The Boson-Shape of the Conscience

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Abstract — The integral operators of conscience defined in quantum intentionality are used and the link-wave in the Feynman diagrams defined by bosons in the frame of the interchange of the interactions between particles and anti-particles is characterized and determined the conscience as a framework of bosons which defines their quantum nature.

Keywords — Boson framework, conscience operators, conscience of 0-point field, link-wave.

I. INTRODUCTION

The human being from his existence on earth until today has used his body and mind to understand his cosmology internal and external. This cosmology includes conscientious, energetic and material phenomena; which are interdependent "inseparable", are characterized of parts and are continuous flows in the space-time-interdependently-originated between the matter-energy-conscience [1, 2].

The conscience is the basis, because it has knowledge and intentionality [1] and its purpose or motivation further is the harmony and synchronicity inseparable from it with the energy and matter in space-time.

From Aristotle to the present scientists of the west have focused on analyzing the "exterior" cosmology, in it they have found the atom, electrons, photons, quarks, among others as well as the duality wave-particle. Because of this, in the course of history has been unified the magnetic field and the electric, and the equivalence of matter and energy. But today is looking for "something" that allows understanding the union of space and time, that something is conscience, which provides eternal continuity, has knowledge, that is to say, illuminates their perceptible objects and discriminates these objects. In addition to be vacuous, that is to say, does not have an intrinsic identity, as well as is not conditional.

To validate this statement about the nature of conscience, we will use the algebra of conscience operators [1] and Feynman diagrams [2] on the intertwining of the pair of particles (particle/anti-particle), where always underlying a boson as fundamental wave that pre-determines the quantum nature of conscience through the action of a flow that is born of the electromagnetic field of zero-point.

II. FIELDS AND PARTICLES

The quantum mechanics, based on their principle undistinguishable of equal particles, recognizes to the bosons as particles whose spin is equal to an integer number of units \( \hbar \), who obey the Bose-Einstein statistics in systems defined by symmetric wave functions \( \Psi_S \). Also the particles whose spin is equal to a semi-integer number of units \( \hbar \), called fermions, which satisfy the Fermi-Dirac distribution which are defined by complete anti-symmetric wave functions \( \Psi_A \).

The photons and certain nucleuses are included in the quantum distribution of Bose-Einstein, to which they were not impose limitations on the number of particles that can have in a particular cell of the phase space of six dimensions \( (x, y, z, p_x, p_y, p_z) \), while the electrons, protons, neutrons, among others, are considered in the Fermi-Dirac statistics, due to obey the Pauli exclusion principle, where in these systems, in quantum state there cannot more than one particle.

In general the distributions of the quantum and classic statistics are can resume in a formula:

\[
 n = \frac{1}{[W_i - \mu + e^{KT} + \delta]},
\]

where the Maxwell-Boltzmann distribution is obtained when \( (\delta = 0, \mu = 0) \), the Bose-Einstein distribution with \( (\delta = -1) \) or to the Fermi-Dirac distribution \( (\delta = -1) \) (see the figure 1).

In this way, we have that the quanta of electromagnetic field are the photons that are bosons. However, the BCS theory, presented in 1957 to explain superconductivity as a Bose-Einstein condensate [3], proposes the idea that electrons that are fermions are matched forming a pair of fermions, which behave like a boson, this pair is called Cooper pair and their

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link is justified in the interactions of between electrons, mediated by the crystalline structure of the material. In this case we can say that the crystalline structure is the environment where the superconducting conscience of the electrons is revealed through intertwining of Cooper pairs. The crystalline material has acquired a superconducting conscience due to their Fermi fluid [1].

III. CONSCIENCE FIELD

We consider the following postulates on the conscience:

**Postulate 1.** The conscience is objective.

**Postulate 2.** The conscience is instantaneous to every quantum state.

**Postulate 3.** The conscience is an infinite continuous flux.

**Postulate 4.** The conscience illuminates their perceptible objects and discriminate it.

**Postulate 5.** The conscience is in a conscience virtual space-time that synchronizes and harmonizes the Einstein’s space-time and connects the microscopic space-time.

**Postulate 6.** The conscience is adapted to the reference frame of the perceptible object.

**Postulate 7.** The conscience is not conditioned.

To study the conscience is required the conscience operators algebra $O$, [1], and their symbolic integral operator cohomology of string graphs and paths [4], of their conceptual corresponding operators $O^C$, with their Bulnes-Mayá diagrams; these last as concrete cases of the Feynman diagrams [5], which synchronize the perceptible object in the usual space-time and interconnect it with a boson link-wave.

**Def. 3.1** (boson link-wave). Yarn of mind-energy-matter union in the deeper space-time. As deeper space-time we called to the space-time with the $\xi + 1$, dimensions of the tacked of the space-time (with $1 \leq \xi \leq 10$) conducted by the virtual field of the conscience from the quantum level to material level.

The virtual space-time of the conscience or field of conscience does not have any restriction or obstruction since their recognition is instantaneous. In this conscience field arise all the existing fields as are the Gauge, Higgs, among other things, and other fields that can be added and are limited by the hyper-connectivity of the space-time to quantum level.

The conscience has instant recognition in the space-time, that is to say, each point in $\mathbb{M}$, there is a past and future light cone (postulate 2) due to the action of their conscience operator and by their postulates 3 and 4, which allows view the "past, present and future" of the perceptible object (see Figure 2) in a continuous flow that retracts into the past and expands toward the future (causing in the space-time of Einstein the inflation effect), derived from this, the conscience knows all the information or history of the object, that is to say, knows him objectively (postulate 1), also known as appears in other fields in subjective frames (postulate 6).

Due to this, the conscience is the basis and from her appears all conditioned phenomena (postulate 7). The conditionality of the phenomena depends on the field of action where is. This conditioned existence of fields is not independent; is dependently caused, where the interaction and communication media in the conscience field and other fields, is defined through a electromagnetic conscience flow. Since has great velocity and virtual mass, that is to say; is the ideal bridge to communicate the intentionality [1] that is wanted through the coordination of the conscience operators of the conscience-electromagnetic flow-particle in the space-time-continuum (see figure 3).
Objective or ulterior conscience

Fig. 3. Image of the union of space-time between a particle and an electromagnetic wave by the conscience through an conscience operator $O_c$, from here arises a network of connected yarns of mind-energy-matter on the space-time-continuum. The particle comes from the interdependent process originated from conscience-energy-matter which is an interaction that can be defined by an usual Feynman diagram from a aspect energy-matter only. The conscience arises when the energy package (wave) is directed to some purpose. That purpose is determined by the conscience field. Space and time are unified in the particle and wave [6].

IV. FIELD UNIFICATION

The objective or ulterior conscience recognizes the conventional reality as the last, that is to say; "the subjective and the objective" as there are perceptible phenomena to her. The conventional reality of the phenomenon in their relative field, is a connected network with information of conscience-energy-matter, on the space-time continuum (see figure 3).

Note that the subsequent or ulterior conscience permeates all, is clarity, that is to say, recognition (in all the free relative space-time free in white), why does not depend on this space-time, but transcends it.

The figure 2, shows that the ulterior conscience recognizes the hypothetic particle of Higgs $H^0$, which is interdependently caused, that is to say, not exists of impossible form: as independent (because is recognized) as unique (because is particle and antiparticle at the same time, has parts) as stable (their period of life in the time is $1.56 \times 10^{-22}$ s) or with intrinsic identity (provides mass or not to the particles that interact with her). This Higgs particle shows charge and zero spin and mass of $(126.0 \pm 0.4 \text{ (estad.)} \pm 0.4 \text{ (sis.)} \text{ GeV/c}^2)$.

Due to that the Higgs boson has zero spin and load in the same way, in comparison of the fermions which have half-integer spin and positive or negative charged, shows mass and this presence of real or virtual mass can be dragged by a real or virtual force, on the basis of Newton’s second law expressed by the Dirac scheme, this force of drag for the bosons and fermions with real mass is an electromagnetic conscience wave and for the bosons of virtual mass as the photons is an electromagnetic wave of virtual field of conscience.

The link both real and virtual of an electromagnetic wave with bosons and fermions as well as with the conscience is through their respective conscience operators that allow instant transfer of conscientious-information, which has an intentionality or motivation which is to harmonize and synchronize the phenomena involved in the space-time continuum. That is to say, in the figure 2, the Higgs particle has an conscience operator, that is to say, $O_c^{\text{Higgs particle}}$, and the electromagnetic wave, equally also $O_c$, with their electromagnetic wave for the conscience Field because of this can be synchronized the particle, and the electromagnetic wave under scheme of field in the second duality of the QFT. Then appears the spinor technology! [6].

The conscience operator of both has recognition and information, and this is transferred. Therefore, all the particles and fields dependently caused from this synchronization will have a conscience operator, which will have intentionality. This intentionality is to reach their zero point field, or base point, that is to say, the synchrony and harmony of the network of continuous transformation of minimal conscience energy that flows in the space-time of the dependently caused phenomena constructed of conscience-energy-matter in space-time continuum (See figure 4).

Using the concept of the conscience operator, revising the integral action $\mathcal{S}$ given in [1] considering the fermion interaction of the hypothetic particle of Higgs $H^0$, which is interdependently caused, that is to say, not exists of impossible form: as independent (because is recognized) as unique (because is particle and antiparticle at the same time, has parts) as stable (their period of life in the time is $1.56 \times 10^{-22}$ s) or with intrinsic identity (provides mass or not to the particles that interact with her). This Higgs particle shows charge and zero spin and mass of $(126.0 \pm 0.4 \text{ (estad.)} \pm 0.4 \text{ (sis.)} \text{ GeV/c}^2)$.

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Theorem (F. Bulnes). The link-wave of the quantum conscience can be one and only one of the five boson field: $W^+, W^-, Z, H^0$, or $G$, considering their existence dependently caused.

Proof. Using the concept of the conscience operator, revising the integral action $\mathcal{S}$ given in [1] considering the fermion interaction of
particles and some conjectures and theorems proved in recent researches from [1], is followed the theorem.

For example, consider the following Feynman diagram to \( W^+ \), (see figure 5).

\[
\begin{align*}
\text{Fig. 5.} & \quad \text{A) Feynman diagram to } e^-, \text{ captured (there is electron). Then } e^- \text{, captured } p^+ - e^- = \phi(1 \cup 1) = \phi(1) = 1. & \\
& \quad \text{B) } p^+ - e^- - \text{ collision } = \phi(+1-1) = \phi(\text{wave}) = \phi(0) = 0.
\end{align*}
\]

From the figure 5 A), is clear that the conscience field is the capture of particles and eliminates the scattering. The following string-diagram defines this action:

\[
\rightarrow \bullet \leftarrow,
\]

\( (2) \)

V. CONSCIENCE OPERATORS AND BULNES-MAYA DIAGRAMS

The Bulnes-Maya diagrams are a visual basic tool which represents the conscience and the fundamental forces of the QFT. The difference is simply the addition of the conscience in the ends using the symbol (\( \bullet \)), when are synchronized two or more particles and fields. For other side, the symbol (\( \circ \)), is used when have potentiality of synchronization. In addition the conscience operator has intentionality, that is to say, the direction.

These diagrams can facilitate the understanding of how Conscience applies their intentionality to join the space-time, between particles and their antiparticles, their corresponding quanta for bosons and fermions in the zero point of continuous transformation.

The diagrams of Bulnes-Maya are also an elegant mathematical tool, as well as the conscience operators. The Feynman diagram and the Bulnes-Maya diagram for a free electron are shown in figure 6.

The Bulnes-Maya diagram of the figure 6b, the conscience is always at the ends, which allows is communicated and synchronized in space-time with other particles and fields. In figure 6c, is shown the diagram Bulnes-Maya of a free electron, where the conscience unites their continuity in space-time. In this way; by the act of recognizing the electron into a frame of reference of space-time gets the Schrödinger equation

\[
\frac{\partial \Psi}{\partial t} = -i \hbar \left[ \frac{\partial \Psi}{\partial x} \right],
\]

where \( e \), represents the set of appropriate coordinates for the system and \( H \), is the full Hamiltonian operator.

Of this way, the conscience proves the existence of quanta, for example the particle in a box where is considered that “is known the position of a particle in their limits” in their appropriate system of coordinates (see the figure 7). Then the conscience gives to the particle information of scattering.
Considering that the conscience field is permanent and that their intentionality is give direction of any particle in the space-time [1], to synchronize and harmonize is has that:

\[ \mathcal{S}_{O_c}(\phi(x)) = \int_{X(M)} O_c(\phi(x))d\phi(x), \quad (3) \]

If the particles are bosons of integer spin which is oriented for the intentionality \( I \), of the conscience in the trajectory \( \Gamma \), is had that

\[ I(\mathcal{S}_{O_c}(\phi(x))) = \int_{\Gamma} \{ \int_{X(\Omega(\Gamma))} O_c(\phi(x))d\phi(x) \} \mu_1, \quad (4) \]

Thus the photons that are bosons and the electrons that are fermions, between other, that is amounts to is behavior as a boson through a conscience electromagnetic wave (eliminating half-integer states since is objective (postulate 1)) can be directed in the space-time to comply the intentionality of the conscience, since the electromagnetic wave is a real force to fermions with charge (integrating charge to material particles) and also is a virtual force to bosons without charge where the information is carry out for the conscience operator given by \( O_c(\phi(x)) \), (see figure 4 again).

Also again observing in the figure 4, we have that the conscience electromagnetic wave transports bosons and fermions. This electromagnetic wave must have the same frequency, amplitude, direction and more characteristics that are pondered by the conscience operator (by the postulate 4) to that transports particles and/or waves. The end limits shape the elastic-flux of the link-wave that defines from the bosonic level the conscience.

VI. CONSCIENCE IN THE ZERO-POINT FIELD OF CONTINUOUS TRANSFORMATION

All the particles as the bosons and fermions interact in the space-time, that is to say, not create or nether destroy simply is transformed from particles to quanta or vice versa. The figure 8, shows only the transformations to the particles pair electron/positron with a light quanta recognized for the conscience in the vertices (figures 6). To the figure 8, the Feynman diagram to the horizontal pair proposes that this light quanta is virtual and more speed that the light (as electromagnetic macroscopic manifestation). This is correct because is a virtual conscience quanta. In the vertical part the Feynman diagram proposes that a electron send a photon to the positron where this never take it, which is correct because the conscience always recognizes, that is to say, this haves the required information. Furthermore the figure 8, shows a network of electron and positron pairs in their state 0, of continuous transformation with quanta \( n = 1 \), recognizing for the conscience. Of this way is showed that the conscience field governs on any other field.

Of this way all the particles, anti-particles as well as real as virtual and their quanta of corresponding fields not have in reality an unique origin, nether a final, simply is transformed every moment every instant in the space-time where these changes are recognized by the conscience. These transformations not are casuals due to that each particle, anti-particle and more find their harmony, synchrony in the transformative state more simple, which defines their porpoise that is the intention of the conscience, which direct actions on the particles through transformations one and/or through until to risk such state 0, of the continuous transitorily. Due to that exist inumerable particles, antiparticles, etc, the intentionality never finishes, and that is to say, this will be constant in the space-time.

The conscience in the zero-point field satisfies the following properties of conscience and conceptual operators:

a). The conscience is identified with all the fundamental states of energy.

b). The conscience is the total sum of the unity.

Indeed, the final intentionality of every particle of a system of \( n \)-particles is recognizes their fundamental state (final objectivity or zero-point field) of change of the system. Then this comes given for

\[ \text{Final Objectivity} = \text{Conscience}^{\varphi} = \text{Conscience}^{\varphi - 1} = \text{Conscience}^{\varphi - 2} = \ldots = \text{Conscience}^{0} = 1, \quad (5) \]

The number 1, means that each particle is had unified with the other in the zero-point field (see figure 8). This zero-point field is obtained through the conscientious synergic sum of the conceptual operators \( O^{C_1} \), of every particle with intention (force and direction) of the characteristic system as follows:

\[ O_c = O^{C_1} + O^{C_{n-1}} + O^{C_{n-2}} + \ldots + O^{C_0} = 1, \quad (6) \]

For example, in a quantum process to virtual \( n \)-particles of fundamental bosonic state obtaining given for their link-wave

\[ 1 \text{ A conceptual operator } O^{C} \text{, is an operator that appears in the reference frame of phenomena perceptible by the conscience operator } O_c. \]
we could have \( \pm \frac{1}{2} \pm \frac{1}{2} \pm \frac{1}{2} \pm \frac{1}{2} \pm \ldots = 0 \) or 1, in every case. We will have 1, when the intention risks their objective. Then will be 0, when not risk their objective. In such case, the intention will be latent to the next assay that will realize the intention, while that happen all is converted in pure energy.

\[
O_M = R^a E^t
\]  

where \( O_M \), is the objective effectiveness risked for the conceptual operators to describe and define a reality or phenomena that is obtained by the conscience operator through of their relative objectivity. \( R^a \), is the Neumann dimension to amplitude of electronic propagator of \( O^C \), and \( E^t \), is the Trotter product in the quantum integral transform given by [1].

VII. CONCLUSIONS

In the space of the conscience, that is to say, the quantum fabric of bosons that interact in a deep level of very pure energy, all transformations happen. The constant transforming of these is given in perpetuity. Likewise bosons and fermions interact to obtain constant creation and annihilation to generate a permanent and constant light sea. This sea of energy so when we obtain particles or anti-particles of state 0, that it turn pre-determine the zero-point field remains latent to again to be used in other quantum process of creation or annihilation of particles or anti-particles of the space-time continuum. The postulates that is been enunciated are characteristics of the conscience as virtual field of the space-time, which must formalized in the context of the conscience operators that establish the force and direction with the that said virtual field acts to realize the required quantum transformations in harmony and synchrony.

VIII. ACKNOWLEDGMENTS

I am very grateful to Dr. Francisco Bulnes by his orientation and great acknowledgment of matter. I hope follow collaborating in this prestigious Journal.

Technical Notation

- \( O^C \) – Conceptual operator.
- \( O_c \) – Conscience operator.
- \( \phi(x) \) – Quantum state of the particle \( x \).
- \( QFT \) – Quantum Field theory.
- \( S \) – Action.
- \( G \) – Gluon.
- \( H^0 \) – Higgs boson.
- \( W^- \) – Weak interaction boson of with electronic charge \( - \).
- \( W^+ \) – Weak interaction boson of with electronic charge \( + \).
- \( Z \) – Weak interaction boson of with electronic charge \( 0 \).
- \( \hbar \) – Planck constant \( \approx 6.62606957 \times 10^{-34} \text{ m}^2 \text{ kg / s} \).
- \( \mu, \delta \) – Discriminatory parameters of quantum distributions.
- \( M \) – Full space-time.
References


