



Primordial Dynamic Space and Quantum Personal Ergonomics

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Abstract

The paper defines the notions of “Primordial Dynamic Space” and “Quantum Personal Ergonomics”, with interesting connections with consciousness and the vacuum energy in the direction of a holistic unification.

Keywords: Quantum Physics; Primordial Dynamic Space (PDS); Quantum Personal Ergonomics (QPE); Vacuum Energy; Consciousness; Holistic Unification

Introduction

About the founding concepts of quantum physics, there is as first that of quantum as discrete elementary quantity; from this insight, the notion of wave-particle dualism of matter has been developed. The uncertainty principle establishes the limits in the values measurement of physical conjugated or incompatible quantities in a physical system. Another key concept is that of quantum entanglement, which implies the simultaneous change of characteristics of interacting observables, irrespective of their distance (instant change) [1,2].

The human being is made up of matter and energy, inextricably correlated and transformable into each other; the process is continuously self-regulated, for maintaining a dynamic balance to inner and outer changes in the body. In recent efforts of holistic unification, the reality includes subtle energies, consciousness and the vacuum energy connected with the deep structure of space. Recent developments in this stream concern with the dynamics of this primordial

space and with the concept of ergonomics.

Matter, Energy, Information and Consciousness

Matter, energy, information, consciousness are superposed and connected, and can be summarized through a trans disciplinary scheme, overcoming the rigid division between present and past, technology and spirituality, concrete and abstract.

- The level of matter: it depends by the concepts of space and time, concerns in particular physics and chemistry with their elements.
- The level of energy: it depends by the concepts of space and time, and is studied in particular from physics.
- The level of information: the interconnection in the universe goes beyond the laws of space and time; a related concept is that of hologram.
- The level of consciousness: it is that of interaction with the whole [3].

On the Holographic Reality and Fractals

The concept of holographic model is one of the main scientific-philosophical bases of the new holistic science; it is based on the idea of global information that links the part to the whole. It manifests itself through geometries of a fractal nature, in which a reality repeats itself in its form in the same way on different scales [4-6]. Following this way, at any point in the universe it would be possible to obtain information about the entire universe.

It has been scientifically proven that 99.9999999999996% of atoms are made up of empty space. The holistic interpretation of reality brings to a picture in which every aspect of the universe comes by a vibrational/energetic manifestation, each aspect of the universe is a part of a more complex system, contains information about the whole and the sets in which it exists, and considers multi-directional and flexible properties of time [7,8].

Primordial Dynamic Space and Quantum Personal Ergonomics

Among the attempts to outline the characteristics and the properties of vacuum, recently a research line is oriented in the direction of a primordial space, with a multi-dimensional hyper complex structure, and with dynamic, vortex, toroidal, fractal, entanglement, synchronic and holonomic properties (so called Primordial Dynamic Space) [9,10]; from it, the ordinary spacetime of physics would emerge. The properties of this primordial space are connected to a definition of quantum personal ergonomics.

A definition of Ergonomics from an authoritative source is as follows: "The scientific study of people and their working conditions, especially done in order to improve effectiveness" [11]. Similarly, we define Quantum Personal Ergonomics "The degree of well-being and effectiveness that every human being feels on her/his own body, understood as a set of cells that contains a consciousness entity, relating to the higher mental and spiritual aspects".

All living organisms are made up of individual, identifiable cells; their number, size and type define the structure and functions of an organism. The total number of cells in lower organisms is often known, but has not yet been rigorously defined in higher organisms. Estimates of the total number of cells in a human being ranges between 10^{12} and 10^{16} .

Systematic calculations of the total number of cells of the whole human body and individual organs were made using bibliographic and mathematical approaches. The values reported in literature for the number of cells in the body differ by orders of magnitude and are hardly supported

by measurements or calculations. Updated information, identifying the dominant role of the hematopoietic lineage with respect to the total count ($\approx 90\%$), leads to an estimate of about 3×10^{13} human cells [12].

Other estimates of the total number of human cells calculated for a variety of organs and cell types leads to a total number of 3.72×10^{13} . The knowledge of the total number of cells in the human body and individual organs is important from a cultural, biological, medical, comparative modeling viewpoints, and can be a starting point for completing the total calculation [13].

The number of cells in our body is very high, and the cells we have today are not exactly the same cells we had yesterday and we will have tomorrow. Over time, cells age and become damaged, then constantly replicate by creating their own replacements.

This constant cellular activity is related to the idea that about every seven years the cells were so productive that the body replaced every part of itself; after about seven years of cell replication, the human body is an entirely new collection of cells, inside and outside.

This is true in the sense that some cells in some organs and systems of the body are completely replaced within a few months, others remain more or less as they were from the day of birth [14,15]. Assuming then that every 7 years all the cells in the body have been replaced, we can calculate how many new cells we find in our body every second:

$$7 \text{ years} = 220,752,000 \text{ sec} = 2.20752 \times 10^8 \text{ sec} \Rightarrow \\ 3.72 \times 10^{13} \text{ cells} / 2.20752 \times 10^8 \text{ sec} = 1.685 \times 10^5 \text{ cells/sec.}$$

Therefore, about 168,500 cells in our body turn into new cells every second. Is it possible to act positively on these new cells? This is possible not only by a personal psychological point of view, but also by making use of quantum medicine. In this interpretation, the evolution of the organism/person is made up of several layers and to access the higher levels, a balance of the various parts is required, in order to connect to the central consciousness energy.

Conclusion

Life is matter and energy, mutually linked and transformable; energy is vibration, frequency, and a living being is characterized by the ability to absorb and emit frequencies. The primordial dynamic space has very interesting properties, to be studied qualitatively and quantitatively, and is linked to the concept of global harmony, as to the concept of personal quantum ergonomics.

The human interiority derives from a part of us that exists as a quantum field and therefore goes beyond the body, beyond the canonical space and time dimensions. The human being will never be reached by a machine, despite the current efforts of artificial intelligence, in particular if its use will be not in the correct direction for the good of mankind [16]; human capabilities related to consciousness surpass any human surrogate, and a machine is intrinsically different from a human being [17,18].

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