

Article

Spirit, Consciousness, DNA & Human Experience

Alex Vary*

Abstract

We argue that a primordial spirit pre-existed the cosmos and that the spirit created the cosmos and initiated the physical reality that we experience as human individuals. The cosmos and its worlds were created for spiritual individuals to materialize in and enjoy interesting human experiences.

Keywords: Spirit, soul, consciousness, cosmology, DNA, humans.

Introduction

We are spiritual beings living among humans experiencing humanness. The spirit (our spirit/soul) is unconstrained in space and time, is indestructible and is extraterrestrial. When our spirit assumes human form, it becomes a mere animated material speck on a habitable planet. Our habitable planet Earth is in turn a temporary infinitesimal speck in one galaxy of an immeasurably immense universe. The human form is unique: dimensionally approximately midway between an immense universe and an infinitesimal subatomic quantum realm. From this vantage point we (our spirits) assess our nature and the physical world around us. We become conscious of our spiritual self and the impermanence of the material world in which we reside. We experience human lives knowing that we can return to a purely spiritual state - but only with knowledge and perhaps memories.

Cosmology

Cosmological theory is incomplete if it fails to explain the observable universe and how it came about that we are here to experience it. We explore the patent reality of the cosmos and attempt to understand the emergence of consciousness in it. James Jeans exclaimed in *The Mysterious Universe*, A. . . the universe begins to look more and more like a great thought than like a great machine.@ Perhaps, an primordial consciousness somehow participates in such a machine, the dynamic milieu of the cosmos, and then endeavors to observe the results, ostensibly to detect order in chaos; as pondered by Ilya Prigogine and Isabelle Stengers in *Order out of Chaos*.

Cosmologists declare: There was nothing - then bang! - there was something: atoms, stars, planets, galaxies, and so on. There are but a few who question the generally accepted theory of the spontaneous beginning and the minutely described evolution of the Big Bang. The accompanying mathematics is explanatory, consistent, and elegant. Among those who dispute Big Bang theory is Halton Arp (*Seeing Red*); but neither Arp nor others yet offer sufficient statistical-observational evidence which can successfully contradict the current theory. We offer an alternative to the notion that the cosmos suddenly emerged, expanded, and evolved from a singular point-like nothingness.

* Correspondence: Alex Vary, PhD, Retired NASA Scientist & Independent Researcher. Email: axelvary@wowway.com

The appearance of somethingness from nothingness has inspired this inquiry into the source and nature of the resultant somethingness. We contemplate the uncanny balance of constituent parameters required to generate the brain that encapsulates human consciousness and the amazing ability of that consciousness to comprehend the immensity and complexity of the cosmos. Making informed choices is a hallmark and a unique capability of sentient spirits and an emergent consciousness. We *choose* to understand, explain, and exploit the cosmos in which we exist.

Hawking's Grand Design

Our tiny globular habitat, our world, clearly formed from the dust and stellar debris of the cosmos, but the entire material content of the cosmos apparently emerged from an intangible void. Most physics theorists and cosmologists are quite content with the notion that the material content of the cosmos popped out of an antecedent void. The nature of this void and its tangible products are interesting because human consciousness is one of those products. This omnipotent void has been described by Heinz Pagels in his book *Perfect Symmetry* as, "The most complete void that we can imagine . . . no space, time or matter. It is . . . without place, without duration or eternity, without number . . . yet this unthinkable void converts itself into the plenum of existence . . ." perhaps as a consequence of preexisting physical laws.

Pagels then wonders, "Where are these laws written into the void?" and he then infers, "It would seem that even the void is subject to law, a logic that existed prior to time and space." Perhaps the universal void contains the physics, logic, design, energy, and infinite dormant potentialities needed to spawn the cosmos - even uncountable coexisting cosmoses. Does the void contain a library of instructions, formulae, and processes for the formation of perhaps countless habitable worlds, each with a complement of unique sentient beings?

A virtually unchallengeable observation is that it requires an immense dynamic cosmos and a tremendous amount of time to produce minuscule pockets of intelligent consciousness on congenial life-friendly globular habitats. According to Stephen Hawking it also requires a grand design. In *The Grand Design* Stephen Hawking explains how "A . . . understanding of the laws governing us and our universe [may] lead to a unique theory that predicts and describes a vast universe full of the amazing variety that we see." Hawking's *laws of the universe* are putatively so exquisitely formulated that they govern the cosmos down to the minutest details of forces, fields, and quantum particles.

Hawking does not explain where the grand design and laws of the universe originate, reside, or how they self-assemble to initiate the cosmos. He avoids suggesting a consciousness or entelechy that conceives and directs the process. Instead, Hawking advocates the idea that, "Spontaneous creation is the reason there is something rather than nothing, why the universe exists, why we exist. It is not necessary to invoke God to light the blue touch paper and set the universe going." But, implicit in Hawking's universal laws and grand design is the conjecture that they preexist the emergence of the material cosmos. Roger Penrose in his magnum opus *The Road to Reality* concordantly offers a *complete guide* to the laws of the universe.

The reasoned supposition regarding the preexistence of the laws of the universe may be moot if they self-formulated coincidentally with the emergence of the cosmos. This would be the case for what might be termed Darwinian cosmology or non-deterministic stochastic cosmology. Accordingly, Hawking postulates a multi-universe because it allows that a particular finely tuned universe, such as ours, may evolve and survive as one among many, if it is fit to survive. In their struggle to survive, some universes may succeed, others may fail. Some enjoy extended lives, while many collapse and become extinct due to poor or profligate use of available energy and resources beyond permissible parameters. The most interesting of those fit to survive are universes possessing physical properties that produce environments for evolving and sustaining self-aware conscious beings like us. All this putatively arises from a random stochastic process.

Martin Rees (*Just Six Numbers*) identifies key parameters that combine to govern the shape, size, and texture of our cosmos. There is an inexplicable random aspect to the conjunction of these specific numbers; yet the specific values assumed by the Rees parameters patently assure the origination and survival of our kind of cosmos and our kind of consciousness.

Metaphysics of Consciousness

The mystery of consciousness revolves around the question: How can beings made of initially inanimate matter acquire consciousness? Neither the reductionist approach nor the non-reductionist approach has thus far resolved the question. Of course, consciousness is somehow related to the brain but is not identical to brain states.

Consciousness is experienced but is essentially unmeasurable, unquantifiable, and undefinable. Consciousness assigns objective reality, meaning, value, and quality to what is physically sensed and then neurologically processed. When the higher consciousness is experienced, it is not always obvious to the unprepared or unattuned mind. It commands the body and evaluates its experiences. It is an observer. It is an occupant to the body and often called the subconscious. It communicates, or we communicate with it in subtle ways, if not by verbal exchanges, then through imagery, ideation, insight, inspiration, introspection, and meditation. Lucid dreaming, near-death experiences, out-of-body experiences, and certain types of hallucinations are extreme examples.

Any dissertation about the nature of consciousness should also explain metaphysical phenomena. It should explain creativity, inspiration, intuition in literature, in visual art, the works of Shakespeare, Goethe, Mozart, Beethoven, and da Vinci. It should explain prophets, their sayings, writings, scriptures, the Bible, the Koran, the Vedanta, and Upanishad. It should explain the mathematical discoveries and accomplishments of Gauss, Euler, Einstein, von Neumann, and Ramanujan.

Consciousness is usually viewed as a computation involving synaptic processes among brain neurons. This brain-as-computer idea does not adequately explain consciousness. Roger Penrose and Stuart Hameroff see the brain as a complex hierarchy, where consciousness originates from processes within neurons rather than from emergent connections among neurons. Quantum resonances within neurons and quantum vibrations in cytoskeletal microtubules are more likely to be the basis of consciousness. Penrose and Hameroff hypothesize that consciousness in the brain is an orchestrated objective

reduction (OR). They assert that the OR mechanism is a quantum physics process. We suggest that objective reduction results from the interplay of subjective-objective signal systems inherent in the DNA code, described later.

Mathematical Objects, Illusions, Fantasies

Mathematical objects exist as a priori essences, in a spiritual realm. What the eye sees in the physical world is not a mathematical object, such as a circle or sphere, but an illusion. Attempt to draw a circle on paper using a compass. Have you produced a circle? Of course not! It is infinitely less than perfect. It is not a circle! Magnify the image and at each successive stage of magnification, you find small fragments of matter neither a circle nor a portion of it. This suggests that mathematical objects, such as the famous Schrödinger wave functions used to describe the transit of photons and electrons in space, are essentially illusions or metaphors derived from a spiritual perception of unobservable subatomic particles or phenomena. The notion of wave function has been employed to describe the entire cosmos, indeed, the wave function of the universe.

Mathematical objects exist in Plato's world of perfect forms: Plato held that all that exists in his world of forms is perfect, unchanging, and utterly independent of our awareness of them. Plato's world of forms, and the Akasha, may well include nonmathematical ideas such as beauty, love, and other esoteric and aesthetic ideations and concepts. According to Roger Penrose, Plato's world of perfect forms is the very source and fountainhead of mathematical objects/illusions and of mathematics itself. In *The Emperor's New Mind*, Penrose contends that Plato's world of perfect forms does indeed exist conceptually. Our minds, certainly mathematician's minds, have access to the Platonic realm. Exceptional minds may not always access its content, but whenever they do, they confirm its reality. Scientists and mathematicians may invent and place things into Plato's world only to discover them there later.

Roger Penrose in *Fashion, Faith, and Fantasy in the New Physics of the Universe* cautions that fashion, faith, and fantasy have entrapped mathematicians in their pursuit of truths about objective physical realities and their theoretical representation. He says that discovering mathematical truths is not the same as discovering physical truths: "Regarding what is really going on in the physical world, there is something profoundly missing. To get a proper solution, we need a change in physics, not just some clever mathematics brought in to cover the ontological cracks." Penrose acknowledges the uncanny unfolding of mathematical truths with the minutest properties of the cosmos and the remarkable effectiveness of mathematics in describing and predicting those properties.

The spirit becomes conscious of the uncanny relations between perfect mathematical objects and material objects and even subatomic quantum particles. As an example, we note that the Fibonacci sequence and golden ratio are so prominent everywhere that one is tempted to conclude that sunflower seed patterns to galaxy spirals are governed by the Fibonacci sequence. The Fibonacci sequence consists of the integers: 1, 1, 2, 3, 5, 8, 13, 21, 34, 55, 89, 144. The ratios of successive pairs of numbers converge to the golden ratio $\phi = 1.618033988$. Sunflower seed patterns and spiral galaxy shapes are apparently governed and limited by the golden ratio $\phi^2 = \phi + 1 = 2.618033988$. They are simply mathematical formulations having observable manifestations.

There are other unique mathematical inventions and constructs. Prominent among these is Euler's identity which is often cited as an example of deep mathematical beauty. Euler's identity expresses a profound mathematical truth which links three basic arithmetic operations: addition, multiplication, exponentiation and five fundamental mathematical constants. Mathematical illusions and fantasies do anticipate aspects of physical reality discovered by empirical observations and measurements. Carl Hempel in *The World of Mathematics* observes that "Mathematical, as well as logical reasoning, makes explicit what is implicitly contained in a set of premises while contributing to the content of our knowledge of empirical matters. Mathematics is entirely indispensable as an instrument for the validation and even for the linguistic expression of such knowledge."

The language of mathematics is so precise, it entraps intellect into believing that it embodies all physical truths. The language of mathematics offers remarkably detailed descriptions of aspects of the physical world which are often based on assumed models. Pre-Copernican epicycle-based mathematics validated a geocentric model for planets of the solar system. It was found computationally equivalent to Johann Kepler's heliocentric model based on Tycho Brahe's empirical facts where the sun is one of the foci of elliptical planetary orbits. There is a rather stark lesson in the cost of allowing persuasive metaphors and metaphysical models to run too far ahead of empirical observations.

Institutionalized memes and models embrace the idea that the only reality is the reality of the material physiostratum. The following are examples of questionable models described by exquisitely detailed mathematical formulas.

Wave-Particle Duality Myth
Quantum Graviton Myth
Higgs Boson Myth
Standard Model Discrepancies
Electron/Nucleon Shell Game
String and M-Theory Pseudo-Objects
Big Bang Blowup

These myths and discrepancies are metaphysical conjectures and outdated paradigms and models, elaborated on in *We Are God – Incarnate*. The impact of inconsistencies and deeply rooted institutionalized memes is inestimable and constitutes a crisis in modern physics. Institutionalized memes assert that consciousness can be reduced to neural chemical/electrical interactions. Institutionalized memes deny the reality that we may access only with our spiritual consciousness. There are many academes who doggedly defend the prevailing paradigms and endeavor to convert undergraduate and graduate students to accept what are after all just philosophical models. The practice of the establishment is to a large extent a determined effort to constrain and to compel acceptance of an agreed upon philosophical worldview, for example, big bang inflationary cosmology. Conversion to the faith is offered as the only realistic path to a degree in physics.

In *We Are God – Incarnate* we offer alternatives that better explain the physical foundations of the cosmos and its worlds. We indicate how the primordial consciousness constructed the physic world in which we reside. A new physics theory and a new cosmology should replace old paradigms and

models - most of which raise unanswered questions and a convoluted cosmological scenario. We need to reexamine and replace the old physics and its paradigms to get a better picture of our origin and the origin of the world we live in.

Origin and Modulation of DNA

DNA (deoxyribonucleic acid) forms the basis of all living matter and the human form which our spirits inhabit. We assume the primordial origin and modification of DNA macromolecules and the negentropic generation and evolution of intelligent life and human consciousness. We conjecture the transcendent origin, structure, and encoding of the DNA molecule which produced the diversity of species which we observe and study and the consciousness that observes it. DNA is a primordial high technology structure that contains over a hundred trillion times more information by volume than the most advanced digital information storage device. DNA is a self-duplicating, information storing molecule, only ten atoms wide, and constitutes a form of technology yet unmatched by quantum computer science. In his classic lecture *There's Plenty of Room at the Bottom*, Richard Feynman notes, "All this information whether we have brown eyes, or whether we think at all, or that in the embryo the jawbone should first develop with a little hole in the side so that later a nerve can grow through it . . . all this information is contained in a very tiny fraction of the cell in the form of long-chain DNA molecules in which approximately 50 atoms are used for one bit of information about the cell."

The DNA that spawned and enabled the humanoid species dates back tens of millions of years and consistently gave astonishing intellectual thinking capacity to humans. Evidence shows that the cave man, the Neanderthal, possessed intelligence that rivals modern humans. In their primitive, emergent situation, they had no means nor incentive for making micro-chip-based computers. But they produced ingenious art and invented tools for survival with adroit use of the resources available to them. From the Bronze Age onward, the technological capabilities of contemporary 'computing machines' began to compound exponentially. All humans alive today harbor the same primordial DNA and genes which promise continued evolution.

We argue that the primordial DNA, the DNA code, and all current modulations and versions of it arose as the result of a synergistic iterative design process governed by a primordial consciousness – our combined spiritual consciousness - which is shared by every individual's higher consciousness. We argue the transcendent primordial origin, structure, and encoding of DNA which produced the consciousness that now observes and studies the cosmos.

Conclusion

Theoretical mathematics currently gives an incomplete account of the cosmos - consider the legions of mathematicians who continually contemplate formulations that describe the cosmos down to its most minute details. DNA - by its nature - surpasses all these efforts because it apparently pre-existed and initiated these intuitive human endeavors. DNA appears to be the foundation of human consciousness which assigns meaning to the cosmos and its physics.

References

- Carl G. Hempel (1956), *On the Nature of Mathematical Truth*, in *The World of Mathematics*, Vol. III, James R. Newman, ed., Simon and Shuster.
- Ilya Prigogine and Isabelle Stengers (1984), *Order out of Chaos*, Bantam.
- Heinz Pagels (1985), *Perfect Symmetry*, Heinz Pagels, Simon and Schuster.
- Roger Penrose (1989), *The Emperor's New Mind*, Oxford University Press.
- Roger Penrose (2005), *Road to Reality A complete Guide to the Laws of the Universe*, Knopf.
- Stuart Hameroff, Roger Penrose (2014), *Consciousness in the Universe: Review of the 'Orch OR' Theory*, *Physics of Life Reviews* 11(1) : 39-78.
- Roger Penrose (2016), *Fashion, Faith, and Fantasy in the New Physics of the Universe*, , Princeton University Press.
- Alex Vary (2019), *We Are God – Incarnate*, Page Publishing.