Article

Space, Time, & Consciousness (Part 1): Introduction, Overview & Acknowledgments

Jack H. Hiller^{*}

ABSTRACT

In this series of articles, I explore near death experience ("NDE") and present a self-consistent and coherent body of theory about the nature of the world. In reading over the many NDE accounts for background information relevant to theory construction, I eventually realized that I was discovering a dimension of human existence of common human interest far higher than topics generated by conventional philosophy, physics and psychology. The experience reported about after a soul leaves the body is transcendent over life on Earth with its physical pleasures and pains, ego oriented successes and failures, joys from friendships formed, and heart crushing loss of friends and family to permanent death. Instead of the common belief that life arrives here as a transient affair by birth from out of a void, followed by a death forever ending such a random flicker, the picture formed from the NDE/OBE was dramatically different. Individual life only "appears" to be ephemeral. In reality, the soul has been formed within a timeless domain to live for eternity, with its Earth lives providing for adventures into a dangerous "game" ended by death, but providing for excitement, fun, and the sharing of love along the way.

Keywords: Near death experience, NDE, out of body experience, OBE, space, time, consciousness, creation, frozen time.

Introduction

Having achieved a second career retirement, and having bought my final retirement home, my only serious concern in retirement was selling my prior work home before retirement funds ran dry from paying mortgages and maintenance on two houses. One evening, I casually watched a TV program on the Science Discovery Channel about the nature of Creation that was led by Stephen Hawking. He contended that Creation of the world could adequately be explained by quantum mechanics. The singularity hypothesized to have exploded as the Big Bang was simply stated to have been a spontaneous eruption triggered in accordance with the theory of quantum mechanics; nothing was actually created by the Big Bang, because it was reasonable to suppose that equal amounts of positive and negative energy had erupted, with the negative somehow moving away, or with the energies having been created with a slight imbalance, so that they cancelled each other out, with some positive energy left over to form our world. No need here to attribute creation to any supernatural force, such as religions posit for God.

^{*}Correspondence: Jack H. Hiller, PhD, JD, Independent Researcher, USA. E-mail: jh7138@gmail.com

Not myself practicing in any religious faith, the slighting to God was not offensive, but the array of supposed facts about equal amounts of energy having been created, or a slight imbalance in favor of positive energy, or the existence of the hypothesized singularity, and its explosion being triggered by the laws of quantum mechanics, supposing there were any laws in effect when there was no energy or materiality, struck me as a string of inconsistent hypotheses, and as highly speculative, at best. Where did the singularity come from, or anything else? What could have triggered the formation and explosion of any singularity? While it's reasonable to speculate that equal, or nearly equal, amounts of positive and negative energies could have been created, citing quantum mechanics as the reason for the singularity's explosion was more of an arm waving explanation than any true explanation; in the legal profession, such an assertion would be scorned as conclusory - a conclusion lacking adequate supporting evidence. Physicists hope eventually to gather sufficient reliable facts to construct a feasible explanation, a theory, for how the world came into existence - but an arm wave does not work. So, for a few days I grumbled to myself about Hawking's inadequate theory, and most especially wondered how Creation might validly be explained.

When faced with any complex problem, it's always helpful to write down the issues, facts, and explanatory guesses, so I started to write. While writing, I was reminded of strange reports about a non-material existence, a continuation of consciousness even while the brain was measured to have stopped functioning, in a few books on the Near Death Experience (NDE), such as P.M.H. Atwater's Beyond the Light, Raymond Moody's Life After Life, and Ken Ring's Heading toward Omega. If there were an alternate reality that was being described, it was theoretically possible that the NDE reports might contain explanations for Creation, or useful hints. I found the Near Death Experience Research Foundation web site established by Jeffrey and Jody Long (NDERF), and read there over 4000 first hand NDE reports, along with responses to a comprehensive questionnaire about their NDE. In the course of reading the NDE reports, it struck me that Descartes' theory of mind-body dualism, and Plato's theories of knowledge and forms might be insightful, whereas before as an undergraduate student these theories seemed farfetched. It was at that point that I started to write in earnest, although yet remaining a presumptive materialist.

As I continued to study the NDE with its Out of Body Experience (OBE) reports, I saw a relationship between such experience with elements of Relativity Theory and quantum mechanics, so I focused on examining their mutual relationships. The first paper written was Frozen Time Theory (FTT). An early draft of FTT benefitted from helpful comments by Pim van Lommel who has published one of the most comprehensive reviews of the NDE research literature, *Consciousness Beyond Life*, which also included a discussion of possible theoretical links to modern physics. After finishing the FTT paper, I thought I was done. However, additional thoughts were percolating about the nature of reality that I had not directly addressed, so I started writing about my new discoveries in a second paper, Universal Consciousness: A

Tripartite Domain Theory. Again, I thought the work was done after finishing it, but I continued to see the need to delve even deeper. With no particular plan, a series of related papers followed over the next few years.

In reading over the many NDE accounts for background information relevant to theory construction, I eventually realized that I was discovering a dimension of human existence of common human interest far higher than topics generated by conventional philosophy, physics and psychology. The experience reported about after a soul leaves the body is transcendent over life on Earth with its physical pleasures and pains, ego oriented successes and failures, joys from friendships formed, and heart crushing loss of friends and family to permanent death. Instead of the common belief that life arrives here as a transient affair by birth from out of a void, followed by a death forever ending such a random flicker, the picture formed from the NDE/OBE was dramatically different. Individual life only "appears" to be ephemeral. In reality, the soul has been formed within a timeless domain to live for eternity, with its Earth lives providing for adventures into a dangerous "game" ended by death, but providing for excitement, fun, and the sharing of love along the way.

One day while looking across the collection of papers I had written around the NDE topic, I realized a self-consistent and coherent body of theory about the nature of the world had evolved, as had my understanding of life, so I was no longer a materialist. All of these papers are collected in this monograph, along with a "playful" Epilogue.

Overview

Article 2. Frozen Time Theory (FTT)

Frozen Time Theory (FTT) reports discovery of a reliable, but surprising, feature of the Out of Body Experience (OBE) reports associated with traumatic Near Death Experiences (NDE). At the instant of a severe trauma, such as a heart attack or violent vehicle collision, the suffering individuals report being puzzled about what has happened, as they are suddenly viewing their environment from a different perspective. Typically, they are now located above their body, so that they no longer see through their eyes, but see from a different location. There was no apparent transition in consciousness or conscious perception to cue separation of consciousness from their body leading to their confusion over what had just happened. *The lack of any distinctive transition for consciousness and conscious perception from the normal bodily state to consciousness and conscious experience.* They also then start to notice that the nature of their sight has changed, as they can see through objects, can focus to the atomic level or out to the cosmos, and see in 360 degrees. Individuals who have been born blind also report

experiencing this remarkable manner of perception. Realization develops that they have been effectively knocked dead, but still remain conscious.

A striking feature of OBE perception is that all entities observed exhibit consciousness, not only relatives and friends who have passed, and angels, but rocks, grass, flowers, trees, animals – even water. This experience is consistent with the ancient philosophy of panpsychism.

One of the great mysteries remaining for the psychology, neurology, and philosophy of perception is termed the issue of qualia, i.e., how can we perceive different qualities such as vision with different colors, sounds, and fragrances, but do so without the brain exhibiting differential structures for processing information after the senses have transduced energies to electrochemical energies in neurons. In the frontal lobes, where we believe perception is present, no differential structures or processes are found there corresponding to the differential qualities of perception. The FTT hypothesizes that the consciousness experienced during the OBE exists in a field or domain of consciousness in which individual entities share their existence without boundaries. *Thus, FTT hypothesizes that perception during normal perception for the body and brain occurs not in the brain itself, but in the consciousness (soul) that had been attached to the normal body. The differential qualities of perception are dependent on how the field of consciousness functions, not on the brain producing the qualities of perception we experience.*

One of the most interesting features of the OBE is the feeling that time no longer runs, and during the OBE it is reported that they have simultaneously viewed past scenes, their current environment, and future scenes. In addition, all entities viewed, including their own "body," glow with the appearance of being made of light. The FTT relates the absence of time running, i.e., frozen time, with the formulation of Special Relativity that photons do not experience time. Thus, FTT hypothesizes that time during the OBE translates to a fourth spatial dimension, such that the past, present, and future correspond to differing locations in the domain of consciousness.

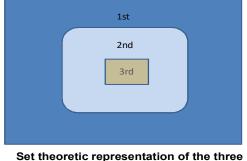
Article 3. Universal Consciousness Underlies All of Reality - A Tripartite Domain Theory

In the FTT, I had accepted from the NDE reports that there existed two realities, our normal domain of reality associated with the paradigm of materialism, and an alternative domain of experience characterized as a field of consciousness in which all entities experienced appeared to be made of light, and time did not run.

An obvious question was about how these two domains might be related. Were they causally independent of each other, even if somehow correlated across time, or might they even be causally linked? Based on the NDE reports and the curious phenomenon of quantum entanglement, what Einstein spoofed about as "spooky action at a distance", I inferred that our material reality was connected to the domain of consciousness. The NDE reports reliably stated that all thought of movement was capable of instantaneity, so if entangled particles existed in the

domain of consciousness as well as the material domain, their instant communication would be accounted for.

Another question was about the possibility for a third domain. Was there anything that might have preceded the material and consciousness domains? The hypothesis that seemed best was that there initially existed a domain of pure consciousness in which nothing else existed, not light, not space, not time. This initial domain might be termed, in common with most religions, as God. This speculation is in fact consistent with the Old Testament according to which all that existed at first was God alone. God's first act of creation was light. After light He created the firmament, or material world. Thus, a tripartite domain theory was formed that is consistent with NDE reporting and The OT. The relationships among the three domains are shown by the Venn diagram below. God is represented as Domain 1; the world of consciousness which includes light is the 2nd Domain; and the physical world we occupy is Domain 3.



Set theoretic representation of the three hypothesized domains

Article 4. Possible Enablers and Barriers to Dimensional Perception

The FTT and Tripartite domain papers acknowledge that our ordinary perception in our material domain separates time as an abstraction with space having three extended spatial dimensions. But in the second domain, as defined to be filled with consciousness and entities made of light, it was hypothesized that time also exists as an extended spatial dimension, so that different times in the material domain would correspond to different locations—without time running. This paper analyzes why common sense regards time in the material domain to have a different character than space. The analysis keys off of Abbott's clever Flatland satire. It is argued that, while common sense regards space as perceptible, but time is regarded as an imperceptible abstract concept only, when time is termed "duration," perception of time and space are equally abstract, and equally perceptible for the objects of sense-perception in the material domain.

Article 5. Analysis of the Differential Perception of Time in the Second and Third Domains

This paper analyzes how perception of time progression (i.e., time is perceived to run) occurs in the material 3^{rd} Domain, but does not occur in the 2^{nd} Domain of consciousness to which the 3^{rd} Domain is connected. The argument is made that perception of time depends on the domain being experienced.

Article 6. Definitions of Now

In philosophy and psychology, some argue that only now exists, the past has forever gone, and the future is yet to be. Given the importance of "now," alternative definitions are presented and discussed.

Article 7. An Absolute Limitation to the Rational Analysis of Experience, Consciousness, and World Origin: the Principle of Interior Unknowability

After working for approximately a decade to produce a defensible theory for how the world came to be, I realized that I had made zero progress. I questioned why that effort was entirely futile, and came to an interesting conclusion-the question itself implied an observational framework external to a Creation event, but scientists could never in principle locate externally as "privileged observers" to be able to see what happened. Thus, a new postulate for the metaphysics of creation was defined. This postulate was termed the Principle of Interior Unknowability (PIU). It was argued that the PIU stands on two legs of support. The first leg is an analogy posed about fishes born in a fish tank having no opportunity ever to locate outside of their tank. From their interior location in the tank, they (or scientists in the material world) would never be able to learn where it came from or how it was made; the same argument applies if the world were instead conceptualized to be infinite with no boundaries. The second leg is a conjectured analogy with Godel's Theorem of Undecidability, developed while he was working on his Incompleteness Theorems. This leg of the argument for the PIU reasons that postulates, axioms or assumptions based on internal observations of our world, applied to mathematically model its creation, are susceptible to creating a paradox (historically known as the Liars Paradox) by self-reference. To escape the potential for producing a valueless or misleading paradox, information would have to be gathered external to a system to be used for modeling its creation. Nevertheless, as pointed out by my friend Neil Siegel, a great deal of scientifically valid and useful information may indeed be acquired within the material world, despite the barrier to knowledge acquisition about creation postulated by the PIU.

Article 8. Review of Carlo Rovelli's Book: The Order of Time

Loop quantum gravity physicist Carlo Rovelli published an entertaining book that explained his preference for denying the utility of a time variable in physics, and even in psychology. This book review identifies points of agreement, but notably points of disagreement.

Article 9. A Postulate Set Governing Existential Knowledge

In an earlier Article, 7., the Principle of Interior Unknowability (PIU) was defined as a postulate which excluded any possibility for scientists to observe the conditions of the origin of the world, or to be able to infer from information collected within our material world how the world was constructed with any certainty, or "where it might have come from." In this Article, three additional Postulates are defined. One of these concerns the nature of existential reality, and states there are two domains for knowledge exploration: 1. the material domain in which we normally perceive the world, and 2. the domain of consciousness that underlies consciousness and conscious perception that may become available during the NDE/OBE or by meditation. This is the Postulate Governing Existence (PGE). The PGE defines the consciousness domain as fundamental. The third postulate is the Postulate Governing Knowledge (PGK) which defines knowledge to be incorporated in consciousness. As was also explained in Article 2.on Universal Consciousness, all individual entities possess consciousness, and "knowledge" is information incorporated into their consciousness. The fourth postulate affirms Descartes' Mind-Body Dualism that mind and brain ordinarily communicate, despite being different in kind. This is the Postulate for Mind-Body Dualism (PMBD). The set of four postulates governs the nature of Existential Knowledge (EK). With the EK as a set theoretic foundation, the potential for extrasensory phenomena is explainable. We may summarize that the nature of any and all knowledge about existence, EK, is a function of PIU, PGE, PGK, and PMBD.

Article 10. What is Consciousness?

A brief historical review of the concept of consciousness is provided from the perspectives of philosophy, psychology, and neurology. The weaknesses in traditional analyses of the nature of consciousness are explained, followed by a synthesis of consciousness (with mind and soul) based on the previous eight Articles. The 2nd Domain of consciousness is recognized as the foundation for how the 3rd Domain of materialism functions. It was concluded that the reality of what consciousness is and how it is known denies any useful ability to define it by reference to objectively observable experience, so it must be regarded as an indefinable, primitive term.

www.JCER.com

Article 11. A Theory of Knowledge: The Transcendental and the Mundane

Knowledge is analyzed to fit two main classifications: 1) the Transcendental idealized forms as described by Plato, and 2) the mundane experiences generated by the body/brain living in the material world. Knowledge of each of the two types is examined for how it is acquired (from the 2nd Domain) or learned by sense-perception experienced in the 3rd Domain. Knowledge learned through life in the 3rd Domain is unreliable because of imperfections in our sense-perception mechanisms, and because memory storage and retrieval are prone to intervening learning distortions and aging processes. By contrast, knowledge acquired directly from or while in the 2nd Domain is perfectly accurate and not subjected to any aging process because time does not run in the 2nd Domain.

Conclusions

Overall, the text argues that Creation and "consciousness" fundamentally exist beyond the boundaries of conventionally acquirable scientific knowledge. The specific arguments employed made use of analogy and the Liar's Paradox to support an out-of-bounds conclusion defined by the Principle of Interior Unknowability (PIU), and appear to be novel for the metaphysics literature. The NDE reports demonstrate a high degree of perceptual consistency for the OBE experience, such as time no longer perceived as running, all entities perceived to be made of light, and actions driven by thought perceived as instantaneous; all of these perceptions were found to be consistent with Relativity Theory and quantum mechanics. A theoretical foundation was laid for the reality of paranormal phenomena. It was found from the review of over 4000 NDE reports available on the NDERF and IANDS' web sites that the NDEs were dominated by experiencing the light and love of a God Creator, even for those who were agnostic or atheist before their NDE. Based on these NDE reports and the neo-Platonic concept of Transcendental knowledge having been provided to the human conscience, a proposed code of conduct was included in the Annex. The quest to develop knowledge about Creation and consciousness ends in a conclusion that, by our being immersed in them, they are not ever directly observable by us as material beings. However, conventional science is plagued by those who either seek to deny their existence, or instead seek to scientifically describe and explain them, whereas the PIU shows that both of such opposing perspectives are wrong.

Acknowledgements:

Friends and former work associates contributed with encouragement, criticism, and suggestions for clarifying the novel concepts developed — concepts that even surprised me as their author. Before I had begun writing this book after finishing my career as an applied scientist, having worked as a bench level scientist and Senior Executive for the Dept. of Army, and then as a chief scientist for a division of the Northrop Grumman Corporation, I would not have been caught dead talking or writing about the nature of space, or time, or consciousness.

First, I must thank Glenn Roberts who kept making sure I did not stray from or offend the spirit of scripture in the Old and New Testaments with any explicit contradictions, although I did manage to skirt the edges a few times by including ideas not directly mentioned in scripture. I must also thank my former colleague from the Army Research Institute (ARI) Dr. Hal Ozkaptan who found no contradiction with Islamic principles. My old friend and colleague from ARI, Dr. Robert Seidel, made many productive suggestions for improvement. My former boss, two levels over my pay grade, Dr. Neil Siegel, aided with pointed comments aiming for precision, and is pointedly quoted. Dr. Lee Whitt provided continual challenges to what I was arguing that invariably served to clarify my thought and writing, and so has earned great appreciation. My good neighbor Dr. John Kiley introduced me to Carlo Rovelli's interesting book on time, and never expressly objected to what I wrote.

Serious work does not get done without loving support, and I have indeed had two sources, my wife Rebecca, still beautiful as we approach 50 years together, and my pal Shakespeare, an African Gray parrot who made sure by his squawks and taunts over the past dozen years that I stayed grounded.





Bibliography

Atwater, P. Beyond the Light. New York: Carol Publishing Group, 1994.

Lommel, van P. Consciousness Beyond Life. New York: HarperCollins, 2007.

Long, Jeffrey and Jody. The Near Death Experience website (https://www.nderf.org/).

Moody, Raymond. Life after Life. San Francisco: HarperSanFrancisco, 1975.

Ring, K. *Heading Toward Omega: In Search of the Meaning of the Near-Death Experience*. New York: Harper Perennial, 1986.