

THE TIME – MATTER COSMOGONIC PARADOX

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Abstract: *The birth of the Universe, according to the double Vedic negation – neither existent nor non-existent – finds its equivalence in the contemporary theories: of the C field and of the unique field of over-symmetry. In this case, we can prove the interdependence between time and space, matter and motion, as two antagonistic couples situated on the same surface of a classic standard strip: the Möbius strip.*

Keywords: *C field, over-symmetry, fermion, boson, temporal reversibility, Möbius strip.*

Antagonistic theories hide in their indeterminacy, through the antique *apeiron*, the same imperceptible kernel of the unique creation. The truth is concealing itself in the whole, analyzing both in point of view of origin as well as the standard, making us aware of the scientific value of the religion, respectively the sacralization of the science. Starting with Big Bang and continuing the study from the perspective of the Möbius Strip theory over the primordial in timeless aspects, making time abstract or regarding the quadri-dimensionality in an analytical way, by according the zero value to the time axis (the reduction, from mathematical perspective, of time to zero), to the same genesis it can be attributed, by analogy, an identical perspective. Everything is simplified by continuing the study on the indeterminacy constant, over the unreal *i* in the Einsteinian theory. By superposing the twisted strip (both spatial and temporal) we discover a pre-entirety, which is in consensus with Einstein's studies: the supposed strip *i* from the previous analysis.

So, we can be the Universe's projection in time, or the time imposes the helicoidal, twisted pace. In these conditions, the time repeats itself, the space repeats itself, and, out of some waggish judgment, the Universe stammers in its own dreaming-like existence. We exist and do not exist at the same time. There is nothing else for us to do than define the paradox as the supreme law, diversified,

the axiom of the knowable and unknowable in the Truth.

Fred Hoyle claims that the matter in Universe isn't born from nothing, from naught, but from a material field, also called the **C** field. In the quasistationary universe described by the Möbius¹ strip can be defined the evolutionary cycle: substance → (motion) → field → (motion) → substance. The essence of the macro-systemic actions and transformations is constituted by the philosophical category which is definitely for the matter and this is the motion. The motion has the decisive role of delimitating the temporal aspect by describing it, and from here

¹ Into a mirror with the shape of Möbius strip, the torsion, having a gradual passage of the curve, realizes the projection of a point situated at different distances, both in the interior and the exterior of the strip. The geometric figure drawn by the virtual image is not a disk or a semi-disk, there being a projection to the infinite. The described shape can be approximate to the space within a parabola with a peak at plus infinite in the exterior part of the strip and a semi-disk in the interior. If the torsion rotates itself, in the interior it is obtained a corpus described by the semi disk, while in the exterior it is the image of a semi disk described by the compact parabola. For one rotation degree, the realized image would sweep up to the infinite the whole space, thus forming the Universe as the virtual image of the point. Which means that the birth of the Universe from the initial point can also be tackled from a purely physical perspective.

comes the regarding of the temporal from another perspective, - the quantum one – at the same time with the existence of a sufficient quantity of energy. In another words, the motion supposes energy, a stable category, which can be preserved at a global level. The double Vedic² negation – neither existent nor non-existent (of the preexistent) found itself, through the C field, the most accurate transposition.

The preexistent supposes indefiniteness, amorphism. The geometrical categories have no definition (the Euclidean space or, for instance, the non-Euclidean one). The physical categories succeed each other. There is the field that will generate the substance and the physical space. From the philosophical point of view, there is no time and space. The point does not define itself through time and space but through field, divinity.

The motion creates within the virtual, through projection, the substance (in geometrical-physical representation, projection of the twisted band, at the edge of the possibility of the human brain abstracting). Its Hoyle, too, the one who enunciates the conservation in a whole of the energy, considering that the moment pr the created particles (the matter) is equal with the one possessed by the C field, so the energy and the moment preserved in both evolutionary phases from cosmic perspective: creation and annihilation.

Looked on the whole, the C field can be found in the unique field of over-symmetry this field is generated by the over-symmetry transformations: the elementary subatomic particles that generate fields of force (fermions) transform themselves into

subatomic particles that describe fields of force (bosons), with displacement through space and time, matter through gravity. Because of this objective causality, time appears transposed into the material component (the matter cannot be described in the absence of time). This leads to the necessity of the existence of the matter in the form of a cumulation of particles describing and generating fields.

The time existence supposes, in the matter plan, its existence in the shape of a field or of substance. In this case we can talk about the temporal field, described by the subatomic particles of very small sizes, which are called chronons. That also results from the relation of the space-time continuum indissolubility, more precisely form the imaginary variant ict , which situates the expression of the distance between two events within the theory of relativity limited into an Euclidian continuum. If we describe the light speed (c) as being the rapport between the standard distance between origin and the Möbius strip (put s_e and equal to i) and the standard time (t_e), we reach the energy relation (E), for the rest mass m_0 : $E = -m_0/t_e^2$.

The Plank-Einstein equation $h\nu_0 = m_0c^2$ becomes $h\nu_0 = -m_0/t_e^2$. The variables of this relation are m_0 and ν_0 , and they determine the periodicity. So $m\lambda = m_1\lambda_1 = m_n\lambda_n$, but $m = m_0/\text{rad}(1 - v^2/c^2)$, where λ = wavelength, ν = frequency and h = Plank's constant. In another words $m = m_0/\text{rad}(1 - t^2/t_e^2)$.

As a result $m = f(t)$, so $t\lambda = t_1\lambda_1 = \dots = t_n\lambda_n$ and $t_L = t \pm Dt$, time disposing itself into quanta from the energy point of view.

The fundamental relations from the quantum generalized and relativist theory become: $\nu\lambda = s_e/t_e$, $\nu\lambda t_e = i$, $E = mc^2 = m_i^2/t_e^2$, $m = -Et_e^2$. Due to the fact that the mass, as I previously showed, is direct proportional with time, so it has a strictly positive value, comes the necessity to grant a negative value to the energy. The time consumes the existent energetic rest, according to the general conservation of the energy. From here results a temporal acceleration in activities which regard an intense motion and high execution speed, in relation with a relative, external

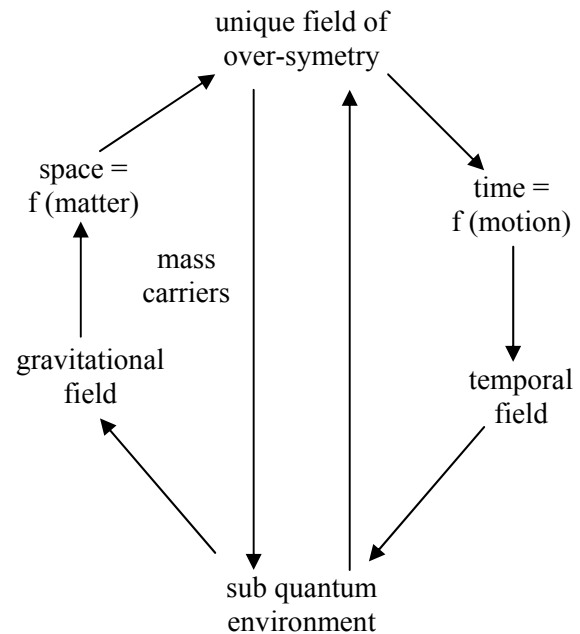
² The Vedic myths excel by the cosmogonist idea of creation out of “what is neither existent nor non-existent”: “*Then there was not existence nor non-existence, there was neither air nor the remote sky / What was it covering? Where? Under whose protection were the waters? Was there a bottomless depth? / Then there was neither death nor immortality; the sign of night and of the day had not (yet) been created / The One was breathing without breath; and there was nothing else above them.*”

coordinates system, in which the actions occur more slowly. The time becomes energetic equalizer, the temporal energy presupposes the energetic ballast of all actions. The physical time in classical relativity is the result of the measurement of a quantum system having n quasi-stable states by means of a measure apparatus capable of perceiving only one state. From here comes the incompatibility between the physical time, the astral one and the biological, human time. Healey considers the quantum world as being composed of a quanta systems hierarchy, each of them having its own dynamic state which evolves continually. From this perspective, time is a quantum system, tri-dimensional indescribable, having n stable states, simultaneous ones (another time in the same time). Time could be reversible if more energy than the one consumed was produced, in another words, the existence of a perpetual motion would lead to the possibility of the temporal reversibility³.

The interactions are considered to be the internal interactions of a system composed by the quantum multi-universe interpretation proposed by Everett. Through this, to the Universe it is attributed its own quantum state. This theory can be extended into a sub quantum environment, in Bohm and Vigier's supposition.

Between the quantum field of over-symmetry (a matter-motion continuum) and the sub quantum environment are realized,

directly and bipolar, closely connections between the mass carriers. Thus it is created an evolutional environment, a matter conservation and development cycle:



The extension of Everett's interpretation in sub elemental is in concordance with the granular structure of the field (energetically knots pointed out by Weyl following the study of the mass-energy rapport). On this quantum system hierarchic differentiated is overlaid the permanent inexistence of the particles, these not being the same at the same time. In another words, following the interactions, the matter becomes time (which is also matter), the chronons changing in their turn into perceivable matter. The transformations take place at a sub quantum scale.

From the material evolution cycle comes the interdependence between time and space reported to motion and matter, according to which they can be represented (or they can have values in three-dimensional). The evolutional hexagon presupposes the discrete leap – continuous through the existence and mixture of three fields and three forms of material existence of sub quantum particles, at which level it is continually realized the energetic transfer in the Universe. The gravitons and the chronons describe the fundamental dimensions in three-dimensional, in the classic relativity: space and time, to

³ The mathematic entity organizes the material entity. As form and content, both substance and field are much better covered by words. On a mathematic framework can be realized through the word the three-dimensional perceived image: motion, matter (field and substance). In this structure the redefinition and re-orientation of the paradox towards concrete become necessary. The time universality allows the cognitive perception of the global dynamics; the necessity of a sense is imposed by the human intellect sensory limits. The sense, reported to the metrical tensors of the temporal field, does not imply (when talking about a temporal anteriority) the same structural description of the spatiality. The subsequent modifications are irrevocable; they occur at the irreversible action of two parameters: space and time, in a generalized structure.

the field being attributed a space-temporal combined character. The material concomitant continuum and discontinuity and the propriety of strangeness become perceptible. Put into a plastic image, the affirmation and the negation find themselves in the torsion zone of a classic standard strip: the Möbius strip.

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