

## The Serpent and the Ladder

given at the UU Fellowship Pottstown  
on December 30, 2017 by Rev. Paul Langston-Daley

There are many different ways of knowing the things we know. In the mid 80's, a group of women came together to write a book called, *Women's Ways of Knowing: The Development of Self, Voice and Mind*. It is a feminist interpretation of how we come to know. According to the authors, there are "different perspectives from which women (in particular) view reality and draw conclusions about truth, knowledge and authority."

I would generally agree with the authors when they say, "We do not think of the ordinary person as preoccupied with such difficult and profound questions as: What is truth? What is authority? To whom do I listen? What counts for me as evidence? How do I know what I know?" As UU's, this is part of the foundation of our spiritual searching, our spiritual path. It is precisely these questions which bring many of us to UU churches and Fellowships around the world. We seek to answer these questions for ourselves for the very reason the authors say we must ask them: "...to ask ourselves these questions and to reflect on our answers is more than an intellectual exercise, for our basic assumptions about the nature of truth and reality and the origins of knowledge shape the way we see the world and ourselves as participants in it. They affect our definitions of ourselves, the way we interact with others, our public and private personae, our sense of control over life events, our views of teaching and learning, and our conceptions of morality."

I believe that all knowledge is subjective. Everything we know comes to us through

our 5 senses. All information is filtered through our experience, past and present, our personal biases and our level of understanding about a particular subject or topic. There are differences in how women and men perceive the world based on their upbringing, their history, and their level of acceptance in the cultural norm.

When we all look at particular object, chances are good that we are not all *seeing* the same thing. People who are color blind do not have the same experience of the world of people who see in full color. Artists tend to see the world through the lens of shape, form or light. Two people may not experience a piece of music in the same way. Some of us are able to isolate individual instruments from a full orchestra. My mother used to say all the time- "I can't understand a word they're saying, can you?" or "What is that awful racket you listening to." Teenagers of the rock and roll generations seem to have the uncanny ability to isolate lyrics no matter what the music sounds like.

Many of you know that I do not have perfect vision. This is identified by the fact that I wear glasses. But what you probably don't know is that I do not see with stereoscopic vision. My eyes don't focus together- so what I *see*, will differ from what others *see*. This is one of the lenses through which I know the world. I am also a white middleclass lesbian. Each of these factors plus many others will contribute to how and why I know what I know.

Each of us has a history that will affect our way of perceiving the world around us.

It will also affect how we accept and integrate new information resulting in what we call knowledge. New information that contradicts what we know is either rejected or integrated to form new opinions or ideas.

In his book *The Cosmic Serpent*, Jeremy Narby asks the question: How is it that indigenous people, without the help of modern science, can have so much botanical and medicinal knowledge? Trial and error alone, even over time, can not explain their vast library of resources.

Jeremy Narby has introduced an interesting perspective about the intersection of how and what we, western thinking people, and indigenous people know about life and the basic building blocks called DNA. He examines this intersection by expanding his vision and looking at both science and shamanism stereoscopically. Using the traditional elements of shamanism he opens his mind to a new way of thinking about what and how we know about DNA. He asks us to reexamine what are sometimes called pseudo-sciences to witness their contribution to knowing the world.

His investigation had led him to formulate the following working hypothesis: "In their visions, shamans take their consciousness down to the molecular level and gain access to information related to DNA, which they call "animate essences" or "spirits." This is where they see double helixes, twisted ladders, and chromosome shapes. This is how shamanic cultures have known for millennia that the vital principle is the same for all living beings and is shaped like two entwined serpents (or a vine, a rope, a ladder. . .). DNA is the source of their astonishing botanical and medicinal knowledge, which can be attained only in defocalized and "nonrational" states of

consciousness, though its results are empirically verifiable. The myths of these cultures are filled with biological imagery. And the shamans' metaphoric explanations correspond quite precisely to the descriptions that biologists are starting to provide."

Simply put, shamans use trance states and hallucinations to communicate with spirits. These spirits provide images of double helixes, twisted ladders and chromosome shapes to explain the properties of plants and other substances for use in healing. Biologists are just beginning to understand complex interactions which shamans have known about for centuries.

Narby, an anthropologist, studied with the Ashanica people of the Peruvian Amazon in the 1980's. He was there to show the rational use of the land by its indigenous inhabitants as a way to prevent colonization and deforestation. What he came away with might very well call into question many of western science's assumptions about the world we live in.

He spent a good deal of his time in conversation with the ayahausqueros or shamans of the community because he discovered, much of the knowledge about the plants, animals land and forest came from these shaman. The shaman claimed that the knowledge they received came from the maninkari or spirits of the plants (and all life forms) themselves. These included medicinal and complimentary combinations of plants to produce medicinal effects. These spirits were contacted by drinking ayahuasca, a strong hallucinogen, and smoking tobacco as a means of attracting the spirits. It is these hallucinations that provide the information to the shaman to help in healing.

Narby was skeptical because he had been taught as the rest of us- from his book, *The Cosmic Serpent*:

“First, hallucinations *cannot* be the source of real information, because to consider them as such is the definition of psychosis. Western knowledge considers hallucinations to be at best illusions, at worst morbid phenomena.<sup>13</sup>

Second, plants do not communicate like human beings. Scientific theories of communication consider that only human beings use abstract symbols like words and pictures and that plants do not relay information in the form of mental images.<sup>14</sup> For science, the human brain is the source of hallucinations, which psychoactive plants merely trigger by way of the hallucinogenic molecules they contain.”

So one of the questions Narby asked was; does the information come from outside as the shamans say, or is it stored in the human brain and accessed through the hallucinations?

In many indigenous cultures, drinking or eating substances that produce hallucinations is a common way to access the information necessary for healing. There are some cultures use only drumming and repetitive rhythm to achieve the trance state required to ascertain the information. Generally, shamans, seek and attain the knowledge they need from the spirit world. Those who train to become shaman must endure a very complex apprenticeship which includes dietary restrictions, fasting, solitary retreats and an understanding of the drugs used in trance. For the ayahuasqueros there are certain dietary and physical restrictions prior to ingestion that help to reduce the side effects and also help to induce the hallucinatory effects of drug.

Another common element among the shamanistic traditions from around the world, including the western and eastern amazon, the Aborigines of Australia, tribes in northern Siberia, the ancient Egyptians and some native traditions of the United States, is the image of snakes. Much of the mythology of these indigenous tribes includes the image of twisted, entwined, or twin snakes as the mother of all life. These snakes are often species which can live both in water and on land like the anaconda. They represent the feminine and masculine elements of life and have the power to reproduce themselves. Other common images describe the information being acquired by use of ladders, twisted vines, or ropes. Many have similar patterns and forms including double helixes. Drawings and painting done by shamans show these dramatic similarities.

Narby’s interpretation of the art work done by native shaman points out the common theme of ladders, things that look like “chromosomes” and double helixes- all images used to describe DNA.

These maninkari or spirits provide information to the shamans by use of images and metaphors. Words, as such, are not the means by which the information is delivered. The shamans use of song, rhythm and tone help them translate the images and information into a form that they can use in healing. In some ways these images and metaphors mirror the form of DNA itself in that they twist around the thing they describe, never naming it as such, but pointing to it from many different perspectives.

In the 1950’s, James Watson and Frances Crick, building on the work of Rosalind Franklin, discovered what is believed to be the basic building blocks of all life. DNA.

One of the sources I read actually stated that one of the scientist (it doesn't say which) had a dream about two snakes entwined with each other and dancing. This dream, according to the source, was the catalyst for the discovery of the form of DNA. I was unable to verify this story, but thought it might be worth mentioning- if its true, then it seems to me that it lends further support to Narby's hypothesis.

DNA consists of four bases labeled A, C, G, and T and they combine with the twenty amino acids. The bases combine to form the rungs of the ladder and only match up with their corresponding base. G can only bond with C because it connects by three hydrogen bonds and A can only bond with T because it connects by two hydrogen bonds. This eliminates any error in pairing. The rails of the ladder are made up by phosphorus. The rails are mirror images of themselves.

This means that they can split down the center of the rungs, like a zipper, and reconnect producing two exact replicas or twins. This is the basis for the process used in cloning. The bases draw the amino acids and create different arrangements of them. When an embryo is forming, it consists of a DNA strand from each parent, an exact replica of each- and combines to form the chromosomes in the new life form.

Narby illustrates the similarities between DNA and shaman visions beautifully. To explain the apparent contradiction about how the plants actually communicate, he points out that DNA emits a low frequency light. The light is emitted from outside, by the plants themselves. This he believes is the key to the hallucinations that are central to the shamanistic knowledge. This low level light is picked up by the heightened consciousness created by the drugs that are

ingested. The increased level of consciousness or hypersensitivity allows the shaman to see what is otherwise invisible to the naked eye.

One of the shaman Narby talks with says that the maninkari, the spirits, are always there, like radio waves. It is simply a matter of tuning them in. The drugs, dreams or repetitive rhythms are the mechanism for doing so.

Some of you may have heard of Findhorn. It is a community in Scotland that concentrates on human connection with botanical life. The results of their work have produced, among other things, verifiable evidence of increased yield in the fruits, substantially larger and more prolific flowers, a minimum of intrusive weeds and detrimental insects and wildlife. Yet science has mocked this garden in much the same way it has mocked shamanism. Because the methods are not considered rational, the results are minimized, denied or in some cases discredited - sometimes referred to as that woo woo stuff.

Narby points out the seemingly too narrow focus that science sometimes holds. His own journey takes him from anthropology in the Amazon jungle to molecular biology, to neurology and psychology and back again. Throughout the course of his book he wonders at why connections have not been made through cross discipline studies. This myopic vision of science limits our knowing. Narby states: "The microscopic world of DNA, and its proteins and enzymes, is teeming inside us and is enough to make us marvel. Yet rational discourse, which holds a monopoly on the subject, denies itself a sense of wonder. Current biologists condemn themselves, through their beliefs, to describe DNA and the cell-based life for which it codes as if they were

blind people discussing movies or objective anthropologists explaining the hallucinatory sphere of which they have no experience: They oblige themselves to consider an animate reality as if it were inanimate.

By ignoring this obligation, and by considering shamanism and biology at the same time, stereoscopically, I saw DNA snakes. They were alive.”

DNA exists in all life forms. So that means that you and I and the hawk flying around outside and the poison oak covering the hillside out back are made of exactly the same material, 4 bases and those combine to form the strands of amino acids, only in different combinations. You and I are different, we look different, but the genetic blocks are the same. The tree and I are obviously different, but the genetic blocks are the same.

Perhaps it is time to reexamine how and what we know about the world around us. Maybe the so called pseudo-sciences have something to offer in helping to explain how life began, what our purpose is, how we should live or how we might live better in tune with the world around us. Is it possible that there are absolute truths even given our subject nature.

I had heard of DNA and understood the basic concept of it. But until I actually read some of the material about it, I had no idea that such a simple form could create such complex life. Patterns repeat in all life

forms- the veins on a leaf have a pattern similar to the texture of skin. The inside of a skates mouth has a pattern similar as the skin of a snake. All these patterns repeat forming the web that we call life. This is a truth that is difficult to deny. Our knowledge and understanding of this intricate web might be more fully realized if we open ourselves to the possibility that

humanity might not be the only intelligent, communicating life form. If we remove our gaze from the mirror to the world outside we might discover new ways of knowing and being known. We might even rediscover a salvific reverence for life. We might even find answers beyond our wildest imagination.

(PLEASE NOTE: The “anti-science” slant in this sermon is not an expression of dislike for the scientific process. It is an expression of my frustration with the sometimes closed mindedness of academic science..)