Vibration, Mind and Consciousness

I wish to augment my previous submissions on the topic of mind as creative of, behind, and independent of matter, inasmuch as I have come across additional corroborating viewpoints articulated mostly by theoretical physicists, who, being at the forefront of scientific investigation into the nature of reality, seem almost uniformly to be more open to new ideas and less inclined to myopically defend ideological turf and fortify the redoubts of dogma, at whatever cost to notions of established "truth."

Albert Einstein, regarding the unified field theory he postulated to explain reality, wrote: "If we think of the field as being removed, there is no 'space' which remains, since space does not have an independent existence." "[Objective] reality is merely an illusion, albeit a very persistent one." "Hence it is clear that the space of physics is not, in the last analysis, anything given in nature or independent of human thought. It is a function of our conceptual scheme [mind]. Space as conceived by Newton proved to be an illusion, although for practical purposes a very fruitful illusion." The illusoriness of space was later shown to be correct by physicist Milo Wolff, whose findings are discussed further on. In the present context, space is shown to be a construct of the human mind.

David Bohm, "widely considered to be one of the most significant theoretical physicists of the 20th century" (Wikipedia), worked closely with Einstein and "contributed innovative and unorthodox ideas to quantum theory, philosophy of mind, and neuropsychology" (ibid.). He wrote in Wholeness and the Implicate Order: "To meet the challenge before us, our notions of cosmology and the general nature of reality must have room in them to permit a consistent account of consciousness. Vice versa, our notions of consciousness must have room in them to understand what it means for its content to be 'reality as a whole.' The two sets of notions together should be such as to allow for an understanding as to how consciousness and reality are related" (emphasis added).

Eugene Wigner, theoretical physicist and mathematician, who shared a Nobel Prize in Physics in 1963, laid the foundation for the theory of symmetries in quantum mechanics. Wigner wrote that "the very study of the external world [as quantum mechanics] led to the scientific conclusion that the content of the consciousness is the ultimate universal reality" (emphasis added).

In a speech ("The Nature of Matter") given at Florence, Italy in 1944, Max Planck, Nobel laureate in Physics (1918), considered to be the founder of quantum physics, said:

"As a man who has devoted his whole life to the most clear headed science, to the study of matter, I can tell you as a result of my research about atoms this much: There is no matter as such. All matter originates and exists only by virtue of a force which brings the particle of an atom to vibration and holds this most minute
solar system of the atom together. We must assume behind this force the existence of a conscious and intelligent mind. This mind is the matrix of all matter."

And, as quoted in *The Observer* (25 January 1931), Planck asserts: “I regard consciousness as fundamental. I regard matter as derivative from consciousness. We cannot get behind consciousness. Everything that we talk about, everything that we regard as existing, postulates consciousness.”

Thought, then, is not epiphenomenal, but primary, not brain-dependent but brain building, not contingent on but prior to the brain's existence.

As to what many contemporary scientists in the pride of their ignorance claim to be the besetting sin of creationists and intelligent design proponents—their faith (though IDers base their assertions on laboratory data and infer to the most plausible explanation)—Planck counters with this assertion in *Where Is Science Going?* (1932):

"Anybody who has been seriously engaged in scientific work of any kind realizes that over the entrance to the gates of the temple of science are written the words: Ye must have faith. It is a quality which the scientist cannot dispense with."

Faith in what? At the very least, in the reliability of the rigorous use of mind to seek out and identify the full extent of reality, because the human mind is an instance of that archetypal "conscious and intelligent Mind" that is behind the force that gives rise to the formed universe.

I know that "a man convinced against his will is unpersuaded still," so matters of belief tend to remain static with each believer, be he atheist, agnostic, or theist. Thus, Planck's input, and that of his like-minded confreres, may perhaps pique interest but will not likely effect real change. That he was a believer in Deity is clear. That religious belief was increasingly under attack by the "liberated" scientist of his day was the cause for this lamentation in *Religion und Naturwissenschaft* (1958):

"Under these conditions it is no wonder that the movement of atheists, which declare religion to be just a deliberate illusion, invented by power-seeking priests, and which has for the pious belief in a higher Power nothing but words of mockery, eagerly makes use of progressive scientific knowledge and in a presumed unity with it, expands in an ever faster pace its disintegrating action on all nations of the earth and on all social levels. I do not need to explain in any more detail that after its victory, not only all the most precious treasures of our culture would vanish, but — which is even worse — also any prospects at a better future."
Planck held definite religious-scientific views. He maintained that "Science and religion, in their ultimate effects, are headed for the same goal, the recognition of an omnipotent intellect ruling the universe.... The victory of atheism would not only destroy the most valuable treasures of our civilization, but, what is even worse, would annihilate the very hope for a better life.” — *Scientific Autobiography and Other Papers*, pp. 76, 156. Originally published in 1949.

Planck refers to the "force which brings the particle of an atom to vibration." It is vibration that gives rise to creation in its myriad forms in their separate yet interdependent identities. Before vibration was chaos, increate or ur "matter." What is this vibration? My studies and thinking suggest actually a hierarchy of vibrations, not simply that range of frequencies that governs material manifestation, but frequencies at ever more intangible and ethereal/spiritual levels. John's Gospel provides a key: "In the beginning was the Logos... and the Logos was God.... All things were made by him; and without him was not any thing made that was made." (All foregoing quotes are from [this site](http://www.example.com).)

Translating Logos as "Word" loses the ancient Greek understanding of thought as truly creative and existing in and emanating out of a real superphysical dimension, the home world of the rational mind. (Those interested might care to read the review of George Kühlewind’s book *Becoming Aware of the Logos*.) Thus, in the creation account of Genesis, when God speaks, "Let there be" (the 'creative fiat'), sound or vibration organizes primordial protomatter (what Rosicrucians call "cosmic root-substance") into the forms corresponding to those vibrations. Created objects have vibratory keynotes or signatures. This was dramatically demonstrated by Royal Rife, the genius who determined the vibratory keynote of a number of pathogenic microbes (including tetanus, gonorrhea, staphylococcus, pneumococcus, streptococci, typhus, and tuberculosis) by directing that same frequency (what he called the mortal oscillatory rate) back at the microbe with an amplitude sufficient to cause it to self-destruct, which event could be viewed in vivo (impossible with an electron microscope) using his over 2000-part microscope. According to a report submitted to the *Journal of the Franklin Institute*, it had a magnification of 60,000x and a resolution of 31,000x. (See image next page.)
(See here the article that describes Rife's simple, direct, and elegant cure for cancer. Also click here and read “Raymond Royal Rife and The Cancer Cure That Worked”, an excerpt from by Barry Lynes book The Cancer Cure That Worked — astonishing!)

The electromagnetic spectrum, "the range of all possible frequencies of electromagnetic radiation," depicts (see below), the various properties across the range of frequencies and wavelengths.

Another suggestive illustration (see next page), found in Max Heindel's Rosicrucian Cosmo-Conception, published in 1909, was first presented by British chemist and physicist William Crookes, who did research in spectroscopy and was a pioneer of vacuum tubes, inventing the Crookes tube. Driven by the true scientific spirit that is characterized by bold, inquisitive open-mindedness, he studied preternatural phenomena associated with spiritualism and concluded that the phenomena he witnessed could not be explained as conjuring and "point to the agency of an outside intelligence".
Here is one more startling illustration (next page) showing bioelectric man, with active upper chakras, in his electromagnetic universe:
The electromagnetic spectrum encompasses vibratory levels ("octaves" in the above middle diagram) pertaining to the physical world. Yet higher vibratory levels obtain in supraphysical worlds.

As for the organizing powers and properties of vibration, one might recall Plutarch's misattributed quote: "Plato said God geometrized continually"—from the crystalline mineral world, to the life-imbued plant world with its phyllotaxy (displacement of leaves around a stem) and petal symmetries, to the far more sophisticated and intricate animal and human forms and functions, whose parts and whole derive from and owe their nature to a symphony of architectonic "sounds". Royal Rife first broadcast vibratory frequencies for healing in the second decade of the 20th century. Electromagnetic frequencies are capable of both creating and destroying man-built and living natural forms. See here for illustrations of this phenomena.

The ubiquitous spiral shape found in seashells (below depicted in the chambered Nautilus), botanical structures, and in DNA itself, demonstrates the mathematical properties of the Fibonacci series, a sequence of numbers in which each term is the sum of the previous two terms, as follows: 0 1 1 2 3 5 8 13 21 34 55 89 etc. The division of any two adjacent numbers gives the "Golden" number; e.g., 34/55 = 0.618, or inversely 55/34 = 1.618, what Kepler calls "the divine proportion".
One of the most spectacular examples of the Fibonacci Series—and kindred logarithmic spirals—in nature is seen in the head of the sunflower (image next page), which displays two spirals, one clockwise, one anti-clockwise.
The ratio of 1.618, known as phi, or the Golden ratio, in evidence throughout nature and the cosmos, is seen by some proponents of intelligent design as a recurring signature of the Designer. This visually rich video gives impressive testimony.

Muslims especially might welcome this video on the prevalence of the Golden Mean (1.618) as a proportional template that structures the objective world, and in particular because it proposes that the Golden Mean point of the Earth is, you guessed it, the Kaaba and Mecca, omphalos and Shekinah of the Mohammedan faith. The calculations are persuasive, seemingly too improbable to be mere chance.

The form-creating property of pitch is an easily demonstrable lab exercise in elementary physics, where chladni figures (named after the German physicist and musician, Ernst Chladni, 1756–1827, who identified the phenomenon, though it was observed centuries earlier) are made by sand, sugar, or salt grains sprinkled on a metal plate whose vibration at varying rates produces corresponding geometric patterns.

The science of cymatics, (from Greek κῦμα, "wave") is the study of visible sound and vibration as they affect matter. Vibration and resonance determine the form and order of all matter, for an illustration of which see here.
The human voice can also produce these chladni or cymatic figures, as singing a Mozart composition through a long tube (tonoscope).

Cymatic imaging of the human voice creates the geometric patterns rendered by a CymaScope.

Water can be regard as a kind of tabula rasa or palimpsest on which different pitches will create corresponding symmetrical patterns, which see here.

A similar phenomenon is observed in the geometry of snowflakes (two sequential videos). These, however, are not sonic products but the result of atmospheric (etheric) vibrations.

The wave structure of all matter (WSM) was established by Dr. Milo Wolff: "He was the first person to have realized and confirmed the fundamental nature of the Spherical Standing Wave Structure of Matter by mathematically uniting significant parts of Quantum Theory and Relativity" with one simple equation. Already, Erwin Schrödinger had rejected the theory of particle structure when he wrote in 1937; "What we observe as material bodies and forces are nothing but shapes and variations of space. Particles are just appearances." Schrödinger believed that quantum waves are real, "not probability distributions with a particle hidden inside. He saw that abolishing the discrete point particle would remove the paradoxes of 'wave-particle duality.'" Wolff writes that "particle-structured physics....satisfies our human prejudices but does not explain the measured facts."

Wolff gives a brief account of how he arrived at his finding on the wave structure of matter and provides images of the inward and outward wave movements whose interactions constitute matter (combining quantum mechanics with Einstein’s Theory of Relativity).

We are still left with the need to explain the origin of the energy that informs and makes possible quantum waves.

The proximate cause of all apparently material shapes is their vibrating etheric counterpart, called by Anthroposophist Rudolf Steiner "the body of formative forces." However, the first cause of the forms we see around us is, as Max Heindel explains, the archetypal force which plays into the archetypes of those forms in the World of Thought, whose very "substance" is supersensible tone. Each material thing has its sonic signature(s). For instance, "There is [writes Max Heindel in Occult Principles of Health and Healing] in the skull at the base of the brain a flame. It burns continually in the medulla oblongata at the head of the spinal cord, and like the fire on the altar of the tabernacle [in the wilderness, described in Exodus 35-40], is of divine origin. This fire emits a singing sound like the buzz of a bee, which is the keynote of the physical body, and is sounded by the archetype. It builds in and cements together that mass of cells known as 'our body'."
As to the nature of consciousness itself, physicist Tom Campbell's book, *My Big Toe* (where "TOE" is an acronym for Theory of Everything), is synoptic. Condensed in this online exposition—"*Physics, Metaphysics, and the Consciousness Connection*"—it may prove helpful. (Have patience, as Campbell disposes of preliminaries.) His presentation is substantial, lucid, and disciplined. Consciousness, Campbell says, is personal. It must be experienced. It is, in fact, the ground of and precondition for experience. One "operates" within the field of consciousness when one thinks, but consciousness need not have thought content to be registered. Often "mind" and "consciousness" are equated, but technically consciousness subsumes and "extends" beyond mind. Meditative states may initiate in thought but can advance into positive trans-rational states.

A TOE that only explains the objective world, such as advanced by Einstein, is a "little" TOE. Campbell wants a big TOE, one that explains all experience, including, and especially, subjective experience, since the latter, according to Campbell, constitutes virtually all of reality. While most scientists dismiss the subjective world as either unreal or unimportant because it lies outside the purview of contracted scientific inquiry, Campbell contends that subjective is fundamentally more real than objective experience. Campbell seized upon a life-transforming invitation from Robert Munro, who had his first out-of-the-body experience (OBE) in 1958 and wanted to ground and scientifically study these exceptional events under the scrutiny and rigor of laboratory conditions, which Campbell and another scientist were to set up and apply. Most importantly, Munro was instructed to collect importable evidence in order to authenticate the validity of his experiences, which involved the physical world, the nonphysical world, an alternate universe, and past lifetimes (reincarnation is one of the main principles of his cosmology). Monroe came to realize that "we are co-creators with a mysterious and indifferent essence that is definitely not the God of Sunday school lessons."

After thirty years of research Campbell arrived at the following conclusions:

- Consciousness is the media of reality and information is its content.
- Entropy—the gradual loss of energy in a system, whereby it tends to devolve toward greater randomness and chaos—is the evolutionary motivator of consciousness, which, by aggregating information and acquiring new skill sets, brings greater understanding, predictive power, and system efficiency to better explain and potentiate the content of experience, thus reducing entropy and increasing order and functionality.
- Fundamental reality is modeled as a system of digital consciousness, with data input, archival storage (memory), retrieval (from backup files and downloading), and feedback loops (learning).

The implications of modeling consciousness as digital information, like an organic computer, are perhaps initially disconcerting but gradually disclose their aptness.
While Campbell's analogy may impact as cold and foreign, the representation of consciousness as a computer system best models its operation and in no way inhibits or diminishes its capacity or capability.

Personal understanding of the nature of consciousness is the only understanding that creates fundamental reality. It cannot be understood theoretically, it must be experienced. One must step into it and know it first-hand, personalize it. One must go from the outside of theoretical comprehension to the inside of actual experience. This realization is Campbell's important contribution, along with the digital modeling of this experience of consciousness to make it scientifically accessible.

Campbell expands on both David Bohm’s positing the content to be ‘reality as a whole’, and Eugene Wigner’s “scientific conclusion that the content of the consciousness is the ultimate universal reality” (see p. 1) by maintaining that Consciousness itself is the one Reality. In this he is in full accord with Harold Percival’s experience of “Consciousness as the Ultimate and Absolute Reality.” Percival’s monumental work, Thinking and Destiny, 1946, 1047 pages, contains the following from the “Author’s Forward” (pp. xxv-xxvi):

“Being conscious of Consciousness reveals the ‘unknown’ to the one who has been so conscious. Then it will be the duty of that one to make known what he can of being conscious of Consciousness. The great worth in being conscious of Consciousness is that it enables one to know about any subject by thinking. Thinking is the steady holding of the Conscious Light within on the subject of the thinking.”

An essay written by Percival subsequent to the publication of Thinking and Destiny on “Consciousness” may prove helpful.

For those unfamiliar with the person and publications of Percival, see here

Over time Campbell became able to experience the nontraditional metaphysical worlds of which this sense-based world is but a small subset. Effort, will, intent, desire, focus, and predisposition all played their part in his achievement. He experienced psi phenomena, including remote viewing, out-of-body experiences, communicating with nonphysical beings, and telepathy, which are all natural attributes of (accessible to) low entropy consciousness. "Lowering entropy, spiritual growth, increasing the quality of consciousness, and growing up are all expressions of the same thing." "Love is defined as the fundamental expression of low entropy consciousness."

Because Campbell has, to a degree, experienced the larger reality, teeming as it does with Life, he is able to report the existence of many different reality frames or dimensions, each containing sentient (conscious) entities that interact according to their own rule sets.
Who is qualified to experience (as opposed to intellectualize about) metaphysical reality? Who better, who, in the last analysis, other than each one so inclined, so desiring? Others may rant, caution, sneer at, dissuade from and deprecate the idea and intention. Evidently it's not for them. But we choose and make our own experience, though others may participate in like manner and interact with us. Regarding the validity, veracity, and reality of what we experience, we are indubitably the best authority and judge, not some self-constituted or institutionally-legitimized other.

Why is the paranormal so difficult to explain? All former attempts have insisted that physical world parameters be applied to nonphysical worlds, have demanded that the rules governing the subset hold good for those that organize the superset. "We force little picture constraints on big picture phenomena." It won't work.

Campbell deliberately avoids the hype, frisson, mystique, and glamour one too frequently encounters in treatments of spiritualism. He doesn't intrigue and allure. He plays down the phenomenon and doesn't flaunt his abilities. He's well grounded, as one must be to be successful in such an endeavor. But our evolution in love, as love, does not require that we seek paranormal experiences. There are abundant fields to harvest right where we are, in the physical world, in our physical bodies. Campbell, being a true scientist, wants to know, is inquisitive, needs to explore and expand his horizons. So he travels elsewhere and logs his other-world experiences.

While fear will certainly nullify any effort made to experience larger and other dimensions, love will promote it. Love naturally tends to experience in wholes, whereas the merely intellectual, academic approach to reality is fragmented and partial, and therefore subject to distortion. Nevertheless, healthy skepticism and discrimination have their role in guiding one's intentions in new realms, even as they serve us in our routine lives.

Physics, metaphysics, philosophy, and religion are all partial views of the same reality from different perspectives, holding different beliefs, and based on different assumptions. "In the big picture they are all easily understandable as individual shadows of one whole thing. One can see where and how each got stuck because of their limiting beliefs."

Mind and consciousness are not captive to the mortal, material brain. But final proof of this assertion will never be given until and unless one initiates the process that eventuates in conscious separation from it and maintains the continuity of consciousness without it. Then all gainsaying is of no account, for one has the certitude of direct evidence in personal experience.