Quantum-Assisted Process of Disembody Under Near-Death Conditions: An Informational-Field Support Model

Florin Gaiseanu

ABSTRACT
Following the evolution of the concept of information as one of the fundamental components of the universe and analysing the last discoveries of the quantum physics, it is defined the informational (mass free) field of the matter. On this basis and taking into account the informational nature of the mind activity, it is defined an info-creational based model monitoring the human body, associated/connected to matter/antimatter binary system of the universe, allowing to show that the near-death experiences like disembody of information from the non-living matter (brain), time retrovision back to the infancy, peace, detachment and absorbing tube, could be deduced as consequences of such a system, explaining them in its specific terms.

Key Words: Near-death experiences, disembody, matter, antimatter, informational field, entropic, antientropic

Introduction
As it was recently shown (Fracasso and Friedman, 2011), the near-death experiences (NDEs) characterised generally by peace, joy, disengagement, extra-corporal view, time reversion of life and the absorption to a tunnel, were and remain a dispute topic on the medical research field, mainly because it is not clear that the experience during this state could be assigned to a disembody process of the consciousness or not. The key question on this matter is therefore that if during NDEs the consciousness really persists as long as the brain functioning is practically absent and how to explain this. As much as the non-invasive exploring technologies and the resuscitation techniques registered substantial progresses, especially due to the penetration of the intelligent microsystems and their integration into the innovative physical-electro-mechanical tools (Kaku, 2014), as more as conclusive cases of direct witnesses describing the phenomenology of such a state and therefore more conclusive experiments/opinions/reports become available. In such way, there were obtained pro and anti-arguments to supportcombat various hypothesis on the inducing causes like: (i) natural opiates, which could producing a peace and joy state (Blackmore, 1993; Carr, 1982); (ii) administered ketamine as anaesthetic (Rogo, 1984); (iii) dysfunctions of right temporal lobe, as similarly observed at epileptics (Britton and Bootzin, 2004); (iv) anoxia or hypoxia in the dying brain (Blackmore, 1983; Whinnery, 1997); (v) reduced arterial blood pressure in the eyes and brain (Stefansson et al., 2006); (vi)
depersonalization as a psychological defence

(vii) fantasy-proneness personality characteristics (Gabbard and Twemlow, 1984); subjective interpretation (Norton, 1995); (viii) (imaginary) expectations (Rodin, 1989); remembering of own's birth tunnel (Sagan, 1979).

Noting the dissensions on the existing theories, a new research line was proposed based on quantum physics concepts to explain NDEs (Carter, 2010; Greyson, 2010; Fenwick, 2010; van Lommel, 2006) or the consciousness nature by microtubules quantum activity (Hameroff and Penrose, 1996; 2014; Hameroff, 1998; Penrose and Hameroff, 1996). A spontaneous communication quantum effect theoretically predicted and experimentally observed between correlated particles (Bouwmeester et al., 1997) was taken into account to explain the communication between “entangled” minds (Radin, 2006).

However, most of the proposed models specifically that based on non-quantum principles are focused on some particular/local or not general or typical factors determining NDEs, while the quantum based models are incomplete, because these are not able to explain NEDs and other extrasensory phenomena. The most difficult problem which has no answer is to explain how the consciousness could remain active without the support of the brain functioning during NDEs, providing adequate evidences/arguments that the consciousness can be disembodied. Therefore, it should be necessary to approach such phenomena taking into account global/typical properties of consciousness, first of all analysing its specific nature. In this paper it is proposed a model based on informational concepts on consciousness, on one hand suggested by the characteristic type of activities of the brain and on the other hand by some properties recently discovered at the quantum particle level, explaining both the possibility of disembody and the associated observed phenomena perceived during NEDs.

An info-creational field based model of consciousness

To understand better the properties of the consciousness and its forms of exhibition, it is necessary to investigate deeply the properties of matter and its relation with the mind. Moreover, we have to use in this investigation adequate and unitary concepts, to identify the elemental/universal constituting/contributing components/forces to structuring/destructuring of living/non-living systems.

Information of matter

According to Draganescu's concepts on the universe, the fundamental matrices of the world is constituted by two ingredients: the so called “lumatia”, which is unstructured matter, a support with energetic content, under equilibrium conditions, unable to structurate by itself (Draganescu, 1990), and informatter, which is defined as informational “layer”, playing basically a phenomenological role, able to intervene: (1) to structurate matter by the relation: Lumatia + Informatter = Structure and (2) to form the living matter by the relation: Structure + Informatter = The Living.

Starting from these statement principles, we can follow the development of the concept of information and its intervention/importance for the structured world, inevitably observing the theoretical and especially experimental investigations on the elementary particles. Following the observation that everything in the nature could be described by mathematical relations, it was suggested (Tegmark, 2014) that the ultimate fundamental essence of the universe should be that of the laws, of the rules. Traducing this vision in informational concepts, we can conclude that this would be actually an information fundamental “layer” of the matter, able to provide the structure and the organization of the world, like in the Draganescu's model.

New steps on the investigation of the informational nature of the world there were successfully performed as follows (Gates, 2010): the interactions between particles were defined as geometric structures of 0 and 1, the characteristic elementary unit of information in a binary system (Bit), and these were used to rewrite some fundamental equations of the particle physics. On this way surprising results were found, showing that the universe disposes of the possibility to operate under an informational mode and to repair the elemental interactions between particles, as the internet browsers can do it. Moreover, he also deduced
that these error codes are operative also in the human genome, assuring its stability and the reproducibility of the cells. These results show that the matter is structured on “logical” chains and is able to control itself by its own informational system the structuration of matter, supporting in this way the Draganescu’s prediction model.

Following this line, we can observe that the universe could be described as a binary working informational system, where two antagonist elements with symmetrical properties compete and confront each other assuring its global dynamic equilibrium. One of such elemental informational cell could be represented by action/reaction, particle/antiparticle, entropy/antientropy, gravity/antigravity, positive/negative charge or decision, matter/antimatter and so on. The atomic diffusion in solids, where the impurities “recombine” with the vacancy positions (Gaiseanu, 1985) and the electrons (elemental negative electrical charges) with the holes (positive replicas) (Gaiseanu, 1997), are in the sophisticated integrated circuits of microelectronics and microsystems practical examples of such a situation (Gaiseanu, 2013). The mind is practically a decisional system, selecting between YES and NO (Gaiseanu, 2016). The universe is therefore a dynamical “scene”, which maintains its own balance by the confronting of two opposing and inseparable universal elements/forces, reflected also in the live systems by entropic/antientropic tendencies: the entropy low disorganising and the antientropic tendency opposing to it, consequently organising the live matter.

The use of informational concepts permitted to obtain successful progresses on the deduction of universal laws. Indeed, it was demonstrated that the empirical Newton’s gravitational law can be obtained actually from thermodynamic considerations (Verlinger, 2010), associating the particle position with information expressed in Bits, gravitation resulting in fact from the difference in the entropy between the positions of the attracting masses. The gravity appears therefore as an entropic (informational) force, orienting the matter to more entropic zones. Therefore, as the time arrow goes from the past to the future in the entropic systems, this arrow should be oriented in the reverse sense, from the future in the past in the antientropic systems, as it was recently shown (Caroll, 2015). We have to conclude therefore that the increasing entropy (in gravitational systems like that represented by matter) is a law related to a time arrow directed from the past to the future, but in the reverse sense in antientropic (therefore antigravitational) systems, like that represented by antimatter. As matter and antimatter particles (continuously generated by quantum fluctuations) should have antagonist properties, matter should represent consequently a repulsive system for antimatter, as it was recently proposed (Hajdukovic, 2011 a; b; 2012 a, b). On such way the mystery of the dark matter (supposed to be actually accumulated antimatter rejected by galaxy) and dark energy acting as a repulsive antigravitational force would be solved, explaining the (accelerated) expansion of the universe. The influence of gravity/antigravity on the human organism and consciousness, manifested by observed effects like telekinesis, levitation and premonition could be also explained on this way (Gaiseanu, 2016). This model could also explain why the gravitational force is much less than the other three fundamental forces in nature, represented by electromagnetic and the nuclear forces.

By deeper investigation on the specific properties of the matter at microscopical level, remarkable results were recently obtained, within the experiments with neutrons (Denkmayr et al., 2013), showing that the properties of elementary particles can be separated by their mass. This discovery is a key result for our own investigation, because reveals that information could be disembodied from its material support. Similar spectacular results were demonstrated for photons, with the possibility to extend them for electrons and also for atoms, separating their energy from the atom itself, or for any other more complex systems (Aharonov et al., 2013).

An immediate consequence of such results is that we can refer to the set of properties of matter as to an informational field, which can be separated by the matter itself.

The informational system of the human body

On the basis of the above presented results and taking into account that the main activity of the brain is an information-based process, this acting as an informational processor, we can define the info-creational field as the fundamental field where the thought, as an informational operator could act (Gaiseanu, 2016). In other words, we can define also the info-creational field as a
specific field where the information is collected, is operational and recognised by the thought.

We can also define the captured information sequence as info-creagram and the “bonded” information on the brain, presenting the different grades of “fixation”, depending on the repetition process, as infogram. A series of info-creagrams will form info-creactips, which will become info-clips if these will be fixed under a consolidated form. The infograms and info-clips can be recalled from memory by the thought operator and represented on the mental display.

To operate from informational point of view with these concepts, we will define also the sum of the brain zones where information received from internal (IS) or external (ES) sensors is acquired and stoked, as the Centre of Acquisition and Storing of Information (CASI). In the same manner, we can define the Centre of Decision and Command (CDC), the sum of all areas responsible of analysis, decision and transmission/command of this informational decision to the executive elements (EE). As the body acts as a matter able to receive and transmit information, we will define it as informed matter (IM).

The name of the defined info-creational field recognises by itself its creational essence, because allows the creation of new information on the basis on the acquired and stoked information in CASI. The created/captured information from internal/external sources is also creational because is a new one. The acquisition of a new information is an associative process, which can be mathematically described by fitting it with a pre-existing stored information model (Perlovski, 2001; 2002).

Associating to info-clips the emotional component (Goleman, 1995; Dispenza, 2007; Perlovski, 2014) as a personal reaction to information (Gaiseanu, 2016), we can define the so called informational “impress” the info-emotional-clip. The defined concepts presented above allow the operation with informational quantities independently on the informational source (audio, video and all others).

The defined concepts are represented in Fig. 1. Approaching the consciousness in such a manner, we can observe that the human organism is in fact an informational system capturing and disseminating information. Indeed, we can write the following relation, expressing schematically the activity of a reactive circuit, where the ATTITUDE is an informational output response to input (captured) information:

\[ \text{Input info} \rightarrow \text{CASI} \rightarrow \text{CDC} \rightarrow \text{Output info (ATTITUDE)}. \]

The short-time reactive circuit providing the attitude as informational output is defined in Fig. 1 as the Operative Information System (OIS), and could be assimilated actually with the conscious horizon of the consciousness, The Programmed Information System (PIS) is the subconscious zone of the consciousness, consisting in genetic and long-time acquisition (repetitive) information domain, assuring both the info-maintenance of the body functionality by automatic programs and the dissemination of the output genetic information, as represented in Figure 1 by the externally oriented arrows.

![Figure 1. Schematic representation of the informational system of the human body: OIS, defined as the operative informational system, is the sum of the acquisition and decisional subsystems, assuring the immediate adaptation for survival; PIS is the programmed informational system, assuring especially the long-term adaptation for survival by reproduction; IS and ES represent the internal and external informational sensors respectively and IM the informed matter, i.e. the “hard” support of the informational system. This is connected to matter and to the info-creational field.](image-url)
long-term adaptation/survival process by reproduction. The two main informational circuits are managed by the brain processor, connected to specialised informed matter components like external (ES) and internal (IS) sensors and execution elements. Part of this informational system defined as PIS is dedicated to maintain the function of the organism as part of entire all, and another one, defined as OIS, to assure the instant adaptation to new received conditions. Both systems are in a permanent connection providing each other interest information: PIS transmits to OIS the stabilised information (selection criteria, automatic reflexes and internal status signals, represented by black arrow in Figure 1), and PIS receives from OIS the effects of the adaptive commands (represented by white arrow in Figure 1). The repetitive decisions will be integrated in PIS as new acquired subroutines and transmitted genetically to the next generations.

As it can be seen in this figure, the organism is connected to info-creational field and to matter, suggesting the collaboration between the two forms of components, as it was presented above. The connection to matter includes also the interchange processes between the body and matter itself.

Consequences on NDEs and associated phenomena

According to the above presented quantum informational model, the main characteristic features of the informational system of the human body are: (i) the mind operates in a so defined info-creational field, where the thought acts as a selective and focused informational operator, with properties of vector, because it needs an address where to transmit or capture/recall from the information; (ii) operating in this field, the mind is creative because it can project/built new informational configurations; (iii) the informational system of the human body is an antientropic one because (a) OIS accumulates and organise informational experience in CASI, dedicated to adaptation and survival, (b) OIS operates to select and transmit to PIS repetitive information useful for long-time adaptation and survival, which is integrated as subroutines in PIS, playing therefore a protective antientropic role with respect to the organism necessities, (c) PIS itself operates to maintain the correct functioning of the body, managing the microstructural processes to reconstruct/organise IM system against the entropic low obeyed otherwise by matter.

PIS is therefore a stabilised functional system managing from informational point of view the informed matter to fulfil its tasks of body maintenance. OIS fulfils the needs of connexion with the environment and decision for short-time adaptation, organising the information in CASI as an accumulated informational experience, which could be also included by a repetitive process as new algorithms in PIS. We have to deduce therefore that the human informational system is actually an antientropic system controlled by info-creational field based processes.

The accumulated informational experience during the life is a result of an antientropic process, because it is opposing to entropic law obeyed by matter itself. Indeed, both the short-term (attitude) and long-term informational output (genetic transmission) have essentially an antientropic character, because its are oriented to the survival of living organism. As parts of the operational informational field as defined above, the acquired info-routines are also antientropic components. Both informational systems, OIS and PIS are engaged to antientropic processes acting in conjunction with the info-creational field. This field promotes the antientropic processes, organising matter in working living structures and systems. Therefore, associating the info-creational field to gravitational (entropic)/atigravitational (antientropic) of matter/antimatter and corroborating to their informational properties presented above, we can understand various observed effects on the informational system of the human body, as follows.

(1) This field would be the antientropic universal component acting to maintain the organised configuration of the human body, (re)structuring continuously the informed matter into its informational matrices.

(2) Under near-death conditions, the informational field “extracts” (disembodies) the live information from material body, preparing it to become a separated independent entity, accumulating it into this field.

(3) As the informational field is antientropic, it should be also temporally oriented from future to the past, allowing the retro-vision of life from present to the infancy. This special property is manifested also by premonition phenomena (Gaiseanu, 2016). Under near-death special
conditions, the life experience is “absorbed” into this field as an accumulated informationally configured entity during a reverse arrow time process.

(4) The sensation of detachment and peace is actually a consequence of the separation of the informational accumulated experience from IM, which tends to become simply a non-live matter. During the life, the antientropic (and then antigravitational) force of antimatter is perceived as “haven”, opposing to the “heavy” attraction of matter and material entropic (destructuration) processes.

(5) The “extra-vision” during this process is actually the same with that operating by the thought during the internal/external exploring of the informational field when we are disconnected from the external sensors. This vision is the result of a direct (“scanning process”) exploration of the informational field, where the vector thought is the informational operator, as we already discussed above.

(6) The connection of mind to the antientropic and antigravitational field of antimatter can also explain (Gaiseanu, 2016) phenomena like levitation, telekinesis (particularly the cloud dissipation by the mind power and premonition [Ignatenco, 1994]), well supporting the proposed model.

(7) We can admit that the tube visualised during NEDs is actually a specific detection form of the transitional region between the living and “pure” informational space. If we approach this item in terms of highly-condensed and free mass zones, similarly with the situation of the so called black holes in our universe, we can attribute the highly condensed mass zone to IM and the free mass zone to informational field. Therefore, the tube would represent the quantum transition between IM and pure informational field, where the own informational experience is antientropically resorbed/accumulated after the finish of the body functioning.

Under these circumstances, on the basis of this model, we can suggest that the evolution of living species on our planet was in the same way influenced by the antientropic field of antimatter. Therefore, it is reasonable to believe that the probability played an important role for the evolution of inferior species, but the antientropic force contributed in a fundamental way to the structuring of more evolved living system, accelerating/amplifying the development of increased complexity degree of such living systems.

Conclusions

The conception approaching information as a fundamental component of our universe is supported by the recent theoretical and experimental evidences, showing that this is a primary associated component to matter/energy constituent.

The matter/antimatter system represents a binary fundamental unit within the informational universe, playing an active fundamental role on its time/form evolution/distribution, each component showing opposite time arrow sense and opposite type entropy (gravitation) with respect to the other.

The elemental properties of particles can be separated (disembodied), pointing out that: (i) information is part of matter, but maintains its own representation, so we can refer to it as to a quantum informational field; (ii) information is separable from its matter body. On this basis, it is realistic to define a quantum info-creational field, where the thought acts as an informational operator. The thought works actually with disembodied virtual information, collected from the external environment and from the body.

Our informational system is basically composed by (i) OIS, providing the attitude as an output informational reactive short-term adaptation to the environmental conditions, and (ii) by PIS, managing the maintenance of IM (physical body) and providing genetic information, as an informational output for long-term adaptation and survival. The above defined quantum informational system stipulates actually that the human body (and other living systems) are the results of the collaboration/confrontation between two antagonist components: the ordinary gravitational (entropic) matter, tending to disorganise the body and the assisting force of antigravitational (antientropic) field of antimatter, tending to do the contrary.

The near-death experience phenomena can be deduced as natural consequences of the above model; (i) the retrovision of own’s life is a consequence of the time regression of the personal informational experience into the antientropic essence informational field; (ii) the disembody of mind and the extracorporal vision are consequences of the separation between informational field and IM, these becoming “pure” and non-living (ordinary) matter respectively; (iii) the absorbing tube is the detected transition
zone between the two different existential forms of matter, differentiated by antagonist entropic (gravitational)/antientropic (antigravitational) properties.

The proposed model is supported by some specific properties of the human consciousness like premonition, levitation and telekinesis, particularly expressed by clouds dissipation by the mind power, which could be explained well by this quantum process.

This model opens a new direction of investigation of the consciousness, starting from fundamental properties of our universe, both at the large and small scale. Although antimatter was practically neglected as a possible player on our matter universe, probably because matter and antimatter particles in contact are annihilated in an explosive manner, this should have a role, possibly determinant for the universe expansion and on the living systems, as discussed above. Even antimatter is far away from our local living space, its influence could be notable and detectable on our world. This new line of investigation could contribute in a determinant way to the clarification of the consciousness unexplained features, like the near-death phenomena and of its extrasensory properties like premonition and telekinesis. New steps of investigation could also be directed to the genesis/development of the living structures on our planet.

References
Carroll S. The Arrow of Time (www.proposterousuniverse.com) and “From Eternity to Here, the Quest for the Ultimate Theory of Time”, GB: One world publication, 2015.
Draganescu M. Informatia Materiei (in Romanian) - [Information of Matter (English)], Romanian Academy, 1990; 24: 230-240.
Fenwick P. Non-local effects in the process of dying: Can quantum mechanics help? NeuroQuantology 2010; 8(2);155-163.
Fracasso Cand Friedman H. Near-death Experiences and the Possibility of Disembodied Consciousness: Challenges to Prevailing Neurobiological and Psychosocial Theories, NeuroQuantology 2011; 9(1); 4153.

Gaiseanu F., Sachelarie M, Sachelarie D and Estève J. Contributions to the Modelling and Simulation of the Human Body, Consciousness and Life Physics. Cosmology and Astrophysics J 2016; (1); under the publication process.


Tegmark M. Our Mathematical Universe: My Quest for the Ultimate Nature of Reality, USA, Randomhouse, 2014.
