

Theory of Universal Oscillation

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ABSTRACT: The proposed theory is based on the hypothesis of a rotating universe. At a critical circumference the universe rotates with an angular velocity in the peri-luminal range. Through circumferential increments at the critical circumference, matter forms into black holes and emerges into singularity. An instantaneous transfer of information takes place in the singularity through probable resonance of representative energy quanta within a coherent energy-wave milieu. The re-materialization of matter is associated with the emission of vectored energy which contributes to the expansion of the universe, Brownian movement and further prevents the collapse of the atom. This energy which derives from emission is proposed as a source of Dark Energy. A process of perpetual oscillation is therefore proposed, as existing between the relativistic and nonlocality domains. In the context of this theory it is proposed that the brain and the consciousness that it supports becomes the convergence point and bridge between the relativistic and nonlocality dimensions. This self-perpetuating dynamic provides an explanation for prevailing superposition and the collapsing of the wave into relativistic existence.

Key words: Universal Oscillation, black hole, nonlocality, singularity, Dark Energy, consciousness, neuro-electric field, superposition, wave collapse.

INTRODUCTION

Existing models which have attempted to integrate the core concepts of relativity with quantum physics remain controversial and incomplete. The prevailing consensus is that gravitational forces function predominantly in the macro-environment, the strong, weak and electromagnetic forces function predominantly within the atomic and subatomic quantum environment, while beyond Planck mass and length, within a singularity, known variables and calculations break down leaving an undefined milieu. These multi-faceted but incomplete models are further flawed by the conspicuous absence of any proposed hypothesis explaining the observed phenomenon of entanglement within a nonlocality context in which occurs the supra-luminal transfer of information.

The fundamental requirement for any proposed unifying theory is that all the observed characteristics of time, mass and energy be incorporated without bias. The theory should also be firmly anchored within the extended, perceived environment and not diverge into an abstract mathematical form which may no longer reflect the dynamics of the environment that it represents. Mathematical modelling is essential in

evolving and unifying any proposed physical theory. However when the symbolic representation of the physical environment becomes integrated within a mathematical language in which the language itself is governed by its own rules, a situation may arise in which the mathematics becomes an end in itself and no longer accurately reflects the extended physical environment. There are those subscribers to the nonlocality thesis who would argue that following the documented influences of observer consciousness on entanglement, mathematical modelling itself may bring about observable changes in the physical environment.

UNIVERSAL ROTATION AND OSCILLATION

The theory which I propose has attempted to incorporate the diversity of observed and modelled physical phenomena in the context of a heuristic approach. Fundamental to this proposed theory is a globally rotating universe. Several individuals have proposed this concept in the past, based upon mathematical and physical evidence. Gamow initially postulated a rotating universe in which the rotation of individual stars and galaxies resulted from the universal rotation (Gamow, 1946). Gödel in his Metric subsequently proposed a rotating universe but without factoring in the Hubble constant for expansion (Gödel, 1949). Later, Hawking endorsed mathematically the possibility of a rotating universe, albeit with a low angular velocity (Hawking, 1969). Su and Chu obtained a superior limit of global universal rotation of 4×10^{-17} rad.s⁻¹ (Su & Chu, 2009). Chechin subsequently derived a global rotation value based on the induced rotation of elliptical galaxies (Chechin, 2010). On the study of rotation of galaxies, Longo showed that more than fifty percent of 15 000 galaxies demonstrated a counter-clockwise rotation, which contributed to the possibility of a globally rotating universe (Longo, 2011). Li-Xin proposed mathematically that a globally rotating universe could give rise to the formation of galaxies and their individual spins (Li-Xin, 1998).

My own proposed theory of a rotating universe is based on the proof submitted by Berman and Gomide in which they show that, by a general relativistic derivation, the universe is locally and globally stable in a rotation resembling an extreme Kerr white-hole-universe (Kerr, 1963; Berman & Gomide, 2013). I contend that at the centre of an assumed circular universe, rotates a super-massive black hole where the angular velocity is near the luminal (speed of light) value, c . Consequent upon a shear effect or frame dragging (conforming to the Lense-Thirring effect), the adjacent space or ergosphere, rotates at similar angular velocity values (Lense & Thirring, 1918). In the uniform universal rotation of a presumed sphere, the angular velocity increases progressively from the centre towards the periphery such that the rotation at the periphery is constantly in the luminal range (figure 1).

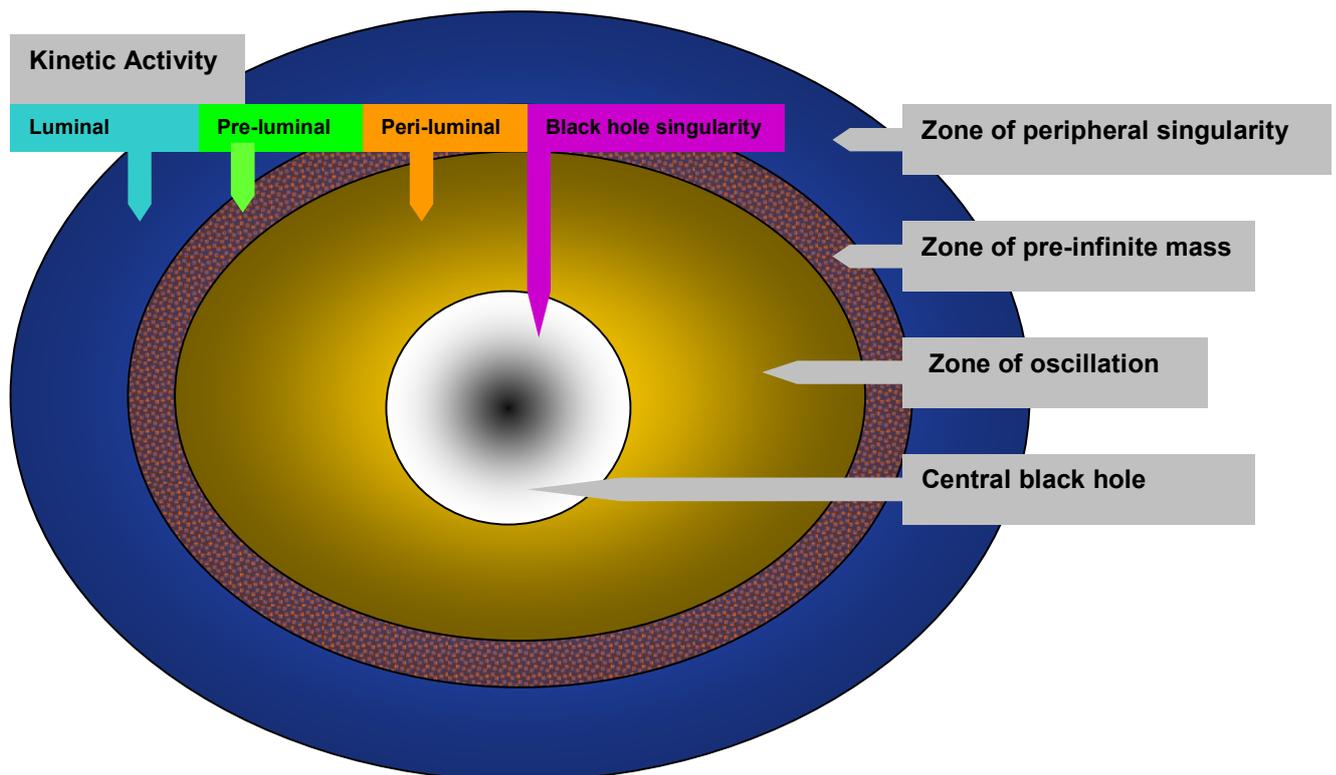


Figure 1

Four zones of kinetic activity may be identified:

1. The singularity within the central rotating black hole
2. A zone adjacent to the central black hole where rotation tends to luminal c – zone of oscillation
3. A zone following where rotation varies above and below luminal c – zone of pre-infinite mass
4. A peripheral zone where rotation is permanently at luminal c – zone of peripheral singularity

As a consequence of universal rotation two processes become apparent. Firstly, the centripetal force resulting from the rotation will contribute to the expansion of the universe as described by Hubble (Hubble, 1929). Secondly and as a consequence of the first, baryonic mass approaching the peripheral zone will transition permanently into singularity and will be lost from the physical domain. As a result of the conservation of angular momentum the universal angular velocity would accelerate as would universal expansion.

I would postulate further that the rapidly rotating universe results in the rotation of all other universal bodies inclusive of a range extending from sub-atomic particles to galaxies. At the scale of galaxies I would contend that the super-massive black holes identified at the centre of many galaxies similarly rotate with an angular velocity concomitant with their zonal locations. In this context I would postulate that our solar system is located in the zone of oscillation for reasons outlined below. Following on from Special Relativity, as a mass entity accelerates towards the speed of light c , the energy driving the acceleration is

progressively converted into mass in accordance with the formula $E=mc^2$ (Einstein, 1905). If the process is allowed to continue, the mass would theoretically tend to increase to infinite proportions. However at a threshold mass, the Schwarzschild radius for that specific mass is reached. The Schwarzschild radius is a measure of the threshold ratio of the radius of a spherical entity and its density such that if the density increases above the threshold for that specific radius, the mass entity as such can no longer be sustained. The mass entity therefore implodes in upon itself and transforms into a black hole, emerging into singularity (Schwarzschild, 1916). This hypothesis has been supported mathematically by Kumar and Sahoo (Kumar & Sahoo, 2013). Fundamental to this discussion is the proposition that there are no individual singularities but rather an entanglement of all singularities into a prevailing and ubiquitous co-existing singularity dimension, devoid of time and space.

Angular velocity along the circumference of rotation can be viewed as the average velocity after traversing individual Planck length segments, arranged with changing orientations along a circumference. The Planck length is the smallest measurable physical distance beyond which all physical parameters become undefined. With changing vectors of force and acceleration along the circumference there are incremental changes in angular velocity. As the circumferential path changes at the start of the next segment, the angular velocity has diminished to a sub-luminal value because the previous vectors of force and acceleration have diminished as the new vectors increase angular velocity in a different direction. Hence the mass re-emerges from singularity at the sub-luminal velocity, experiences the new vector influences, accelerates to threshold angular velocity and then exits again into singularity. In this way the process perpetually repeats itself.

In effect what is postulated is an oscillation of mass and its energy equivalent while within the dimensions of relativity and the singularity respectively, occurring within the zone of oscillation (figure 1). Within the dimension of relativity there is no velocity greater than luminal c . However within the nonlocality milieu of the singularity, mass, time and distance tend to zero such that connectivity is instantaneous. It is in this latter dimension that the observed manifestation of nonlocality can be adequately explained.

The vectors of force and acceleration require abundant energy to maintain luminal levels of angular velocity, beyond that which is contributed by the centrally rotating black-hole. Conversely the re-emergence of mass from singularity is accompanied by the gain of energy. The magnitude of this energy would be of the order of mc^2 , following on from relativity. Consequently there is a pool of energy resulting from this vectored energy emission and utilization which I postulate contributes to ubiquitous Dark Energy. It is the pool of Dark Energy which is utilized (absorbed) to *inter alia* drive the angular velocity of the

universe and which facilitates the emergence into singularity. Dark Energy will be detectable wherever the mass oscillation occurs.

GRAVITY, INERTIA AND ELECTROSTATIC FORCES

Energy absorption gives rise to the gravitational force which is further manifest by the geodesic curves of relativistic space-time in the vicinity of substantial mass. Energy absorption at the molecular, atomic and subatomic levels gives rise to electrostatic, strong and weak attraction and is no different from the gravitational effects of the macro-sphere. Vected energy emission contributes to the expansion of the universe, Brownian movement, the integrity of atomic and molecular structure by preventing atomic collapse as well as electrostatic repulsion. The centripetal/centrifugal forces consequent upon the rotating universe further contribute to the expansion of the universe. I would contend further that a significant proportion of the red-shifting seen in distant stars and galaxies reflects not only the accelerated movement away from our location due to an expanding universe, but also due to the relative increased angular velocity of more peripheral universal elements relative to our position and the centrally rotating super-massive black hole.

The perpetual processes of absorption and emission are proposed as the core forces of the universe. Absorption and emission in space-time in the vicinity of accelerating mass (undergoing oscillation) would give rise to a propagating wave through space-time, the parameters of which would reflect the magnitude of the accelerating mass. The configuration of the propagation at the luminal velocity, c , requires the direct influence of singularity parameters. This is discussed further, below. Absorption and emission is also proposed as an explanation for gravitational waves propagating at luminal velocity as predicted by Einstein (Einstein, 1916).

The physical properties of mass such as density, momentum and inertia are consequently regarded as a measure of the degree of energy absorption required in the oscillation process. The more the body mass, the more energy required for absorption and oscillation and the greater the gravitational value. At all levels of mass dimensions the competing processes of absorption and emission will occur. All subatomic components within any given mass body follow the circumferential trajectory in which each in turn passes into singularity at the Planck distance. Larger mass bodies comprise greater numbers of molecular and atomic components and therefore represent the summation of these components in terms of energy absorption and emission. Vected emission within the body is randomly orientated and will therefore tend to cancel out significantly while absorption continues unopposed. The integrity of the mass within the

relativistic domain therefore prevails. The existence of resultant vectored emission beyond the mass surface will contribute to the effects described previously.

Similarly, in the context of closely situated large body masses, vectored emission between the bodies is randomly orientated and will therefore tend to cancel out significantly while absorption continues unopposed. In this way the gravitational forces within a galaxy will offset the expansion of space-time due to the combined influence of emission and centripetal/centrifugal forces. I would further contend that this absorptive process supersedes the hypothesis of dark matter and its postulated gravitational influences.

Molecular and atomic components which contribute to a greater mass are integrated into the collective absorption and emission dynamic of the mass entity. On fragmenting the mass into smaller molecular and atomic components, the characteristics of the opposing processes of absorption and emission will change. The opposing processes become more equally balanced and manifestations of each become more identifiable and more easily manipulated or biased into either direction.

The Casimir effect describes the forces that exist on two parallel, electrically neutral conducting plates placed close together in a vacuum (Lamoreaux, 1997). The explanation proposed for this phenomenon is that the proximity of the plates would limit the formation of photons and other particles between the plates in terms of wavelengths relative to the external environment, such that the imbalance of prevailing quantum activity would result in a force exerted upon the opposing plates. I would argue that the force exerted upon the plates reflects the combined forces of emission and absorption where the random vectors of emission would cancel out while absorption prevails.

In the context of this model I propose that hypothetical gauge bosons do not exist. Rather, forces incorporated in the Standard Model may be accounted for by randomly orientated and vectored emission within the field which will cancel out significantly in regard to grouped structures while absorption continues unopposed. In this context the greater absorption/attraction index of protons for electrons relative to the neutron absorption index may be theorized on the basis of the quark types and their configurations. It is proposed therefore that Up quarks have a greater absorption over emission ratio than Down quarks. Consequently protons comprising two Up and one Down quarks are configured as a triangular structure while neutrons comprising two Down and one Up quarks are configured in a linear structure with a Down quark on each side of an Up quark. The gluon as an entity then becomes redundant, representing only the state of absorption over emission and the resultant absorption value.

I further propose that the Higgs boson also represents more a state than a particle. It would represent highly energized mass approaching black hole formation or alternatively, 're-entry' of highly energized

mass returning from the singularity at the point of energy emission. One has in fact observed the emergence of newer ‘Higgsless’ alternatives to the Standard Model (Calmet et al, 2008).

CHARACTERISTICS OF DARK ENERGY

The energy contributors to the Dark Energy pool can be summarized as follows:

1. Mass emission on return to the relativistic milieu
2. Kinetic energy of mass, previously accelerating, returning to the relativistic milieu
3. The centrally rotating black-hole

No distinction is made between macro-bodies and subatomic particles. In terms of this definition therefore, subatomic emission from accelerating bodies gives rise to electromagnetic emission while macro-body emission analogously would give rise to gravitational waves.

Dark energy in this context equates to quantum field energy or zero point energy. The characteristics of Dark Energy would therefore need to support the following universal observations:

1. Incorporate the properties of space-time
2. Provide the appropriate medium for electromagnetic transmission
3. Remain static or devoid of angular velocity relative to rotating universal bodies thus supporting a universal relativistic frame. In this way Dark Energy at the interface with oscillating mass receives kinetic energy emission and imparts a similar magnitude of energy in an equal and opposite manner thereby contributing to the mass acceleration. Therefore Dark Energy can be seen to accelerate subatomic particles as well as macro-bodies in terms of rotation and linear translation. I would propose that light and other electromagnetic transmission are propagated as a result of absorption and emission by physical bodies encountered along the course of their geodesic trajectories. This is derived from the supposition that an event that generates an electromagnetic transmission is recorded as the ‘universal present’ in the context of the singularity but has yet to arrive at the point of an observer several light years away in a relativistic environment. It is postulated that the initiated event existing in the nonlocality of the singularity becomes manifest in the quantum field energy of the relativistic dimension through sequential oscillations. The configuration of the wave form within space-time requires the ‘blue-print’ within singularity to sustain its configuration. Consequently, space-time devoid of the oscillation dynamic would be perceived as having large black hole-like properties, reflecting an absence of dark energy supportive substrate.

INFORMATION TRANSFER IN THE SINGULARITY

The singularity may be defined as a dimension characterized by the presence of the energy equivalent of mass devoid of time, mass and distance. Implicit in this dimension is the wave form equivalent of all mass entities. However the wave-energy representation must be in the form of identifiable quanta which retain their individual integrity so that on return to relativistic conditions the mass is re-materialized. I submit further that within the singularity, the phenomenon of resonance occurs between similar energy quanta or through the harmonics thereof. Resonance in this context is equivalent to coherence. This in itself would contribute to the connectedness of the dimension. Coherence tends to increase spontaneously with ongoing interaction. In this way the instantaneous transfer of information takes place which may become manifest in mass entities on return to the relativistic dimension. Coherent entities connected in the singularity in this way, manifest a connectedness in a relativistic dimension and are described as being entangled. Perceived changes of entangled entities in the relativistic milieu are instantaneous as a result of the coherent connectivity while within the singularity. Instantaneous changes of entangled entities has recently been observed and measured at two distant locations (Fuwa et al., 2015).

The wave-energy representation of all physical elements in the singularity incorporates all the potential for materialization and is referred to as superposition. In the context of this proposed Theory of Universal Oscillation, superposition occurs within the singularity domain with the probability of universal coherence. In the absence of attempts at direct quantification of superposition or the directing of any conscious attention towards this energy equivalent, the energy milieu evolves according to Schrödinger's equation (Schrodinger, 1926). I would further contend that the source files underpinning the entire oscillation process are also operative in the energy flux of the singularity. Consequently every physical entity that re-emerges into physicality incorporates the full singularity flux at that specific instant, reflecting the probable universal coherence. Each entity is thus a hologram of the entire spectrum of singularity flux inclusive of the source files of the extended oscillation process. Implicit in this assertion is that all entities in relativistic physicality are entangled as a result of their coherence within the singularity.

A PROPOSED STRATEGY FOR THE INVESTIGATION OF UNIVERSAL OSCILLATION

In regard to the rotation of mass bodies on a circumference it is postulated that every mass body has a leading interface and a trailing interface, where the leading interface represents the direction of motion and the trailing interface represents the opposite direction. As a consequence of the phase difference between the leading and trailing interfaces, there will be differences in the absorption-emission values between the two interfaces. I would contend therefore that if gravitational lensing was performed simultaneously

between the leading and trailing interfaces on a large body, different values would be obtained as a result of the gravitational lensing asymmetry. Therefore the validation of the Theory of Universal Oscillation rests upon the proof of Gravitational Lensing Asymmetry.

THE BRAIN AND CONSCIOUSNESS

Human consciousness is perceived in the relativistic domain as a process in which environmental entities and their associations are perceived and integrated. The integration develops into an understanding of the environment which then evolves into a unique subjective reality. All subsequent conscious (and unconscious) action is modulated by this integration. If the neuropsychological integration be analogous to digital circuitry, then the unique individual design of the circuitry is a product of all prevailing influences at the time of its origin, in the context of the nature-nurture dynamic. The unique circuitry and its inherent bias will subsequently select out elements in the environment which are synchronous with its configuration.

Quantum systems have been shown to incorporate the energy equivalents of all physical entities (referred to as basis/base states). As proposed previously, the wave-energy equivalent representing all physical elements in the singularity, exists in coherent superposition. Consequent upon attempts at directly and consciously quantifying the singularity and its intrinsic superposition, all prevailing potential regarding a specific entity/dynamic is collapsed into relativistic physicality (base state). The wave of potential energy in superposition is said to have been collapsed.

Wave collapse, it is argued, applies both to the collapse of statistical possibilities (infinite possibilities as opposed to zero alternative possibilities) as well as to the collapse of the wave-energy (frequency) reflecting the specific entity. The newly formed relativistic entities then become new substrate for oscillation with the singularity and thereby contribute to the prevailing superposition potential. In the context of this discussion it is proposed that wave collapse refers to a combination of both the identification of the basis state of an entity following measurement of quantum superposition together with the experimental findings of the conversion of a wave state in the double slit experiments into the particulate/granular state following measurement. The latter has recently been demonstrated again by Radin (Radin et al, 2016) and has also been demonstrated with particles of atom size (Manning et al., 2015). The wave collapse of measured, entangled (coherent) entities following simultaneous measurements at two distant locations has also recently been demonstrated. (Fuwa et al., 2015). As indicated previously, entities in relativistic physicality are entangled as a result of their coherence within the singularity. However, due to fragmented and segmentally compartmentalized individual perceptions (consciousness), universal entanglement within the relativistic dimension is concealed and replaced by the illusion of separation in

time and space. Physical entities in the relativistic domain can thus be described as artefactual standing waves resulting from the interference of the coherent waves of singularity with the apparent de-coherence of Dark Energy, precipitated by conscious engagement with specific segments of superposition. I would argue therefore that wave collapse applies equally to both quantum entities at the atomic and subatomic level as well as to the macro-environment of Relativity. It is my contention that differing relativistic frames engaged in a common event will influence the relative outcome by the incorporation of observer consciousness and consequent wave collapse.

A review of fundamental neuroscience is essential in order to understand the concept of consciousness and its function within the context of the Universal Oscillation theory. Logically, the discussion begins with a review of sensory input since all integration is based on this. In studying the hard-wired configuration at the level of the sensory receiving areas of the brain, it becomes apparent that neuronal cells and collections of neuronal cells are stereotypically, spatially arranged for function. In effect, the sensory process at the cortical level is characterized by the fragmentation of the incoming signal into its most fundamental components. In the visual cortex, the incoming light signal is fragmented to a level at which first order receptive cells respond only to fixed points of light frequencies or darkness. Thereafter subsequent order cells higher up in the filtering hierarchy begin synthesizing the sensed information received from the lower order cells through specific receptivity to further qualities of the sensed signal such as static and moving lines in all angles of orientation (Ganong, 1979). The information is further filtered through progressively higher order neurons which are individually responsive to more qualities of the sensed signal and in this way begin to synthesize the perceived information (Felleman & Van Essen, 1991). This process continues until it arrives at a point where the cells at the apex of this filtering and re-synthesizing hierarchy are the representation of the perceived entity. It is postulated that this apical representation is most likely situated in an association area. This sensory-association process may be summarized as follows:

1. First order cells receive the incoming sensory information in a fragmented form.
2. A hierarchy exists such that the sensed information is transferred through successive orders of cells, each being responsive to more of the features of the sensed information than the preceding order.
3. The configuration of all the cells is stereotypically arranged to carry out this required function.
4. The overall configuration of participating cells is triangular (pyramidal or conical in three dimensions) in that the base comprises the greatest numbers of cells, each specific only to very small increments of sensed information, while higher orders comprise progressively fewer cells, each specifically representative of more information. The least amount of cells would be situated at the apex of the configuration – the specific representation of the sensed entity.

This process represents the labelling of individual entities in the environment. Once a foundation of labelled entities is established, the process continues with the integration of associations of labelled entities. In this way awareness evolves into understanding that ultimately contributes to the development of a subjective pre-frontal lobe-based world view. Of significance is that the subjective world view in turn, influences the receptivity of information at the first order cells and its subsequent integration. In this way we can identify the ‘bottom-up’ process of establishing neuronal representation of the environment as well as the ‘top-down’ process of biasing incoming information.

The hard-wired process described above will give rise to an adequate integration, supportive of human consciousness and independent function. This represents a common foundation, stereotypically similar for all individuals. We deduce this from the observation that neuro-anatomy and neuro-physiology are similarly spatially localized in different individuals. At this point we would need to project further in terms of this integration process to provide a model supportive of individual creativity. In order to explain creativity, we would need to expand the hard-wiring beyond the apices of primary triangular configurations, specifically representative of entities and their associations. In effect, hard-wiring represents an integration of environmental entities and their associations. Creativity, on the other hand, reflects a future-based, abstract integration.

We can assume that many “un-labelled” neurons and processes exist within the milieu of the integration process. These neurons would provide the substrate for further integration. In the event that the apices of two or more representative triangles of configuration are triggered, neighbouring neurons and their processes may be recruited and incorporated in the synaptic circuit. In effect, the recruited neurons, termed inter-neurons, would be those caught in the common penumbra of triggered apices. This process would be more likely to occur if the triggering were repetitive and if there was an element of reward (dopamine-based). As in all neuronal circuit creation, the initial neuro-transmitter mediated connection would evolve into a structurally permanent circuit through protein synthesis and axonal/dendritic growth (Kandel, 2001). The integration of apices elevates neuronal association to a higher order. The expansion of consciousness is therefore a consequence of repeated integration of subsequent apices of representation.

The key to understanding the process of memory storage is the appreciation of the interplay of genetic expression with activated, stereotyped neuronal cells. It has been shown that primordial neurons differentiate in response to genetically determined induction factors. Of significance in this regard is the finding that neuronal differentiation is dependant upon location within the developing neural tube. Following differentiation, neuronal cell processes migrate to specifically predetermined destinations under the influence of cell-derived guidance factors (Jessell & Sanes, 2000). From these observations it can be

extrapolated that neuronal populations are stereotypically configured in terms of their anatomical location to represent specific functions or bytes of information. The initial stimulation of a given neuron occurs therefore as a result of the location of the neuron within an integration, which is genetically determined. The configuration of synaptic connections is also genetically determined. Consequently a given neuron and its connections, when stimulated, immediately represents a pre-programmed byte of information. The genetic transcription of prion-like proteins to establish permanent synaptic connections completes the hard-wiring process (Si et al., 2003). In this way memory storage is a product of precise, stereotyped neuro-anatomical location and the subsequent transcription-driven imprinting and labelling of the neuron when triggered with a byte of information appropriate for that specific neuron within the integration. In other words, a given neuron represents a convergence point for specific representation of information by virtue of its genetically determined, stereotyped anatomical location and its position within a synaptic integration. In regard to creativity, it is proposed that the inter-neurons which mediate this process, harness genetic substrate and synthesize prion-like proteins appropriate for the integrated configurations.

It follows that the loss of neuronal cells and consequently the bytes of memory incorporated within them, would not necessarily diminish the information stored within the greater configuration. More integrated neurons higher up in the configuration that have been activated and imprinted with information would incorporate the information represented by lower tier cells. Evidence in favour of this postulate is the finding that the removal of the first order visual cells (decortication) in the monkey does not result in an appreciable loss of visual discrimination. Clearly, higher order levels of representation had been imprinted with lower order information (Keating & Horel, 1972). Recent research in Arc neuronal genes demonstrates the possibility that neuronal genetic coding may be transported to other networked neurons in the form of virus-like capsids (Pastuzyn et al 2018).

The critical interface of labelled and recorded environmental entities occurs at the sensory organs. These organs include the eye, ear, taste and smell receptors as well as touch, temperature and pressure receptors. The sense organs transduce the mass-energy environmental entity into its granular-mass equivalent alone. Based on perceived associations of mass entities labelled through the senses, circuits of neuronal connections incorporate a multitude of combinations and permutations of sensed substrate. All circuits at every level of representation and sophistication manifest charge in motion and thus generate a frequency. It is proposed that circuits incorporating similar sub-component circuits will resonate with each other. In this way the integration of circuits firing together will occur both by direct conduction with each other if circuit connection occurs as well as by transmission through resonance. The brain as an organ then

appears to approximate a black box within the cranium. Frequencies are generated by neuronal activity and in turn, stimulate resonating circuits. These frequencies which are partially monitored by the electroencephalogram (EEG), function additionally as a co-ordinating influence of multiple circuits and their activity across a widely spread area of the organ (Canolty et al., 2010).

In the context of the Universal Oscillation dynamic neuronal circuitry in the relativistic domain has representation within the singularity dimension. Circuitry while within the singularity dimension of the oscillation dynamic serves as a template, coding for the comprehensive neuronal configuration and representation. Labelled and represented elements carried through from the primary sensory organs transmute into their authentic energy-frequency equivalent and resonate in coherence with the energy equivalent of the primary entities themselves. In this way the template imprints further resonance influences on the energy equivalents of the entities. On return to the relativistic dimension, the primary integrated entities represented by the neuronal circuitry are physically modified. The influence upon integrated entities is through pure conceptualization, the written or drawn form and/or by actual physical co-creation. I would propose that this is the neuro-scientific explanation of collapsing the wave of superposition. Additionally, entities independent of a neuronal integration within the singularity that coherently resonate with each other underpin the phenomenon of entanglement on return to the relativistic domain. However conscious engagement with coherently resonating entities implies resonance between the energy equivalent of one or more of the entities with the circuit based representation of the entity. This action will modify the characteristics of one or more of the entities and terminate the coherence and entanglement on return to the relativistic environment. Wave collapse has occurred and thereby brought coherent entanglement to an instantaneous end.

The configuration of the neuro-circuitry in each brain is unique. Consequently the brain and the process of consciousness which it supports therefore becomes a unique source of frequency (energy) coherence. This unique coherence of frequencies represents the contribution of each individual to singularity superposition. The resultant unique interference pattern also represents the specific identification of the individual consciousness within the singularity in the form of a carrier frequency – an inverse Fourier transform of all neuro-circuitry frequencies at that specific point in time.

The process of resonance within the singularity dimension would apply additionally to coherent energy-frequency equivalents of neuronal circuitry of different brains. While it is improbable that this process would actively create new circuits, the activation of existing circuits through singularity induced resonance may predispose to ongoing activation on return to the relativistic domain. The activated circuits

would in turn contribute to further integration via Hebb's Rule: "Neurons that fire together, wire together" (Hebb, 1949).

I conclude therefore that consciousness is a composite manifestation of representative neuronal circuitry, the resonating intra-cranial frequencies and the singularity-based energy equivalence of the circuitry and the entities represented therein. I would suggest therefore that consciousness extends beyond the brain organ and indeed, beyond the mass-based relativistic domain.

TIME

In the relativistic domain, time in terms of past, present and future is defined on the basis of sequential wave function collapse. As superposition is collapsed into a relativistic frame, an event is recognized and labelled in the context of sequential wave collapse. In this way an arrow of sequential process is identifiable. Past, present and future are thus relative positions on a unidirectional process.

The singularity domain represents a coherent and perpetually resonating milieu incorporating quantum superposition of energy-frequency. Through the Universal Oscillation process, segments of this energy are repeatedly collapsed into the relativity domain and immediately return as further energy-frequency superposition potential. Energy-frequency changes resulting from wave collapse and new superposition potential will affect all resonating energy. Therefore energy-frequency resulting from previous superposition collapse becomes influenced by subsequent 'new' superposition. The singularity however represents an infinite present. It is also much vaster than the segments involved in the wave collapse of superposition potential.

When viewed from the relativistic perspective, the singularity incorporates elements of past and present wave collapse and newly established superposition, together with influences from future superposition, devoid of wave collapse. Theoretically therefore past wave collapse may be influenced and modified by wave collapse in the present but the influence on the future singularity dynamic will only be in the form of a contribution to collective superposition.

DEATH

A condition for the perpetual oscillation of consciousness between its relativity-based physical form and its energy equivalent within the singularity is that there needs to be an intact and resonantly perfect physical/organic brain receptacle. If neural circuitry is lost in the relativistic dimension, the energy equivalent of that represented by the lost circuitry remains by default in the singularity as unique energy - the carrier frequency. Following whole brain death the extreme situation will occur in which none of the

energy equivalent of the entire neuropsychological circuitry can be returned to the relativity-based physical brain. In the singularity, the energy-based equivalent of consciousness would become re-united with previously lost quanta and regain its complete energy-based format.

It is postulated therefore that the unique interference pattern of each individual persists independent of physical death in the singularity. Data which is integral to this nonlocality milieu assumes timeless and spaceless properties. The data also retains its integrity by virtue of its unique interference pattern. The persistence of this data in the form of energy-frequency, supports resonance within the nonlocality, singularity milieu and between the singularity and the relativistic milieu. A possible illustration of this hypothesis is that of ‘terminal lucidity’. Terminal lucidity refers to a period of lucidity and clarity which occurs in the final hours before death in some individuals suffering from advanced Alzheimer’s disease and in other chronic dementias characterized by severe cognitive impairment (Nahm et al., 2011). In most of these cases there is radiological evidence of gross volume loss (atrophy) of brain tissue. I would propose that these individuals reach a threshold loss of cerebration such that the signal to noise ratio of singularity-based energy-frequency data is significantly raised. With a functioning hippocampus they begin to resonate with the energy equivalent of lost circuitry. In effect this reflects the reconciliation of the last of the relativity-based organ with its complete nonlocality equivalent.

DISCUSSION

The fundamental motivation for proposing this theory of Universal Oscillation is based on the need to offer a comprehensive model which explains observed phenomena that have hitherto not been adequately explained by existing models and theories. The need to integrate the five senses-based Relativistic environment with non-relativistic quantum observations and to further extend this to incorporate entanglement and the effects of human consciousness, has given rise to the proposed oscillation between the Relativistic environment and a newly defined singularity dimension. Borne out of this dynamic is the emergence of two fundamental forces in the extended universe – absorption and emission. The nonlocality properties of the singularity is the subject of ongoing research (Radin, 2004). Einstein’s “Spooky action at a distance” has been validated in several studies such that the dimension of nonlocality is now recognized as an integral component of an extended and integrated environment (Sheldrake et al. 2004).

The heuristic model that has been proposed, is based on the hypothesis that the entire universe perpetually rotates around a centrally situated super-massive black hole with an angular velocity in the per-luminal range. It is further proposed that angular velocities increase as one moves progressively along a radius extending from the ergosphere of the rotating black hole towards the outer circumference of the

universe. It is postulated that earth within its galaxy occupies a critical position within a zone adjacent to the ergosphere of the centrally rotating Black-hole such that the angular velocity is in the peri-luminal range, resulting in perpetual and oscillatory black hole formation. Through circumferential Planck increments along this critical circumference, matter forms into black holes and emerges into singularity. An instantaneous transfer of information takes place in the singularity through probable resonance of representative energy quanta within a coherent energy-wave milieu. Due to incremental changes of force and acceleration along the circumference, angular velocity will diminish intermittently facilitating the re-materialization of matter into the relativistic dimension. The re-materialization of matter is associated with the emission of energy which contributes to the expansion of the universe, Brownian movement and further prevents the collapse of the atom. This energy which derives from emission is proposed as contributing to the source of Dark Energy. Dark Energy *inter alia* serves to maintain the angular velocity of rotation of the universe and thereby, the emergence into singularity.

The human brain and the process of consciousness that it supports may be viewed as a convergence point, bridging the dimensions of relativity and singularity. The application of the oscillation dynamic in the context of neuro-physiology provides a possible explanation for the wave function collapse of coherent quantum superposition potential. As this process continues, the database of the singularity represented by resonating energy-frequency becomes enhanced. The new states of quantum superposition in turn provide substrate for further wave function collapse into relativity.

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AUTHOR'S NOTES

I would contend that the universe was rotating at the moment of the Big Bang. Inherent in this contention is the postulate that prior to the 'manifestation' of what was to become the baryonic universe there existed a singularity that rotated at supra-luminal levels. I submit that it was the slowing of the singularity that led to the Big Bang and manifestation. Since the Cosmic Microwave Background Radiation (CMB) was an integral part of the evolving universe, I would propose that it rotates with baryonic matter. Hence there would be no evidence that the universe rotates relative to the CMB. This is endorsed by the finding of insignificant anisotropism in the CMB.

At the core of General Relativity is the incorporation of the gravitational influences of all bodies upon each other. In so doing, Einstein had indirectly applied Mach's Conjecture which stated and implied such an influence. In fact it was Einstein's application of the Conjecture which gave life to the Conjecture and which in turn contributed to General Relativity. Extrapolating the concept further I would suggest that the rotating universe drives the rotation of all baryonic mass bodies which in turn, contribute to a rotating universe in a universal frame-dragging process. Since there is evidence of super-massive black holes rotating near the speed of light, I would conclude that in the context of Mach's Conjecture and frame-dragging, the universe as a whole is rotating near luminal levels of angular velocity.

Recent findings of multiple galaxies in distant parts of the universe all sharing similar directions of rotation, contributes further to evidence of a rotating universe. Additionally, the finding of super-massive black holes rotating at or near the speed of light contributes to the probability of our own angular velocity approximating the speed of light as a consequence of our relative frame perspective of the rotating entities.

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