

What does the science know about the space vacuum nowadays? In the 20<sup>th</sup> century it emerged that: it is not a void space in its popular sense, but some material environment of the electromagnetic field with its zero-point oscillations, where virtual particles are quickly and incessantly arising and disappearing. Paul Dirac, an English scientist, made fundamental contributions to the vacuum theory. He was the first to suppose the theoretical possibility of antiparticles' existence, among which it is possible an electron – antielectron pair, subsequently experimentally discovered and called as a positron. The scientists called the vacuum positron field “the Dirac Sea”. Thus, the space (physical) vacuum, belying its name, it is not a void space, but something that generates virtual particles against the background of the electron-positron field with zero-point oscillations. But at this point an unbidden paradoxicality emerges: if it is not a void space, but a specific material environment, what shall we do with the principal law of all material things – the law of interaction? All material, physical, corporal and substantial field-effect formations are certainly required to mutually react upon each other. And where can we see such impact on the part of the vacuum upon the gigantic astronomical bodies, which move on a non-stop basis in this splendid environment during billion years! Is it possible that the old vacuum has not its own nature? Then why do we call it material environment without any resistance? The second point, why do the astro giants have such a powerful impulse that nothing can stop them? In fact, the logic suggests that if something moves by inertia and nothing pushes him, this thing can be easily stopped. Because there is no force pushing. The logic demands this conclusion; the vacuum is not a void space, but an astonishing environment, where it is possible to keep moving while maintaining a powerful impulse. What sort of environment is it? All we know about the material formations is not appropriate in this case. The theory of Existence (= of Being, of existence of All). We can use the law of unity and struggle of opposites from the arsenal of philosophical dialectics, which is also called the symmetry of opposites. The world is composed of identity – differences – opposites. The opposites shape each other. What kind of world do we live in? In the world of Existence and Beings, let us call them Conexistence (con from Latin with ...). Peering at our Conexisting world, how does this Conexistence succeed? For a theoretical approach, we have to make a great theoretical summary. At this point we use the concept of determinacy; all things are determined and continue being determined. But a moment of indeterminacy also exists, and a vector of directed changes results, all gyre goes from the Indeterminacy to the Determinacy and vice versa. Let us generalize the Determinacy and Indeterminacy by the notion of function and functionality. Thus, the world of functions where there is a dynamic focus from the Indeterminacy to the Determinacy and vice versa. The function is indeterminate, high rhythmical, dynamic and ontological throbbing with the determination potential from the Indeterminacy to the Determinacy and vice versa. We are living in the material world and, according to a scientist; our logic is the logic of solid objects. In humans, the objective thinking spontaneously and historically is formed. We became accustomed to perceive and understand our environment and the world in some objects. Here is stone, water, ground etc., everything is usual, clear and understandable. Nevertheless, if we stay at the level of absolutization of the objective world, we can never understand the secret nature of the vacuum. First of all, we need to peer and define the parameters of Conexistence. The logic suggests the following: the undetermined function with aspiration potential to the determinacy goes to the level of two realities – Conexistence and Antiexistence, they are always together, now approximate now separate in the continuous process of shaping each other. Let us consider one part – the Conexistence. In our language the words “existence”, “available” and “is” are deemed as synonymous. It is time for their differentiation. The Existence is a more limited concept than availability and “is”. There are only material and mental formations, and we can express with the words “the whole availability” and “is in general” everything, up to signs and delirium. The logic suggests: the undetermined function has to gain three qualities for reach the level of Conexistence: twisting-in, compression and gravity. They have their own metrics and when we run up against the required dimension, it a “jerkiness” happens, and the act of Conexistence is expressed by it. The myriads of jerkiness create the availability, life and being. Let us turn now to the heuristic logic of the symmetry of opposites. Then we have to suppose that the Antiexistence is created when the undetermined function goes through the process of unwinding – uncompressing – repulsion. For getting a more convicting picture of this universal ontological process we shall introduce three additional concepts: marked, defined, specified. At the beginning of all it is necessary the Parsee (anything separated) to be segregated from the entire continuum. Then Parsee shall be determined, let us call this process “ergonics”. The Ergon, ergonic is all composed of actions and activities. And we constantly observe it. But other not observable part exists, which can be called ontological semantics. Every Parsee is a part, element of All, occupying its place – niche and performing its function – role. And everywhere we can see it, from a particle to a galaxy, from a grain of sand to the society and everything in the world has always and passes through its semantization. For better peering at the ergonic and semantic part of all the things, let us consider two examples, by the way, and we will note the following thing: all people both common men and scientists do not differentiate ergonics and semantics. For instance, sex gives pleasure to the biped and quadruped. If only ergonics existed in the world, the friction of two solid meat genitals against each other would not bring anything but temper. And ontosemantics animates this procedure so much that in the human world the sexual acts are raised to the level of entire subculture. For instance, the alcoholic beverages: if the world had only ontoergonics, it would be a purely physiological exercise. But ontosemantics animates this act so much that it becomes a part of national culture. Just by virtue of the ontosemantics two opposing realities Conexistence and Antiexistence acquire the great logical meaning. The Conexistence is semanticized within the universal format of self-assertion and the Antiexistence within the format of self-denial. Only this understanding of the Cosmos, composed of two realities, provides an theoretical approach of all its parameters. The symmetry of opposites is fully justified on a large amount of material.

And the conparticles and antiparticles, conmatter and antimatter, congravity and antigravity are discovered by the experimental and theoretical way. Now we need to make another step to the large generalization, we need to introduce the concepts of Conexisting and Antiexisting realities. Just realities, not environment. After all, the reality is higher than the level of the environment in its morphogenesis. If we make such an assumption, we discover new perspectives in the all Cosmos investigation, and what could be more important? Because we are not only the children of galaxy, but also the children of large and immense Cosmos.

The confidence of all theoretical suggestions can be divided into three parts: convincing, probable, hypothetical. And our version of the theory of Conexistence as a new suggested position can be divided into these parts too. The innovation about the Antiexisting reality, irrespective of its artificiality at first sight, has reasons to be deemed as convincing. How is it possible that the gigantic astrobodies during billion years move? If the gravitational field rains within the reality of Conexistence, on the side of the Antiexistence inertial, i.e. antigravitational field exists. Up to now the inertia and inertness have been considered in the literature as synonyms, our version of cosmology proposes their separation. The inertia is the constancy of non-movement, and the inertness is the constancy of steady movement within the Antiexisting reality. We turn to the idea of ancient thinkers, who say that every movement requires some pushing force. Thus, the second law of Newtonian mechanics should be corrected. There is a reason to say that the gravitational and inertial fields are equivalent also form the point of view of our assumption. According to the theory of relativity, the massive and inertial masses are equivalent. Thus, why is it possible a sustained movement in the Cosmos? We also have to suggest the following: a body getting an impulse creates for itself an inertial platform – swash, and if it does not meet any resistance from other material formations, it will move on a non-stop basis from one point to another. Because the Antiexisting reality is dominant as nothing but the creation of space from one point in all directions and upon moving each body convert into space in the format of inertia. According to this concept we can understand the possibility of inertial rotation movement. It means that such space creation goes on not only as a straight line, but as radian circles. And where is this space vacuum as a reality? It is everywhere. Each our impulse–movement is already creation of a swash inertial platform. Only now we can understand the expression “move by inertia”. There have been a dispute for a long time about the forces of inertia, many people have been considered and now consider them fictitious. On this occasion, L.V. Leskov in his work “Unknown Universe” reasonably notices: “How could they be fictitious, if the mangle big irons?” The Conexisting reality would not exist without the Antiexisting reality, they strictly shape each other. For instance, the ball has been pushed, and why has it flown? – You ask. The answer will be: “It is clear, because it has been pushed and it will be moving until uses up the impulse received by it”. The causativity within the world can be two-fold and three-fold. The pushing is only the first cause – the impulse, and then we can observe the second aspect of the causativity, the cause – condition. The ball creates its inertial platform in another reality. If this another reality did not exist, the ball upon separating would not fly, the energy of pushing would be transferred into vibration. Hence, if you like football, you should thank to the Antiexisting inertial reality. Only it can explain the possibility of fast moving of a heavy-headed large-tonnage cachalot at a depth of 300 meters in pursuit of the meat. We usually determine three factors which help him: fins, tail and a special body lubricant. The fins and tail only direct the movement; they cannot serve as a powerful mean of movement. We need to investigate cachalot and other fast-moving animals in laboratory conditions to discover the secret of the nature which reached to neutralize the gravity directly and strongly enter to the inertial field. The birds and cheetahs and other animals have got such wonderful abilities. Our concept about two realities of the large space, in our opinion, is worthy of note and does not contradict neither to the tiny fact nor logic either from the natural and scientific and philosophical point of view. Once again, take a note: if we stay at the level of objective thinking and world outlook, we cannot accept the idea of the Antiexistence, we need a special functional thinking. The undetermined function with determination to the determinacy can get any forms, even such an unusual for us the Antiexistence (contraexistence). Some distinctive formation separates by the functional way and removes from itself. For the nature there is nothing mad. It has immense opportunities and these opportunities must be fulfilled. Because it possesses the eternity and the need for an exceptional variety and inexhaustible Content. Our hypothesis (and we are sure it is true) glorifies the space vacuum and it deserves it. New perspectives emerge for the further investigation of this wonderful all-space formation.

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