## WWW or What a Wonderful World

## Tiiu Strauss 235 paper

*Summary*: This is a story about the universe, called sometimes the world or respectfully – Nature.

Cosmology is a study of the Universe in its totality and humanity's place in it. It involves beside the science and religion, philosophy and esotericism and it searches answers for the questions about the origin of the Universe and its first cause; its material components and last but not least – the ultimate reason for the existence of the Universe.

We use the word "world" as a synonym to the universe and the cosmos or Nature. What are meant under the term "universe"? In the broadest sense it is defined "as everything that physically exists". Even more – the medieval philosopher Johannes Scotus Eriugena has defined universe as just "everything" – "everything that exists and everything that does not exist." What are the components of this "everything"? In the broadest sense there are space and time, all matter in his variety of forms, energy and all the physical laws and constants governing them.

The components of the word universe are – uni + verse - deriving from the French; and have meaning even to the non-linguists – "uni" as "one" and "vertere" as "something rotated, rolled, changed". The great philosophers have used the word universe in the sense as "everything rolled into one, everything combined into one". If there is one universe "rolled into one" maybe there is more such kind of aggregates which are too "rolled into one"? Yes, there are theories affirming that our universe is one of many "universes" and they all together may constitute the "multiverse".

Is there a starting-point of our universe? Where the universe is going to?

The esoteric point of view is clear through the three fundamentals – first - "...there is one absolute Reality which antecedes all manifested, conditioned, being. This Infinite and Eternal Cause ("Unconscious" and "Unknowable")... is the rootless root of "all that was, is, or ever shall be." Secondly – "periodically ...numberless Universes incessantly manifesting and disappearing,"; and thirdly – "The fundamental identity of all Souls with the Universal Over-Soul, the latter being itself an aspect of the Unknown Root, ...". [SD I, 17]

Investigating more the greatest book of Madame Blavatsky, *The Secret Doctrine*, and *Stanzas of Dzyan* (and the other sources as well), we see that the universes appear and disappear periodically. Before the beginning of the universe there is only the Absolute, more "Be-bess" than "Being" as it is depicted. It is described as Being and Non-Being; and as Darkness in many cases. From that Darkness at the beginning of our universe emerge two aspects – Spirit and Matter, named as two differentiations of the One. And so it evolves more and more ... into our wonderful universe.

What does science say about the beginning of our universe?

The prevailing theory is the Big Bang theory which is the cosmological model of the initial conditions and subsequent development of the universe supported by the current scientific observations. This theory says that the universe is expanding "from a gravitational singularity, a point in space-time at which all the matter and energy of the observable universe was concentrated." Or the idea that first there were primordial hot and dense initial conditions (incredibly high energy density, huge temperatures and pressures), all this was very rapidly expanding and cooling.

This expansion continues to our days, the universe grows in size. Now we may examine thoroughly the result of this expansion. There are several scientific observations supporting this idea of expansion and the whole Big Bang theory too. They say that today this expansion is accelerating for the density of our universe is low.

There are two major assumptions underlying on the Big Bang theory –

- The Cosmological Principle, stating that on large scales the universe is homogeneous and isotropic;
- The universality of physical laws.

These assumptions initially were taken as postulates, but today there are some results on observations and testing both of them, showing for example that the universe looks the same in all directions.

Esotericism speaks about the First Cause and the Causeless Cause concerning the beginning of the universe. "That, which is neither Spirit nor matter — that is IT — the Causeless CAUSE of Spirit and Matter, which are the Cause of Kosmos." — states the Secret Doctrine [SD I, 258]. It is the one form of existence, infinite and causeless. The term "First Cause" does not refer to the Absolute, it is the first and refers "the first brought forth"; it is the first in time and space and so it is the term of manifestation.

The esoteric approach of the work of form-building begins with the Nebulous and is the same for solar system and planetary system and for human being. In this process first is the stage where the matter begins to separate itself from the plane substance (it is called sometimes a "fire-mist" stage). Then follows condensation stage, characterized by excessive energy and violent activity, but yet as inchoate for the condition is yet chaotic.

The Fiery stage is following, where "the internal energy of the rapidly congregating atoms and their effect upon each other produces an increase of heat". Here as the result is the spheroidal form "for the vehicles of all entities is seen to be fundamentally a sphere, rolling upon itself and attracting and repulsing other spheres."

The process of condensation continues and the sphere of gaseous fiery essence begins to solidify on its outer surface. The heat is centralized at the sphere heart and produces so pulsation which is characteristic to the sun or to the planet or to some kind of incarnating object in the form-building process. Finally the rhythm is set up and the process synchronized; the inherent karma gives its colors to the vibratory response of the substance.

We know our universe as three-dimensional and time is sometimes regarded as the fourth. How old is our universe? The universe's age is said to be 11 ... 20 billions years, evaluated by the different independent scientists. The universe is not the same all the time, observations show that space appears to have expanded.

Some theories say that the first galaxies formed about a billion years after the Big Bang; lots of the stars were evolving, but it is said that relatively recent galaxies differ from galaxies set up shortly after the Big Bang.

The universe in the sense "everything rotated as one" refers to the rotation, which according to Aristotle is rotation of the outermost sphere, responsible for the motion and change of everything within. The components of the universe as "something rotated, rolled, changed" are galaxies and solar systems within them. Motion is a characteristic of all the components of the universe – the earth (and the other planets) revolving upon its axis is proved fact already long ago.

The same may be said to the fact that our earth (and the other planets) travels around the sun. Furthermore – the entire solar system revolves upon its axis and the other motion, around its cosmic center, is under the consideration too. Although a cycle of this revolving is too vast to comprehend without special preparation. We may only imagine that our solar system is revolving around a cosmic center along with six other constellations – scientists have not admitted this as a fact. Exploiting further the idea of the orbital motion we may assume that this cosmic center in turn is a part of a great wheel ... and all the Universe is in motion.

The universe or everything that exists includes and the laws governing it, the properties of matter, form and their changes. Scientists say that the universe has been governed by the same physical laws throughout its existence.

The most well-known is the law of gravitation, explaining the relations between the planets and the Sun. This law shows itself as the power of a more vital life (the greater accumulative force) upon the lesser so that it "holds all physical forms to itself and prevents their scattering." It states that the force of attraction of one object for another is related to its motion around that object.

In the case of our solar system there is a solar attraction which is the cause of the elliptical trajectory of the planets; it "is the attraction of lesser bodies to larger ones, and of similar bodies to similar". Scientists can calculate some physical characteristics of the solar system (like the velocity and the acceleration) due to knowledge of this law.

Throughout esotericism explains the hidden half of this law as magnetic attraction and repulsion – there is a powerful magnetism of the sun, NOT the weight or gravitation. They say that the Cosmic Magnet is reflected in everything existed and gravitation is working through this. The ancients knew that phenomen, which today is called by the scientists as gravitation, under the names of magnetism, attraction, affinity.

The law of periodicity under the second fundamental proposition of Theosophy governs the cyclical orbits of the planets as well their rotation. This law is applicable to all the astronomical objects from the moon to galaxies.

We know the law of Karma, the law of cause and effect – in astronomy it may define as "the unerring tendency in nature to restore equilibrium and balance where it has been disturbed"; the equilibrium between these forces determines the rotation of the spheres.

What do say scientists about the future of our universe? According to the Big Bang theory in the conditions of accelerated expansion more of the currently visible universe will pass beyond our event horizon and out of contact with us. Scientists acknowledge that the eventual result is not known although there are some untested hypotheses about the further development.

At the same time religious interpretations found on the assumption that there is an eternal universe. It is good to remember the three fundamental propositions from the Secret Doctrine, especially the second one - "periodically …numberless Universes incessantly manifesting and disappearing".