Article

Near-Death Cases Desegregating Non-Locality/Disembodiment via Quantum Mediated Consciousness: An Extended Version of the Cell-Soul Pathway

Contzen Pereira^{*} & J Shashi Kiran Reddy

Abstract

The word *soul* in the cell-soul pathway does not have a scientific definition but has been hypothesized to be an indefinite, non-structured, massless energy made up of electromagnetic radiations that is confined in the cytoskeletal network of a living cell. It is a coherent, imperceptible, uncontainable and recyclable support pathway, which uses energy to promulgate consciousness in the cell supporting its functions (Pereira 2015). The pathway currently provides a mechanistic explanation of the flow of consciousness within the body, but the intent of this paper is to provide an arduous explanation of non-local consciousness or disembodiment observed in near-death experiences. The paper hypothetically subsets the cell-soul pathway with the presence of two forms of consciousness, consistent with a recently developed model by Reddy (2016b): bodily consciousness, which manages functions only at cellular level, and functional consciousness, which is present in the body but can get disembodied and perform nonlocally; the two forms of consciousness represent the overall state of consciousness. The nonlocality of subjective experiences observed in near-death cases can be related to the realm of quantum physics - quantum entanglement between the two forms of consciousness that can demonstrate the capability of storing information holographically within the void or vacuum with the ability to create memories beyond the limitations of the brain and body.

Keywords: Cell-soul pathway, consciousness, entanglement, near-death, experience, disembodiment, zero point field.

Introduction

Consciousness is an enthralling topic in the field of science and various disciplines, but being conscious minus a body when clinically dead is abstruse to apprehend and recognize. Several near-death cases have been recorded and studied. In many cases the individual is conscious outside the body with a capacity to conceive and store memories when clinically dead and can recount these experiences when resuscitated. Non-local consciousness has been defined as a state, where consciousness occurs beyond the physical boundary of the body (Van Lommel 2013), otherwise known as disembodiment. Consciousness in this view is divided into two

Corresponding Author: Contzen Pereira, Nandadeep, Chakala, Andheri (East), Mumbai 400 099, India. Email: contzen@rediffmail.com, contzen@gmail.com

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forms, wherein one form remains identified with the body while the other can be non-material aspect; when the body loosens the other form takes up the task and therefore resulting in retention of memory of a subjective experience. Disembodiment is an ambiguous term rarely accepted in the scientific community but commonly defined as, "A soul, spirit, or consciousness that has been disembodied, or which lacks a physical form" (in Wiktionary). It is therefore an immaterial state, most often invisible to others, so it is ignored by science and only accepted in philosophy as ontological dualism, religious or otherwise. Descartes called the immaterial aspect of consciousness *res cogitans* – in other words, mind, soul or spirit, in which form it correlates with near-death, out-of-body and end-of-life experiences.

Studies conducted by Dr. Sam Parnia and group (2001, 2002, 2014), Dr. Pim van Lommel and group (2001, 2014), Dr. Kenneth Ring and group (1999, 2001, 2006) and Dr. Janice Holden (2009) have provided significant evidence of survival of consciousness after death and has been presented in the form of several near-death cases. Dr. Sam Parnia and group have confirmed that approximately 9% of adults have a near death experience after a cardiac arrest (Parnia et al. 2014). Von Lommel and group (2001) claimed this number to be 18% while IANDS (International Association for Near-Death studies) published that approximately 85% of children have near-death experiences (Long & Holden 2007; Holden 2009). Dr. Bruce Greyson, a well know researcher in near-death studies, has the following opinion about near-death studies: "Our mind-brain identity model works fine for everyday walking and talking, but when you're looking at times when the brain is not functioning and the mind seems to function quite well, you get into that extreme area where we need to look at some other models" (as cited in MacIssac 2015).

Near-death and out-of-body experiences have been termed absurd by some and hallucinatory or illusory by others (e.g., Mobbs & Watt 2011). Recently, respected philosopher and Buddhist, Evan Thompson (2015), contended such experiences are scientifically unproven so must be considered dreams of the brain. Near-death experiences have some common facets which involve a feeling of peace and tranquillity, a sensation of floating through a tunnel towards a bright light while undergoing a complete life review, etc. Sometimes near-death experiences can be horrific, caused by unpleasant feelings of fear or panic which may or may not be associated with a life review (Blanke & Dieguez 2009).

These common features in near-death experiences have been challenged by sceptics, who claim these features to be caused in the brain by factors such as, anoxia or hypercarbia in the dying brain, insufficient administration of general anaesthesia, release of endorphins in brain during stress, high level of serotonin, resident brain electrical activity, administration of painkillers, etc. (Blackmore 1993; Blackmore 1998; Carr 1981, 1982; Judson & Wiltshaw 1983; Morse et al. 1989). Most of these claims by the sceptics have been ruled out by critics, but there are some of them that are still under evaluation (Parnia et al. 2001; Shulman et al. 2003; White & Alkire, 2003;). During cardiac arrests, the brain is presumably dead and both human and animal studies

have provided extensive supporting data on cerebral physiology during and after cardiac arrest (Parnia & Fenwick, 2002). However, as Thompson (2015) and others have noted, brains completely without measurable activity during a cardiac arrest when the NDE presumably is occurring have never been observed under clinical conditions, so it is possible brains continue less visible activity at the crucial time.

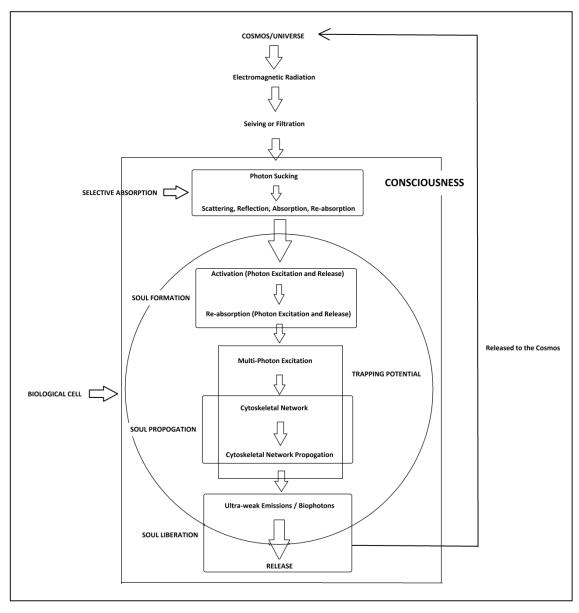


Figure 1. The Schematic Representation of the Cell-Soul Pathway (Pereira 2015)

The cell-soul pathway is a hypothetical pathway and has been defined as a coherent, imperceptible, uncontainable and recyclable support pathway, which uses electromagnetic

energy in the form of photons to promulgate consciousness in a living cell. (See Fig. 1, from Pereira 2015). The pathway is currently limited to the propagation and functioning of consciousness within the microtubular network of the cell, but with further backing from a quantum physics perspective, an attempt is made to understand and justify non-local consciousness or the state of conscious disembodiment, as well as its vivaciousness and richness through the experiences observed in some exceptional near-death cases.

How is it possible for a conscious essence to exist without a physical host? To avoid the purely religious explanations of a separable *soul* or *spirit*, we offer our research into quantum mediated consciousness: an extended version of the cell-soul pathway.

Intriguing Experiences in Near-Death Cases Supporting Disembodiment or Non-Locality of Consciousness

Cardiac arrest patients are one of the most studied cases with regards to near-death and out of body. When resuscitated, patients provide a narration of their experience. The fullness associated with the experience implies that during a near death experience the non-local conscious component or disembodied conscious state leaves the body, but remains in the resuscitation room or in close proximity to the body. Many of these characteristics can be verified by doctors and independent researchers after patients return to their bodies to tell their experience. The capacity of being out of the body and simultaneously being conscious in a near-death state has never been accepted by the scientific community and has often been categorized and disregarded by sceptics as a neuro-psychological state associated with the dying brain (cf. Blackmore 1998). Several near-death cases have demonstrated this phenomenal state of being disembodied, but there are a few cases that stand-out from the regular cases and thus pose a challenge to the scientific community. The case studies presented in this paper are exceptional near-death cases that provide a substantiation of the existence and rationalized approach of consenting non-local consciousness. The case studies presented here are not proven beyond all doubt as they have been criticized for various reasons by several sceptics, yet they still support the idea of non-local consciousness and disembodiment.

The first case is of Kimberly Clark (e.g., Rivas 2015; Sharp 2007) who had an experience that changed her life and her belief in the existence of consciousness after death. One morning, as part of her daily work schedule at the Harbour View hospital, she was working with a team of doctors who were trying to save a woman who had been bought to the intensive care ward as she was suffering a massive heart attack. As the doctors tried to save the woman, her heart stopped several minutes; she was clinically dead for those few minutes and it was a miracle that the doctors could bring her back. When the woman calmed down she explained to Kim, that during her resuscitation she had found herself at the ceiling level and could accurately point at the

corner of the room from where she was observing her own resuscitation. But this was not all; she had also felt herself three storeys above the ground from where she could see a tennis shoe sitting on a ledge. The tennis shoe was dark blue, worn with a scruff by the little toe and the lace going under the shoe heel; she felt agitated because she wanted someone to get the shoe.

When Kim checked the ledge of the patient's window there was no shoe, but when a through search of all the ledges in the hospital was conducted, on the opposite side of the hospital on a different floor, in a room with a window facing to the west there was a tennis shoe on the ledge with the same description that had been provided by the woman. Kim could not believe her eyes as she opened the window and reached down and picked up the shoe which bore the scruff on the opposite side. There were no other buildings on that side of the hospital and the details of this shoe as described by the woman could definitely not have been seen from the ground or from anywhere inside the hospital. To add to that, it was the first time that this woman had ever visited this hospital. To know that a shoe is lying on the ledge with its nearly perfect description, she should have either seen the shoe before the operation or she should have been there in the same room much before the operation, as there was no possibility of viewing the shoe from an opposite building. Then how did she see this shoe and experience its pattern and colour especially during a situation when she was dead?

Hovering above her body and viewing the shoe from three storeys high was possible only if she was suspended from that height or if she was flying. This case clearly reveals a state of disembodiment, where the individual could move out of the body, rise up to a level of three storeys and observe a shoe placed on a ledge with a scruff on the side not facing the window (see Rivas 2015; Sharp 2007). Under no circumstances, can this experience can be considered as a dream or hallucination, as the shoe that was described by the woman was found later on the ledge with the same features. In this disembodied state the woman was conscious, as she was aware of her surroundings where she could even describe the colours and texture of the shoe. There seems to prove that there is a form of consciousness that can be non-localized in a situation like death, which is evident in this experience. The fact that this form of consciousness can become re-localized in the body (return to the body) proves that even when disembodied, it is still connected in some form to the body and can enter back into the body with memories that were created in the disembodied state.

Another interesting case study is of Vicki Noratuk, who has been blind from birth and was terribly injured in a car crash (Stroganoff 2010; Ring & Valarino 2006). She had a skull fracture, concussion, neck injury, back injury, leg injury and, worse, her heart stopped rendering her clinically dead for approximately 4 minutes. At that very moment she felt her back against the ceiling and she kept looking at everything that was happening on the hospital table. She even heard a doctor say that it was unfortunate that she would now also be deaf along with being blind, because there was blood on her left ear drum. She even recollected one of the lady doctors mentioning that even if she survived this coma she would be in a vegetative state. As she fought

for her life something extraordinary was happening – she could see for the first time in her life, but she felt was a nightmare, as she had never before perceived anything beyond the reach of touch. The blind usually touch things to feel them; therefore, this woman's world was always at an arm's length. This frightened her as she could now perceive things through sight that were beyond reach.. In this state she could see her left hand and the ring on her left finger; she even felt her shortened hair that had been shaved off; she was conscious without her body which lay on the operation table.

She had never dreamed in visual images, but now she was actually experiencing them She could not differentiate between the colours that she was seeing for the first time and considered them different intensities of light. She survived and returned to her world of darkness yet she has no doubt that for just a few minutes she could see. This case study strongly supports the state of conscious disembodiment – a woman who was blind from birth could see and experience in full consciousness and in her disembodied state could create and retain memories that could be narrated once she was back into her body. Experiencing her senses in such a state must be overwhelming, but it provides us with an explanation that the sense can be experienced even in a disembodied state and by some means get transmitted to the sense organs of the body, which is in a state of suspended animation while being refurbished. Being conscious in a disembodied state of consciousness.

Many such cases have been reported in blind subjects and none of the explanations or models proposed to explain them provides an in-depth understanding of such phenomenon. To explain such happenings in the blind, Ring and Cooper (1999) coined the term *mindsight* and sees it as a form of transcendental knowing often reported by both blind and sighted during extrasensory or out-of-body experiences (cf. French, 2005; Ring, 2001; Ring & Cooper, 1999).

The next case study is of 55 year old truck driver, Al Sullivan, who was undergoing a triple bypass surgery (Kelly et al. 1999; Sullivan, 2013). This was the first time he had met his cardiovascular surgeon on the operating table. As the anaesthesia took effect the surgeon introduced himself and kept explaining the whole operation procedure which involved removing his veins from the leg and the arteries from chest wall in order to perform the planned 4-5 bypasses. Suddenly, he felt that he did not have to listen to the surgeon anymore, as he was no longer in his body and did not need his ears to listen, for he had left his body and could watch the whole procedure from above. He saw the team covering his eyes with tape and placing all sorts of drapes and blankets around him, with the surgeon and his team getting ready to operate on him.

Hovering above his body he saw his surgeon standing alone over his opened chest, which was being held open by metal clamps while two other surgeons were working over his leg. He recalls being puzzled at the time about why they were working on his leg when the problem was with his heart, but he now knows that at this point in the surgery the surgeons were stripping the vein out of his leg to create the bypass graft for his heart. At one point he observed the surgeon take a step back, place his arms near his armpits and move his folded hands in an unusual manner that looked as if he was flapping his arms. This was later confirmed by the surgeon and his team: when the surgeon was not operating he had a habit of placing his hands close to his chest and point with his elbow to prevent contaminating his hands. He could not have known this peculiar behaviour of his surgeon unless he was conscious in the room or someone would have told him that way before the operation, which was next to impossible. When he came back to his body after the surgery was over, the surgeon was startled that he could describe his own arm flapping, which was his idiosyncratic method of keeping his hands sterile.

This case confirms that in a disembodied conscious state the individual can experience his surroundings as if he were in his conscious body. The connection between the body and the disembodied conscious state seems to be so enduring that it can create and store these memories, which can be revived once consciousness re-enters into the body. Observing the operation, providing details about the procedure and observing the behaviour of his surgeon could not have been possible when his eyes were taped and he was in a state of unconsciousness. During a near-death experience the brain is apparently inactive and there seems to be no activity in the vision centre of the brain (Parnia & Fenwick, 2002), so how can memories be created without the presence of active brain in a body? How is the individual conscious, when clinically dead? There should be a mechanism that creates these memories within the realms of the world that lay beyond the imagination of oneself.

The above cases strongly support the possibility of a disembodied state during a near death experience, but we also need a more physical-mechanical explanation of how this is possible. It is a difficult task to prove the existence of the experience as well as the mechanism that made it possible, but it can be hypothesised. The next section attempts to understand and provide an explanation to this form of conscious state from the perspective of a hypothesised pathway known as the cell-soul pathway (see Fig. 1 above, Pereira 2015), which we feel indicates the flow of consciousness within the body. The existence of a conscious state other than the body and its interaction with the circulating consciousness within the cellular network of the cells in the body as described by the cell-soul pathway could provide a convincing explanation of non-locality of consciousness.

The Extended version of the Cell-Soul Pathway

The word *soul* in the cell-soul pathway does not have a scientific definition but has been hypothesized to be an indefinite, non-structured, massless energy made up of electromagnetic radiations that is confined in the cytoskeletal network of the biological cell. The cell-soul pathway is a hypothetical pathway that helps in the propagation of consciousness to support the

functioning of the body at the level of a biological cell by means of immeasurable assortment of photons of different frequencies and wavelengths within the cytoskeletal network of a single cell (Pereira 2015).

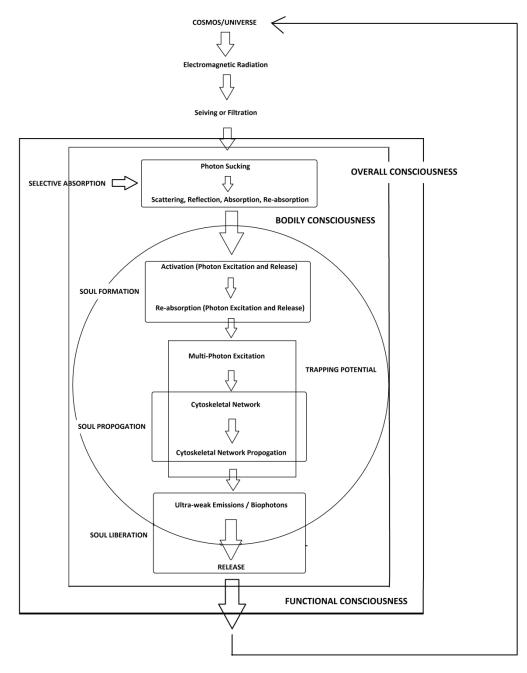


Figure 2. The Schematic Representation of the Extended Cell-Soul Pathway (Embodied State)

Consciousness propagated by this pathway is a form of consciousness which we now propose as "bodily consciousness". Bodily consciousness is circulated within the cell and the cells of the body and together keeps the cells and the bodily functions going (see Fig. 2). This form of

consciousness is involuntary and is dependent on the individual cells and their individual consciousness. Aging, malfunctioning, sudden death or damage of cells and cellular function can impair the flow of bodily consciousness which may or may not result in death but brings about a change in the overall consciousness of the body. Bodily consciousness is propagated by means of photons and has been well explained by the cell-soul pathway which involves trapping and circulation of electromagnetic radiation that prevails in the universe resulting in the formation of consciousness that wholly depends on the organization of matter that makes up the cell, its components and biochemical systems (see Fig. 1, Pereira 2015).

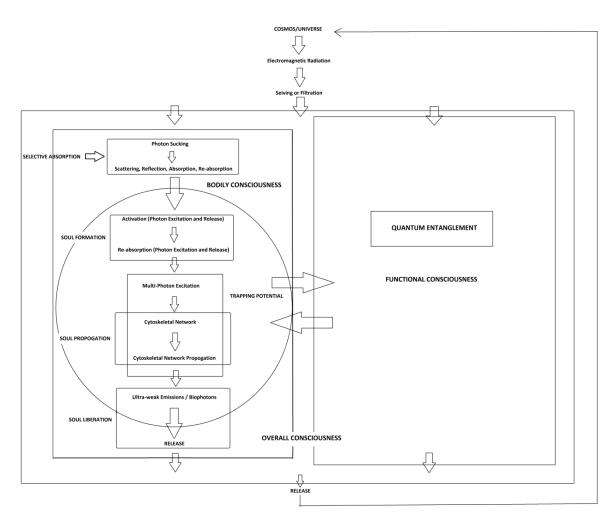


Figure 3. The Schematic Representation of the Extended Cell-Soul Pathway (Disembodied State)

In order to support the non-local consciousness that is effective during near-death experiences we propose the presence of another form of consciousness that exists within the body along with the bodily consciousness. As part of the extension to the cell-soul pathway we call this form of consciousness the "functional consciousness", which originates and terminates by means of the same process as that of the cell-soul pathway (Fig 2). The functional form of consciousness

immediately detaches from the body during death and is likely the main cause for the non-local conscious experiences during a near-death experience (Fig. 3). This form of consciousness can also support the conscious states observed in rapid eye movement sleep or end-of-life experiences, but we would need further sources of information to claim it exists after actual death, so such explorations are beyond the scope of this paper (and any conceivable paper at this time). The bodily and functional forms of consciousness together form the overall state of consciousness of a body and therefore support this unique and untouched pathway that has been prevailing since life came into existence that maintains obedience in its interaction with various cellular, bodily and out-of-body functions.

Photons play an important role in the cell-soul pathway. Gradual release of photons has been demonstrated in dying biological cells that shows a rapid increase in ultra-weak emission, an activity termed the "flash of death" (Reddy 2016a; Slawinski 2005). Biophotons are known to show increased intensity when they undergo physiological changes under chemical or physical stress (Slawinski 1990) or when the cells get damaged beyond repair (Reddy 2016a; Scheminzký 1916) indicating increased absorption of electromagnetic radiation leading to amplified cell-soul pathway activity under cellular stress. A breach in the cellular process or clinical death as observed in cardiac arrest patients can lead to an obstruction in the flow of bodily consciousness via the cell-soul pathway which may recover by increased absorption of electromagnetic radiation or photons from the environment, but until then the functional form of consciousness may remain dissociated but conscious. If this exchange or recovery is not swift, it may lead to cell death, which will result in a gradual release of the bodily consciousness from each and every dying cell and a complete severance of the functional consciousness from the body.

In a near-death experience, the functional consciousness resides outside the body and seems to be an exploratory state but stays connected to the body. At this moment the functional consciousness is fully aware as even though it is out of the body it still stays connected to the body. The connection of the functional consciousness to the body can be better explained by quantum entanglement, wherein the photons of the functional form of consciousness are entangled to the photons of the body form of consciousness that resides with the body. This entanglement which is better explained in the next section sustains until the body is in a state of return, where each damaged cell of the body tries to revive the rhythmic biochemical cycles that manage the cellular process within each cell from the exterior. The cell soul-pathway supports several conscious roles in cell functions, including cell proliferation and differentiation, apoptosis, DNA synthesis, RNA transcription, protein expression, ATP synthesis and metabolic activity and the overall consciousness of the body. The pathway is an ultra-fast networking pathway in gigahertz, megahertz and kilohertz frequencies and is required for the propagation and integration of both forms of consciousness (Pereira 2015).

The disembodied or the non-local form of experience in the near-death cases is conscious or aware to a level that memories can be created and stored and later recalled and narrated is supported by the ultra-fast processing of the cell-soul pathway. Bokkon and team (Bokkon et al 2013). have already provided a biophysical visual representational model to show the involvement of low-energy quantum entanglements during near-death experiences. Whether these processes are conducted within the bodily consciousness or the functional consciousness is difficult to answer, but the exuberance or richness of the experiences are similar to those created in a state of deep dream or meditative consciousness. Despite of the existence of the various forms of consciousness, consciousness functions as a whole unit when it comes to an experience. The working of the senses in a non-local or disembodied state supports the hypothesis that the body though technically (no blood circulation) dead is still conducting consciousness externally by means of the cell-soul pathway; awaiting an assurance of the death or return to life of the body.

Consciousness is therefore an indefinite form of energy that propagates via the cell-soul pathway and in the process creates experiences within and outside the body. During a near-death case, the bodily consciousness is in a process of recovering with the recovery of the body and its cellular functions, but the functional consciousness can experience the whole recovery process of the body and therefore is more interested in the resuscitation process.

Quantum entangled states of consciousness

Self-sustaining quantum generated energy through entanglement is the answer to all mystical realties and the answer lies in believing in its existence in and around us (Pereira & Harter 2015). Based on our extended hypotheses, it is now well established that the cell-soul pathway supports two forms of consciousness, functional consciousness and bodily consciousness. These forms of consciousness have the same source of energy supply; the electromagnetic radiation that manages the cell and its functions thus supporting the bodily form of consciousness which interim creates the functional form of consciousness (Fig. 2). The way of life in living systems, is trapping of electromagnetic radiation energy, its conversion into chemical energy and its use for cellular maintenance and growth (Overmann & Garcia-Pichel 2006) which is the basis of the energy flow system for this pathway. The Planck postulate, which describes how all matter absorbs and re-emits photons, i.e., quanta of energy, from and into the quantum foam of the zeropoint field that pervades all matter and even the vacuum of space (Haisch et al. 1997). Normally these emissions are random exchanges of energy between particles and the zero-point field but in living tissue have been shown to exhibit quantum coherence and also carry information non-locally i.e. instantaneous transmission of information across space and time (Darling 2005).

Physicists have experimentally demonstrated the entanglement of two particles no matter how far apart they are (even a billion miles apart, in theory), so a change in one particle instantly creates a simultaneous change in the other as if they were connected or in some way the same particle. This phenomenon is called quantum entanglement which Einstein dismissed as "spooky actions from a distance" and is suggestive of an underlying reality that physicists have not yet been able to explain although there are many theories. A biological cell demonstrates consciousness built by the quantum principles of entanglement, coherence and non-locality as explained by the cellsoul pathway (Pereira 2015) and its extended version. There is a vice versa interaction between the functional and bodily forms of consciousness which supports consciousness outside and inside the body (Fig. 3). Quantum entanglement is a unique property in quantum physics that best describes the mysterious behaviours that take place at a quantum level with its effects observed at a macroscopic level (Peres 1993). When two particles are entangled, they behave as one and not as two separate particles, so what happens in the quantum world is completely different from what we perceive in the macroscopic world, and this also holds true for the world of quantum biology. In an entangled state of photons there will be a constant exchange of energy between these particles which interacts with one another resulting in information gathering. Hameroff and Chopra (2012) suggest that quantum entanglement of low-energy particles could interact even outside the body suggesting a near-death experience; therefore the existence of a quantum soul.

According to physicist Fred Alan Wolf (1994), near-death experiences can be explained using a holographic model in which death is merely a shifting of a person's consciousness from one dimension of the hologram to another. Based on the cell-soul pathway hypothesis, it can be further hypothesised that the information creation, gathering and transfer during a near-death experience or in a state of disembodiment, may occur as a result of quantum entanglement of the photons present between the two states of consciousness resulting in a photon cloud that acts as a holographic image processor (Fig. 3). The cloud of energised photons is therefore in a constant state of exchanging energy with the cosmos with an ability to retain memory through holographic processing to teleport consciousness outside the body. Creating a hologram of a single photon was believed to be impossible due to the fundamental laws of physics. However, scientists at the Faculty of Physics, University of Warsaw, have successfully applied concepts of classical holography to the world of quantum phenomena (Chrapkiewicz et al. 2016). A new measurement technique has enabled them to register the first-ever hologram of a single light particle, thereby shedding new light on the foundations of quantum mechanics. This experiment is a major step toward improving the understanding of the fundamental principles of quantum mechanics and supports the hypothesis of creation of memories beyond the limits of the body.

In quantum theory, the *zero-point field* (ZPF) is a quantum vacuum state or void which generally contains nothing but electromagnetic waves and infinitesimal particles popping into and out of

existence (Caligiuri & Musha 2015). The cell-soul pathway along with the forms of consciousness functioning within the zero-point field supports the entanglement that occurs during a near-death experience, wherein the entangled photons of the two forms of consciousness result in creation of memories of their experiences by means of the holographic principle. Marcer and group had hypothesised the existence of a holographic memory and holographic image that is stored in the zero-point field (Marcer & Schempp 1997). The information, its storage and its access is nature's information transfer mechanism and has been explained by the quantum hologram concept laid down by Mitchell and Staretz (2011) and others. The quantum hologram and its information is therefore contained in the amplitude, frequencies and the relationships with the phases and their interference patterns of the photons emitted and absorbed in the four dimensional space/time reality.

A zero-point field of the universe is supportive of the holographic principle where consciousness and memories are not localized in the body but are distributed within the conscious disembodied state. The discovery of an *electromagnetic zero-point field* lends credibility to the possibility of having vast memory storage capabilities outside of the physical body and supports the functioning of the functional consciousness during a near-death experience. Phenomena such as these can be best understood if the zero point fields can be *tapped* as a storage location for information and energy which can be accessed at any time. The zero-point field is ubiquitous, nonlocal, cannot be attenuated, lasts indefinitely with no loss of coherence and can store unlimited information processed non-locally as a quantum holographic processor (Mitchell 2016), which is an ideal location to process information non-locally during a near-death experience. When the disembodied state or functional consciousness restores back to the body or rather merges with the bodily state of consciousness, the memories stored within the holographic field created during this process can be revived by the body and appears as vivid as it would be in a fully functional conscious body.

Conclusions

Non-local consciousness or disembodiment is a unique characteristic state observed in neardeath experiences, where an individual is conscious in that state and generates memories that are rich and vivid to be remembered when back into the body. The extended version of the cell-soul pathway explains this feature from a point of quantum entanglement within the zero-point field where the photons within the functional form of consciousness are connected to the bodily form of consciousness resulting in an energy exchange. The non-localized subjective experience in an near-death experience has therefore been hypothesised to be a characteristic within the limits of quantum physics; quantum entanglement a property that can demonstrate the capability of storing information holographically within the void or vacuum with the ability to create

memories beyond the limitations of the brain and body, thus supporting the state of conscious disembodiment or non-locality.

Finally, I do not believe that functional or disembodied consciousness survives after death (not near-death), the End-of-Life situation. Consciousness of any form converts its self to simple energy (cosmic energy) and is returned back to where it belongs, supporting the first law of thermodynamics. In accordance to the second law, the entropic change is managed by the retention of a holographically created memory of the mind within the matrix of this cosmic energy. This hologram can be reactivated if tapped by an individual who has learned the art of interacting with cosmic energy, in a good way or a bad way. These individuals (shamans, mediums, channelers, etc.) can utilize their functional consciousness to intermingle with the holograms of specific individuals. In a dying situation, the functional consciousness exists in the same state and therefore taps into the cosmic energy and starts seeking the memories of its loved ones, etc.

Consciousness stays so long as the body stays; this condition is supported by quantum entanglement. During an NDE, the embodied and disembodied consciousness stay connected and the memories are revived only after the individual comes back to the body. Death of the body will release consciousness in the form of energy that will be a gradual process for embodied consciousness as compared to the disembodied functional consciousness.

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