## PARALLEL UNIVERSES

In 1957, Hugh Everett proposed the theory of Parallel Universes, which was later developed by Bryce Dewitt. This hypothesis recognize intelligent life forms in diverse parallel universes, unknown to man, which coexist with him since the origins of the universe, but it considers it impossible to make physical contact with them. But, where are these spaces? In certain way, those which are somewhat similar to ours are very close. Still, they are completely inaccessible. We cannot accomplish them, regardless of how far we travel in our space and time. The person who reads this book is just one millimeter away from millions of replicas of himself, but this distance cannot be calculated in the space of our perceptions.

The more separated these worlds are, the greater their dissimilarity. The worlds that were divided from ours in a trivial manner are practically indistinguishable from ours. Others will vary in their cat population. In some worlds, Hitler will have not existed and John Kennedy will still be alive. Others will be completely different, particularly those that were separated in the ages next to the beginning of time. Definitely, anything that could occur (although not everything that may theoretically occur), happens somewhere within some of the branches of this branched reality. (Davies, 1986)

Returning to the key subject: Where are these fabulous places that the shaman visits? In popular concepts, where the structure of the universe is not determined by scientific laws, this "detached realities" can be simply located in remote parts of their Cosmos, or just have an "indefinite location". For our scientific worldview, much more rigid and fixed, such explanations do not work. Everett states: "The indeterminism of quantum systems gives place to an arborescent reality where the Universe incessantly branches out in myriads of 'Parallel Universes', physically detached but with identical level of reality. *The mind of the observer also splits in numerous copies*". Then, as we see, if we look among the latest scientific discoveries, the closest and most reasonable answer would be in one of the Parallel Universes.

Eliade proposes: "The preeminently shamanic modus operandi is the passage from one cosmic region to another, from earth to heaven or from earth to the lower world. The shaman knows the secrecy of the breakthrough. This communication between the cosmic zones is possible thanks to the structure of the universe itself... which is conceived with three planes —heaven, earth and lower world— linked by a central axis... and the notion of a "midpoint" followed by the occurrence of a sacred space, impregnated with a transhumant presence". (Eliade, 1961) Alternatively, Paul Davies says: "Up to now, we have an image of the universe in the form of a superimposition of realities extended along the super space, which are separated in disconnected and alternative worlds the instant they are observed. Now we notice that the separation mechanism is not completely effective and that a few minuscule threads still bond our world with the other worlds of the super space". (Davies, 1986)

The simple description of the Parallel Universes concept and that one accepted by general public would be that about the existence of "extraterrestrial life". Some kind of "detached reality", "the alien", "the unknown", but placed much closer to us, inside our time and space. In this sense, the shamanic experiences could be "decoded" in the language of the present world as contacts with people from other planets. Davies says: "some minuscule threads still bond our world with the other worlds of the superspace". Considering the last science discoveries, such as the "wormholes" that could take us in a blink to the other side of the Universe, since it can be folded like a paper piece -a theory defended by Carl Sagan and several quantum physicists-, then the shaman could do this just by drinking his yagé, or also an native from the other side of the galaxy could come to our planet under the same conditions. Natives could think about extraterrestrials as a god, due to these supernatural powers, something that would not occur with us at current times, as we rather desire to see the material remains of their spaceship, and that is where we make the mistake. But this extraterrestrial, god (or whatever it has been considered), would also need to eat, sleep, live; this would include him within the anthropological problem. Upon dying, he would be buried like any other earthman, and the differences would disappear.

Some researchers admit that the folklore that apparently preserves and manifests all these secrets of shamanism deserves a more serious study than the one given to a simple tradition told or inherited from generation to generation. "The hallucinations and scenery follow the conventional models that are perfectly consistent and have an unexpectedly rich theoretical content" (Jensen 1963). The explicit and increasing consciousness in modern social psychiatry says: "...This world of beliefs is an interacting, complex and highly structured set of values, expectation and images of oneself and the others... Moreover, different parts of the beliefs world exist in diverse levels of consciousness and may diverge in their mutual level of harmony or of conflict" (Frank, 1963)

Teilhard de Chardin expresses the option of the coming out of 'worlds over worlds' transcending the no spherical plane, attached like giant neurons to a 'universal consciousness', waiting for our humanity to connect it. These 'galactic minds' would connect like a network to a higher level of consciousness. This leads us to an "omnipresent intelligent consciousness" that would be all over in the universe, also known by our religions as God.

"Any study of shamanism needs to start with a description of the conceptualization of the phenomena relevant and the chosen method for their analysis" (Studebaker 1996) If we search for equivalents for the shamanic realities in the sphere of our own concepts and knowledge, we will find them in the "parallel universes" or "extraterrestrial life." But if we attempt to see things through the eyes of the shaman himself, the problem gets more complicated. Who tries to find a necessary reasonable explanation or a logic that satisfies our methodological mentality, shall be far from understanding and having a clear idea of the phenomenon, since, in our search, we must radically change in the approaching epistemological factor\*. "The only approach to really be capable to

understand is associated to the aptitude for a subjective experience, not to the method itself" (Jensen, 1963)

And, once more, we face the same dilemma: whether these "detached realities" exist or not. Is there something in common -real and objective- among images so dissimilar such as ancestors, gods, extraterrestrials, and inhabitants of parallel universes? Can they actually enter in our lives and leave here their traces? Here we have a very important data: our neurons have certain pre-determined particles only to accept hallucinogens molecules; in the same form as a lock is specifically shaped for just one key, this encoding is set by the human or animal organism from the very first stages of its evolution.

At the Big Bangs instant, and even before, countless of other universes could have been created, which at present coexist with ours. A good example would be the over mentioned and badly understood, known as the 'heavenly' world. Christ, its highest representative, affirmed that his realm (which was not from this world), was in heaven, where his Father lived, and that for going there, it was necessary to 'die.' "Learning to see' requires the metaphorical death of the novice or experiences associated to the disconnection of the soul from the body. The people  $(yag\acute{e})$  you can find in the "life after death" teach diagnostic techniques and pharmacological principles. Learning carries on only if the taboos and the rituals prescribed are observed" (Studebaker, 1996)

From these words of the 'Son of God', and from the data offered by Studebaker, we can deduce that the parallel universes are inhabited. "The sixth occasion I drank (beginning at age 5), I began seeing things, a full of plants garden. And I came into that garden, and somebody taught me the use of every plant... you cannot be scared, or you'll lose it... Ayahuasca has an Indian chief, in the jungle, he is the king of the jungle... he is a spirit, the sovereign of the plants. If you get scared, you cannot tolerate another meeting. If you get to see the king and you are not scared, you learn about plants. It looks like if you were walking in the jungle, even if you are at home; it seems as if you were walking in the jungle, over snakes, and you are not scared. During the fifth or sixth meeting, you begin to obtain part of the strength, the strengths of the plant". (Pule, 1968)

The cultures of the Old World, which practiced shamanism, also used hallucinogenic plants. Between them, one of the most potent is the *Amanita Muscaria*, a red mushroom with white spots, which was largely used in Eurasia, mostly in Siberian shamanism. This mushroom contains Muscarina and other alkaloids that cause *micropsia*: a phenomenon which "makes you see persons in a very tiny size... it makes you see gnomes, and more gnomes, and yet more gnomes. And next, it makes you see people flying, and you feel *transported to fantastic and weird worlds*" (Cabieses, 1998.)

To be more precise, we shall reveal the comment on the experience of a shaman converted to Catholicism, with the use of psychotropic substances: "An experimented Indian chief told me once: (drinking yagé is similar to going to heaven). In this divine paradise you find yourself alone with this <u>humanoid people (yagé)</u>.\* Generally, an

apprentice is instructed by his shaman grandparents, who have left this world a long time ago to go to the <u>place of the people (yagé)</u>\*" (Studebaker, 1996)

According to Asael who states the following text, a shaman *learns to "see."* In the act of drinking Ayahuasca by the apprentice:

... Yes, we get to see something.

Then I asked: Something, but not the whole thing?

To which he replied: Not the whole thing, not like the Indian chiefs, who can see everything; we cannot yet get to see about there.

We have already talked about the state known by them as "seeing". Could this "seeing" be related to the "observing" of Quantum Physics? Unluckily, studies done in this field have only paid attention on the shaman as a personality. "By emphasizing the shaman's personality, conversely, we are deprived of the analysis of what is really important: the creation and control of individually therapeutic and socially consistent symbols, and the ritual context of their dramatic representation" (Studebaker, 1996).

Obviously, it is not precisely heaven where this psychotropic experience can transport us; like this place, as already exposed, there are many other parallel universes to visit. Dante invites us to meet a good collection, by illustrating them as the different levels of hell, paradise and purgatory in his "Divine Comedy". Their particular manifestations depend on the sort of cult or 'witchcraft', but no one could refute their correspondence to Hugh Everett's 'Parallel Universes'.

"Although it is possible to conclude that this space (shamanic journey) is an extracorporeal environment and that the own spirit is travelling throughout external and unknown places, it is equally possible to understand that experience as a looking onto the deepest and darkest locations of our own neuronal records, usually forbidden to the domains of consciousness.

Where is that which we see and feel when passing through the barrier? In which space? Do the voices heard the objects and people which in this moment are part of the world of him who hallucinates, surround him perhaps? Or are they in his personal neuronal circuits? Are they there or are they here? Are they real, spiritual or material beings that are perceived with the senses organs? Or are they internally generated perceptions by the neurological complexes that have experienced a spontaneous or provoked alteration?

To the shaman himself, the conception of 'internal journey' towards the unconscious is, certainly, strange. *To him, it is a 'journey' in the direct sense of the word.* "The space where the events that occur during the *trance* or during the hallucination experienced is, for the primitive belief, *an external space*. During the primitive man's trance, his own spirit travels towards new worlds and other times, and visits remote and on occasions unknown places. Throughout the trance, everything seems to develop in the space that

surrounds the fellow. Nothing is the outcome of his own mind. Everything comes from outside, from another space! It could be said metaphorically that the primitive man cannot see the difference among a radio and a recorder" (Cabieses, 1998).

But in that case, how can we explain the following? "An English explorer colonel (Percy Harrison Fawcett) drank some drops of the extract (of  $yag\acute{e}$ ) and perceived his father's image that at that moment was dying in England, that is, thousands of miles away. (One month later, the colonel received a letter with the new of the effective death of his father, at the exact minute in which he drank the Yageina)" (Segatore 1975).

Dr. Cesar Palomino, a homeopathic physician in Cusco, could record another case: after a stealing, the victim drank *Ayahuasca* and, according to his testimony, he saw in a vision the person who took away the stolen stuff from his house; then the bandit went to a secret place where he hid the booty. Therefore the interviewee decided to communicate this to the police, and he went with them to the hiding place, where the objects laid just like in his visualization.

Psychiatrist Pio Vucetich told us in a private dialogue that some people from the Peruvian northern jungle came to see him; they wanted to know about their children's health in those isolated lands. By drinking *Ayahuasca*, he "flew" to the precise place and he "saw" the children in good health state; he even observed some details that helped the parents to better identify the place. Soon after, all this information became to be absolutely true. Regardless of his vast experience, Dr. Vucetich could not give scientifically details of this phenomenon.

Although in current times the shamanism has undoubtedly came upon lots of problems, other elements contributed to a daring propagation of it, which was however accepted by the Catholic Church. "In the Plaincourault Abbey of Indre, France, a suggestive mural – painted around 1291 - depicts Adam and Eve standing next to the *Tree of Good and Evil Knowledge*, which bears a remarkable similarity to a gigantic mushroom. Since 1910, this mural has been considered to be a representation of the A. Muscaria mushroom" (Torres, 1984). The expressions 'white magic', 'black magic', and others that the <u>collective memory</u> has retained thanks to their continuing importance in our day 's world, only serve to confound people from grasping their true meaning. To this we must add a strong denigration crusade, orchestrated by the diverse philosophical or religious points of view.

The skepticism of our society can be mostly attributed to the 'ridiculous behavior' displayed by most of the current day shamans, to whom no one, or maybe just few people, lends any credit at all. They have actually faraway on preserving the knowledge of their ancestors, the true sorcerers or initiates. *This fact must be plainly understood; to be sure that, the ancient shamans must not be criticized on the basis of the actions of current-day-shamans.* It would be as if someone, remembering the alchemy knowledge, would attempt to turn lead into gold, at the beginnings of the 21<sup>st</sup>. century; or as if an

astrologer by using Tarot tried in vain to win the lottery. Although I am aware, my dear reader that you may well be a true initiate.

Olivia Sejuro Nanetti, in her *Plantas Medicinales utilizadas por los curanderos de Nasca (Medicinal Plants Used by the Nasca Healers*), supported by the National Council for Science and Technology (CONCYTEC) and the Organization of American States, in an interview with Dr. Maria Reiche, says: "*Toñuz* (Pluchea Chingoyo) cures the flu; the *pájaro bobo* (Tessaria Absinthioides) fragrance drifted down to the *pampa* desert, where I was working at the Ingenio valley; the *calato* flower (Bulnesia retama) is medicinal; and *I have found several plants in the pampas, perhaps as signs or reference points of the lines*." (Sejuro, 1989) ... Very interesting! Here we have the segment of lines completing our diagram. Sejuro provides a list of *71 medicinal plants* growing in Nasca, and moreover interviews a sample of *20 traditional healers*; but most amazingly, she misplaced to include the San Pedro cactus in her list, which grows plentifully in the region! How did this ever come to happen? Perhaps she just ignored to ask the traditional healers who use it. Considering that the area is a desert, I assume that these numbers tell us a lot about the value that these plants had in the Nasca past. *Magic Healing – so directly related to shamanism – was also practiced* in that 'laboratory'.

To broach the shamanism topic, it is not sufficient to study it under the light of a single scientific discipline, such as anthropology, medicine, psychology, etc. It is required to combine the methodology from diverse scientific disciplines. "Science is still like this, divided into sections ...where only some, motivated by interdisciplinary impulse, venture to cross limits, and to hell if getting lost. Studying chamanism without using all sciences in concert is, at best, unfruitful. We must use all the tools available" (Cabieses, 1998). Obviously, this is an epistemological problem. The shamanic worldview is holistic; its universe is neither made up from fragments, nor can it be fragmented for an analysis purpose, without losing its essence. Science draws separate elements from the complex universe to better appreciate them, and there is where the problem lies.

An example: in the Inca archaeological park of Machupicchu, there is a stone exhibiting a cut which was hypothetically made to remove another already fitted stone (see <u>Fig.</u> 12d), from the above mentioned epistemological problem, science might not be called at the moment - or maybe never - to give a judgment on this topic. Upon close inspection of the cut mark left on the stone, we are reminded of a split slab of cheese. Traces of the instrument used for cutting may be observed. What sort of instrument could have been used to cut through that tough rock as easily as if it were butter?

Conventional archaeology states that the Incas beat the stones used for building with other harder stones. Then they used bars, and with countless of patience and hard work, they separated them from the main rock. You, my dear reader, can visit Machupicchu, or just study the photograph, and verify that it wasn't like that. The model I show denotes high technology, used in epochs when archaeology assumes that the culture was semi-primitive. But the evidence is irrefutable. We should recognize that there is a neglected aspect in the research, and it is specifically this one. Perhaps when God comes

back again to visit the Inca to give him *Sami* and he would not be arrogant, we shall discover the secret of that plant with which the Incas could make wonders.

Levi-Strauss (1966) tells us: "Magical thinking is not to be considered as a beginning, a rudiment, a sketch, the part of a whole which has not been still materialized. Magical thinking put together a well articulated system and in this sense, it is fairly independent from this other system that is science, except for the entirely formal analogy that joins them and makes the former a kind of metaphorical expression of the latter. Consequently it is better to compare them as two parallel ways of knowledge achievement, rather than contrasting them as magic and science... both science and magic involve the same nature of mental operations and they also differ not for the type but for the different kinds of phenomena which they are applied to". "... As many of the beliefs and much of the human groups wisdom are not the outcome of rationality, it is hard, nearly impossible, to study and understand them with our "rational" mind which only has at hand those elements of judgment that our conscience can easily reach. Therefore, rationalist philosophers and dogmatic theologians of the conscious logic diminish beliefs to mere superstitions worth of utmost ridicule and literary criticism lowers mythologies and legends to romantic metaphors". (Cabieses, 1998)

The analysis performed of the ethnohistoric and anthropological data about the rituals in Machupicchu related with the fertility concept, simultaneously with those of purification, the harvest game and the water's value (as in the Pariacaca myth), the evaluation of archaeoastronomical and ethnoastronomical data on the observations of the sun, planets and stars in the Andes, the validity of the constellations (as in the Pleiades case) and their influence in the establishment of the ceremonial calendar, the agricultural cycle and all the economic activity like fishing and hunting, leads us to the conclusion that they were directly related to the technology, social structure, sexual, political, military (as in the case of beans) initiation rituals and the authority of priesthood. All these formal correspondences would undoubtedly be justified after the original idea of fertility, without which any society would be at risk of extinction. It is not by chance that in the Paracas Cavernas culture tombs in the same geographical region, like many other American cultures, had the symbolic shape of an uterus, and the dead were buried in a 'resembling a birth' fetal position,.

In this way, the relation among the meaning of Machupicchu on the one hand and the pose of the Paracas, Nasca and Inca mummies would also be demonstrated. The iconographic coincidences of the mantles and pottery analogous to the art of other Andean cultures, such as our Wiracocha; the archaeological and ethnographic reports on the parallelisms in technology, the idea of the 'great beyond', expressed in the existence of the upper and lower supra worlds, the ancestors power, the religion and the belief of life after death. The ethnobotanic and ethonologic data about shamanic ceremonies with utilization of psychotropic substances throughout the American continent, the parallelism in their iconological manifestations and also the analogies in their mythology (as is the spiral's case); the experiment with the consumption of 'San Pedro'

in a forty people model, where the Method of Scientific Research concludes that the 100% are flying, on the other hand.

Furthermore, the success of the geometrical experiments for their technology reconstruction, like the Y-shaped post, the "astrolabe" (the stick with a circle at the top), our pantograph and their "exact symmetry" with our "diamond" geoglyph also their communication system, which was a precursor of the Incan Tocapo. Their permanence, although relative, in the current Andean man Collective Memory and the conclusive confirmation that the Measure Unit used was 66.4 cm lead us to conclude that all the spectrum of functions of the buildings in this Magical Ritual Space gyrated around the utmost condition for the survival of any ancient or modern society, evidently expressed in the name of the 'procreation place'. That initial concept led them to develop and later express in Machupicchu and its uildings the entire knowledge of the universe that surrounded them, with the purpose of putting order to their existence, achieving a secure place in the cosmos and leaving this knowledge for the happiness of their successive progenies.