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The Theoretical Legitimation of an Ethical Paradigm of Human Consciousness Nonseparability starting from the Scientific Paradigm of Quantum Theoretical Nonseparability

Abstract: The present paper, extremely significant from the perspective of scientific and philosophical actuality, is an attempt to legitimize an *ethical* paradigm of human consciousness nonseparability, starting from the scientific model of quantum theoretical nonseparability. It has a double stake. 1) *Theoretical/scientific* stake, given by the „cognitive revolution” of quantum theory, which consisted of replacing the classic principle of separability with the principle of nonseparability or global intercorrelation. 2) *Ethical/philosophical* stake, representing the very hypothesis of my research, given by the profoundly ethical implications of the principle of quantum nonseparability upon human consciousness, fact which raises the question whether the human consciousness could suffer, on the basis of nonseparability or global intercorrelation of reality, a profound ethical „revolution”, analogue to the „cognitive revolution” in physics, which would put an end to the fragmentary vision of the I, revealing the profoundly ethical awareness of the fact that the individual fundamentally represents the entire humanity, being responsible for its destiny.

Keywords: consciousness, the separatist-conflictual structure of the I, paradigm of consciousness separability, paradigm of consciousness nonseparability, corpuscular-wave complementarity model of consciousness, paradigm of quantum theoretical nonseparability, „cognitive revolution”, ethical paradigm of human consciousness nonseparability, ethical revolution.

1. Conceptual delimitations between Consciousness and “I” based on their difference of ethical and ontological basis

If the whole European philosophy consists, as Whitehead said, “in a series of footnotes to Plato” (Whitehead, 1985, 39), then one of the founding distinctions on which the edifice of the philosophy and European knowledge are based, gravitates around the cardinal distinction, of Platonic origin, between “shadow” (appearance, opinion or *doxa*), as a lower level of

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knowledge and “being ” (reality, truth or *episteme*), as a higher level of knowledge.

The whole history of the European /Western philosophy and knowledge can be seen as a “footnote” to this aspiration from the ontologically *unfounded* condition of the “shadow” to the ontologically *founded* condition of the “being”, whether it is the aspiration to lift from “sensitive” to “intelligible”, from “illusion” to “reality”, from “error” to “truth” or from “multiplicity”/fragmentation to “unity” (Ardelean, 2019, 18).

The present paper is included in the same sort of aspiration, with the difference that this aspiration will gravitate around two notions of different ethical and ontological nature, the “I” and the Consciousness, the ethical stake, and implicitly the ontological one, consist here in lifting from the ethically unfounded condition of the “I” to the ethically founded condition of consciousness, this ethical mutation involves, as there will be seen, an ontological mutation.

Given that in the current opinion, the “I” and the consciousness are often confused, we must make the delimitation between them, stating that the “I” is neither the consciousness nor the consciousness is the “I”. The two notions, the “I” and the consciousness, so similar in appearance, but so different in essence, must not be confused because “the difference between them is as great as that between the *geocentric* movement and the *heliocentric* movement” (Ardelean, 2019, 11).

Thus, while the geocentric movement of the “I” is a closed and egocentric movement, the “I” placing himself at the center of the universe and considering that the whole world must gravitate around him, analogous to the false geocentric conception that the sun gravitates around the earth, the heliocentric movement of consciousness is an open one, oriented to the other, to the likeness, to the world, analogous to the true heliocentric conception that the earth gravitates around the sun (Ardelean, 2019, 12).

This geocentric movement of the “I” who sees no further from himself and his own interest will be the root of the fragmentation and conflict, where each “I” struggles with another “I”, prefiguring the picture of life as a prey. Therefore, the geocentrism of the “I”, based on fragmentation, should not be confused with the heliocentrism of the consciousness, based on integration, the two notions, movements and attitudes being not only different, but contrary. In this radical difference consists their great ethical and ontological difference.

This ethical and ontological difference between consciousness and “I”, in order to have a legitimate basis, will also be related to an *episteme* but to a new *episteme*, given today by the new scientific *paradigm of quantum theory*, whose ontological and epistemological assumptions, circumscribed to the

new principle of nonseparability or global intercorrelation, have led to a “cognitive revolution” with profound *ethical implications* for human consciousness, as well as for the legitimizing the difference between consciousness and “I”, respectively between the vision based on integration, specific to the consciousness, and the vision based on fragmentation, specific to the “I”.

2. The paradigm of consciousness separability in subject and object

The problem from which I start, representing a constant of personal reflections, is the problem of *fragmentation of human consciousness*, given by the *separatist-conflictual structure of the “I”*. This fragmented consciousness, which is the “I”, by virtue of it being fragmented and separated from the whole, implies a series of destructive consequences on a psychological, social and spiritual level, that is, at the level of the whole field of human consciousness, generating, in the intra and intersubjective space, endless conflicts, reason for which it can be considered the “gordian knot” of all the problems and conflicts of life.

My hypothesis is that this fragmented consciousness, which is the I, is part of the *paradigm of consciousness separability* in subject and object. David Bohm, one of the most remarkable representatives of quantum theory, considers that “this kind of thought that treats things as inherently divided, disconnected, and <<broken up>> into yet smaller constituent parts” (Bohm, 2002, XII) is tributary to the classical model of analysis, according to which the *subject*, the one who thinks considers him/her self “completely separate and independent from the reality/*object*” Bohm, 2002, XI) upon which he/she thinks. This way of thinking reality will institute, according to my hypothesis, the great *ontological* separation between subject and object, which will be the basis of the *psychological* fragmentation, as well as the basis of the *social* fragmentation. The movement of fragmentation of the I “encompasses the entire human consciousness, fragmented at all its levels: ontological, psychological and social” (Ardelean, 2019, 103). This fragmented consciousness, which is the I, will, in other words, create a reality, a world or a society just as fragmented, it becoming the source of all life’s conflicts, generating, in the intra and intersubjective space, endless spiritual, psychological, social, political, economic, ecological and cultural crises, thus making all of our energies be wasted in opposite and contradictory actions. “The inner fragmentation of man mirrors his view of the world <<outside>> which is seen as a multitude of separate objects and events [...] The fragmented view is further extended to society [...] The belief that all these fragments – in ourselves, in our environment and in our

society – are really separate can be seen as the essential reason for the present series of social, ecological and cultural crises. It has alienated us from nature and from our fellow human being. It has brought a grossly unjust distribution of natural resources creating economic, political disorder, and an ugly, polluted environment in which life has often become psychically and mentally unhealthy.”(Capra, 1975, 23)

Therefore, I consider that because of its destructive consequences, *the awareness* of this problem of the fragmentation of the human consciousness becomes urgently necessary. It reveals the danger of continuing with this fragmentary way of thinking, conflict-generating in the intra and intersubjective space.

3. The paradigm of consciousness nonseparability or subject-object nonseparability

As a result, the attempt to legitimize an *ethical paradigm of consciousness*, based on another way of thinking reality, a *nonfragmentary* one, which would put an end to the fragmented-separatist vision of the I, becomes all the more actual and vital for the future or destiny of mankind, as this way of thinking is legitimized by the very new scientific paradigm of quantum theory. It being that this nonfragmentary way of thinking of quantum theory recovers the great ontological separation between subject and object, thus recovering all classical distinctions, tributary to the paradigm of separability, such as: part-whole, observer-observed, consciousness-matter, individual-society it can be considered as institutive of the *paradigm of nonseparability*. Quantum theory thus reveals an essential “interconnectedness of the universe and forces us to see the universe not as a collection of physical objects, but rather as a complicate web of relations between the various parts of an unified whole”(Capra, 1975, 138).

Starting from this paradigm of nonseparability, I will show that it is extremely significant from the point of view of *scientific and philosophical/ethical actuality*, it having a *double stake*: 1) *theoretical/scientific*, given by the revolutionary vision of the world of quantum theory and 2) *ethical/philosophical*, given by the implications of this revolutionary vision of the world on human consciousness.

The theoretical stake is aimed at the most significant scientific paradigm of the twentieth century, respectively quantum theory, whose “cognitive revolution” consisted of replacing the classic principle of separability with the principle of nonseparability or global intercorrelation. According to this, the world no longer appears as being formed from separate parts, as classical, atomist-Newtonian physics states, but seems to be made of a “weaving” or a global network of events and interactions, in which every part is globally connected with the entire universe, so that an

action upon a part is reflecting over the entire universe, and vice versa, the part suffering the influence of all the events in the whole. It follows that the fundament of the world is no longer the part, but the whole, considered logically and ontologically prior to the part. David Bohm confirms this fact most eloquently: “One is led to a new notion of unbroken wholeness which denies the classical idea of analyzability of the world into separately and independently existing parts...We have reversed the usual classical notion that the independent <<elementary parts>> of the world are the fundamental reality, and that the various systems are merely particular contingent forms and arrangements of these parts. Rather, we say that inseparable quantum interconnectedness of the whole universe is the fundamental reality” (Bohm, 1975, 102). The principle of quantum nonseparability thus infirms the separability of the world in favor of its unity or nonseparability, affirming that “the world appears as a complicated tissue of events, in which connections of different kinds alternate or overlap or combine and thereby determine the texture of the whole” (Heisenberg, 1963, 96).

4. From the principle of quantum nonseparability to the principle of ethical nonseparability

The ethical stake, representing the very hypothesis of my research, targets, on the basis of law of symmetry and nonseparability between microcosmos and macrocosmos, subject and object, observer and observed, part and whole, consciousness and matter, individual and society, which is to say on the basis of the self-consistency² of the whole, moving from the paradigm of quantum nonseparability to the paradigm of ethical nonseparability of human consciousness. Over all, it is about the awareness of the profound ethical implications of the vision of quantum nonseparability on human consciousness, which raises the question: Is it possible that human consciousness to suffer, given the nonseparability or global intercorrelation of reality, a profound ethical “revolution”, analogue with the “cognitive revolution” in physics, which would end the fragmentation, given by the separatist-conflictual structure of the “I”?

I consider in this sense, that the most challenging implication of quantum nonseparability is of ethical nature, it targets the human consciousness, respectively the fact that the I can no longer be perceived as a separate consciousness from the consciousness of the world, the human consciousness being seen in the sense of the nonseparability between the “I” (part) and the world (whole), respectively as an ethical nonseparability. The principle of ethical nonseparability becomes thus the principle of the new ethical paradigm of consciousness, based on the profoundly ethical understanding of the fact that the individual

fundamentally represents the entire humanity, being responsible for its future or destiny.

5. The new ethical responsibility – the global mechanism of the part-whole connection

The specificity of this principle of ethical nonseparability will be given by the specificity of a *responsibility*, circumscribed not to a *local* mechanism, but to a *global* one, in which an action upon a part is reflecting simultaneously over the whole, and vice versa, by virtue of the fact that every part has a global connection with the whole. Also, the specificity of this responsibility will primarily be given by *choice*, as determinant factor of thought and reality. Descartes's famous *cogito, ergo sum* has to be replaced by "*opto, ergo sum*: <<I choose, therefore I am>>" (Goswami, 1993, 107) thus revealing the ethical implication between choice, creation or determination of reality and responsibility.

Given the fact that the great epistemological turn of quantum mechanics consisted of including the consciousness of the observer in the observed phenomenon, through which the observer can influence, determine and create reality³, I will show that the model of *corpuscular – wave complementarity* from quantum theory can be interpreted as a *complementarity model of consciousness* in its double hypostasis: corpuscular (spatial-temporally determined) and undulating (spatial-temporally undetermined). Because from a quantum point of view there are waves which can exist in multiple dimensions simultaneously (Goswami, 1993, 4), not being spatial-temporally determined, but only being in the state of possibility, then through the act of observation as act of choice, known under the name of "the collapse of wave function", the consciousness organizes, focuses and materializes these waves (Goswami, 1993, 60), transforming them into observable reality.

Therefore, the act of observation, as act of choice of the consciousness, become *crucial*, it being the condition of possibility for moving from possibility to actuality, which is from the property of the wave, spatial-temporally undetermined, to the property of the corpuscular, spatial-temporally determined. It is in this moving from undetermined to determined, through which the consciousness "chooses", creates and determines reality, on the basis of its double hypostasis of corpuscular-wave, that the crucial responsibility of the *consciousness* resides, simultaneously at a level of part/individual and whole/humanity, as well as simultaneously at a level of possibility-actuality.

6. Conclusions - for an integrative ethics of the consciousness

The assumption that leads to the “cognitive revolution” of the quantum theory is that the world cannot be analyzed in terms of separable entities, but in terms of non-separable entities of an entire cosmic, inseparable and indivisible, whose fundamental property is the nonseparability or global intercorrelation. I consider that from this principle of quantum theory derives the most significant philosophical and ethical implications for human consciousness, which could legitimate/found a new ethics, respectively a new *integrative ethics of the consciousness*.

Implications such as: unity, subject-object nonseparability, global intercorelation or mutual self-consistency which explain, based on the two top theories, Geoffrey Chew's *bootstrap* theory and David Bohm's theory of the *implicate order*, the identity/unity of the part-whole, leads, according to global intercorrelation, to the identity/unity “I” - “world”.

The awareness of this unity, leads to the discovery of the fact that the “I” can no longer be perceived as a separate consciousness from the consciousness of the world, the human consciousness being seen in the sense of the nonseparability between the “I” (part) and the world (whole), respectively as an ethical nonseparability. The principle of ethical nonseparability becomes thus the principle of the new ethical paradigm of consciousness, based on the profoundly ethical understanding of the fact that the *individual* fundamentally represents *the entire humanity*, being responsible for its destiny.

If the Romanian philosopher, Lucian Blaga, perceived in the future the occurrence of some problems “whose solution would make us wonder more than putting of these problems” (Blaga, 1977, 199), then the “solutions” proposed by the new paradigm of quantum theory can surprise us because it is closer than ever to an integrative way of understanding.

I therefore consider that this integrative/nonfragmentary way of understanding will have to be taken into consideration in the future ethical research, taking into account the criterion of general self-consistency or the criterion of harmony with the wholeness (Bohm, 2002, 270) of life, stated by David Bohm. “This is to say, one will require of them a general self-consistency as well as consistency in what flows from them in life as a whole” (Bohm, 2002, 270). The survival of our whole civilization may depend on whether “we can bring about such a change. It will depend, ultimately, on our ability to experience the wholeness of nature and the art of living with it in harmony” (Capra, 1975, 307).

This integrative criterion of self-consistency or harmonization with the whole might lead, on the basis of law of symmetry, nonseparability, and global intercorelation between microcosmos and macrocosmos, subject and object, observer and observed, part and whole, consciousness and

matter, individual and society, which is to say on the basis of the self-consistency of the whole, to a profound ethical revolution of the human consciousness which would end to the fragmentation, given by the separatist-conflictual structure of the I, thus leading to the recovery of the ontological separation.

Notes

¹ The widest formulation of the relationship between *doxa* and *episteme* appear in *The Republic of Plato* (470 A-480 A), as well as in the *Allegory of the Cave* (514 A-521 B).

² This notion is similar to Leibniz's idea of *monads*, each of which "mirrors" the whole in its own way, some in great detail and others rather vaguely. "Thus, although each created Monad represents the whole universe, it represents more distinctly the body which specially pertains to it, and of which it is the entelechy; and as this body expresses the whole universe through the connexion of all matter in the plenum, the soul also represents the whole universe in representing this body, which belongs to it in a special way" (Leiniz, *The Monadology*, translated by Robert Latta, Web edition published by eBooks@Adelaide, The University of Adelaide Library, 2014, 8). The difference is that Leibniz's monads had a permanent existence, whereas basic elements from quantum mechanics are only "moments" or "actual occasions", according to Whitehead, and are thus no permanent.

³ Nothing is more important about the quantum principle than this, that it destroys the concept of the world as "sitting out there", with the observer safely separated from it. In the words of Heisenberg, "what we observe is not nature itself, but nature exposed to our method of questioning" (Heisenberg, 1963, 57). The observer decides how he is going "to set up the measurement and this arrangement will determine, to some extent, the properties of the observed object" (Capra, 1975,140).

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