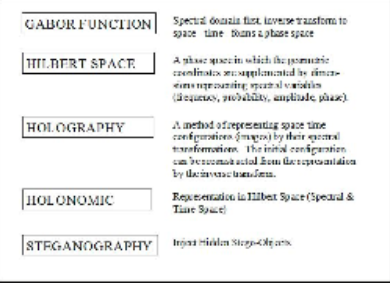
**Quantum Consciousness**

by Michael McCarron

In a previous chapter, ‘Lessons from an American Weapons Designer’ we read about the development of Thought Injection of Dr. John Norseen, while employed at Lockheed-Martin. In his research articles and in conversations he explained several of the key areas involved in his work. One of the areas that he touched upon was the concept of Quantum Consciousness, citing many researchers in this area, he was influenced by the holonomic ideals of Dr. Karl Pribram, Dr. Norseen, specifically in one particular key technological area his research specifically cites the gravitational based Orchestrated Objective Reduction of Nobel laureate Sir Roger Penrose and University of Arizona professor, Dr. Stuart Hameroff. It is important to again note Dr. Norseen’s concept of Quantum Shift Keying (QSK), which is to say a code, which was suggested in Koruga-Hameroff’s 1994 research on Quantum Consciousness, Norseen claimed to use this QSK as a lock-key mechanism that he also compared to Die casting a thought into the biological fabric of a target brain. In the previous chapter, ‘Physics of Neuroweapons’ we studied how gravitational waves served as the basis of this technology, an in detecting gravitational waves the technology of interferometry is used. Which is exactly how Norseen viewed the brain, the brain is an interferometer:

“If we take Pribram and the Russian work, it shows that the human brain structure is an interferometer that uses Gabor Function (wavelet-codelet analysis) in Hilbert Space.” (Norseen, 2002, Part 4)

A slide preserved by Laurie from a presentation prepared by Dr. John Norseen

The seat of the QSK is revealed by Dr. Norseen as taking place in a particular part of the brain, inside neurons, in the molecular mechanism of Microtubules (MTs) writing in a presentation prepared for Russian academics of Reflexive Control in Moscow:

“Invariance can be captured in MT by quantum encryption of various combinations of photons, phonons [GW produces phonons] and electrons, which may synergistically produce, via solitons, a binding property of emergent epiphenomenon, a biofield communication both local and non-local to the protein MT strings. Calpain induced start/stops in the dendritic-synaptic receptors, with varying degrees of glial cell neurochemical nutrient infusion, turn on or off the QSK coded learning sequences in the MT. As more and more of neuronal activity forms a topological geometry around these events, oscillating in concert, perceptual and then cognitive events transpire, suggesting a process for sensory to sentient computation” Norseen (1996)

A phonon is the quantum mechanical description of an elementary vibrational motion in which a lattice of atoms or molecules uniformly oscillates at a single frequency. In classical mechanics this designates a normal mode of vibration.

[Calpain is used for long-term potentiation in neurons. Calpain is a protein belonging to the family of calcium-dependent, non-lysosomal cysteine proteases (proteolytic enzymes) expressed ubiquitously in mammals and many other organisms.

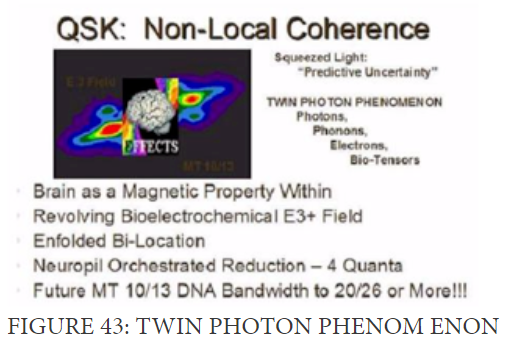
Long-term potentiation (LTP) is a persistent strenthening of synapses based on recent patters of activity. These are patterns of synaptic activity that produce a long-lasting increase in signal transmissions between two neurons. The opposite of LTP is long-term derpession, which produces a long lasting cdecrease in synaptic strength.

Since it’s original discovery in the rabbit hippocampus (CA1 Hippocampus), LTP has been observed in a varity of other neural structures, including the cerebral cortex, cerebellum, amygdala, and many others. Robert Malenka, a prominent LTP researcher, has sugested that LTP may even occur at all excitatory synapses in the mammalian brain.

CaMKII

]

[ti on twitter today8/4/20 said they alter phonon spins, so research that, given that hardly anyone in the TI community knows anything about that, he was also dead on about the AI system so obviously some educated technical person]



Neuropil (or "neuropile") is any area in the nervous system composed of mostly unmyelinated axons, dendrites and glial cell processes that forms a synaptically dense region containing a relatively low number of cell bodies.

In his conversations with Laurie he speaks of the Orchestrated Reduction, in his 1996 Russian presentation he cites Hameroff’s ORCH-OR three times:

Semiotics leads to greater complexity and teleological concentration of energies. Brain structures form to interface and resonate with ZPE; memories are captured ZPE events stored in orchestrated reductions of proteins. When memories are tapped by brain signals — electromagnetic, biochemical or phononic or vibrational — the proteins unwind and unleash the stored memories. Then, as proteins do, they rewind themselves to be tapped again...think of a balsa wood, rubber band-powered airplane that can be used over and over again to fly around the yard. (Norseen, 2002, Part 11).

An important thing to notice about these remarks, aside from familiarity with Orchestrated Reduction of Penrose, is that he is also formulating the Amplifier Theory of Jordan, as he speaks of memories coming from ZPE, Zero Point Energy, which are vacuum fluctuations of virtual particles which in the Classical world are encountered in the Casimir Effect where virtual particles can appear, of which we will read more about from Dr. Michael Persinger later. Dr. Persinger also points to ORCH-OR as a viable candidate as a physical explanation for Consciousness:

The quantity of energy 10-20 J has direct application to the neuroquantum approaches to consciousness. The most popular is the “collapse of the wave function” as cogently articulated by Hameroff and Penrose. Their recent articulate article entitled “Consciousness in the universe: a review of the ‘ORCH OR’ theory” reviews the essential concepts.The dichotomy of the existence of theelectron as a particle or a wave within space is reflected by its classical width, of about 2·10-15 m and its Compton wavelength, 10-12 m, derived from quantum concepts. Although there are several interpretations for this discrepancy, what is important here is that the discrepancy in length according to the Lorentz contraction requires a specific discrepancy between the speed of light (3·108 m·s-1) and some very negligible value less than that velocity. The difference in energy equivalence for the electron at the velocities that would accommodate the Lorentz contraction is in the order of 10-20 J. This could suggest that the increment of energy required for the “collapse of the wave function” is congruent with the quantum increment associated with a single action potential. By extension, millions of action potentials would affect millions of these functions. That the action potentials from only one neuron could affect the global state of the entire cerebral cortices has been reported by Li et al.. Energies in the order of a few increments of 10-20 J have been shown experimentally to alter the probability of an overt response [58]. (Persinger, 2015)

In talking about the negentropy (structure) of Semiotics Norseen brings up the issue of the ability to speak of them quantitatively and then improve on that quantization through technology:

So if you are concerned we are dealing in Esoteric, erudite, non-approachable conditions of Semiotics and Radionics and ZPE and Alfven Wave Grids, then BE SOFTENED my good friend. The very fact that SEMIOTICS requires structure means that it can be TESTED, MEASURED, VERIFIED and understood and TECHNICALLY AMPLIFIED. I have given examples of how simply twisting Chromatin within a mitochondrial (ZPE channel) cell structure results in SEMIOTICS expression and cell division/cloning (Representamen)...and this can be shown faithfully and measurably. (Norseen, 2002, Part. 7)

[Radionics would include now also the use of gravitational waves not just electromagnetic waves]

The question becomes is how is the measuring done? To which Norseen has also provided some insights, speaking of using holography, which we also encountered in the work of Dr. Bar in terms of gravitational wave holography. Norseen also speaks of the gap junctions between neuronal cells, they correspond to a small enough distance for Casimir Effects to take place:

It is only in the communications switching capacity of the brain — (no two neurons normally physically touch each other, therefore, this gap represents a switching capacity), and it is this switching capacity of several million objects that allows for our great mental scan and scope capabilities, not the Memory Storage in physical memory of proteins.

This structure is almost limitless in the ability to generate Holonomic - holographic like resonance patterns. In physical protein memory, there are parts of the brain that deal in one memory to one laid down protein. For instance, in the Fusiform Gyrus, the one to one memories of loved one's faces are stored in isomorphic recall conditions, whereas the rest of the brain is involved with undulating and regular modifications of the alternating calpain, induced plasticity of neurons and protein lay down, that occurs each time we introduce a new memory for codification. These functions normally take place during the delta frequency of deep sleep patterns, only after repeated Rapid Eye Movement (REM) cycles trigger new memory consolidation.

(Norseen, 2002, Part. 7)

Here he is noting the difference between Long Term Memory which can become encoded in proteins, and a holographic resonant model of memories before they become encoded as long term memories. Not all resonances will become memories though. Norseen has noted that to get a hologram of the brain state at a given time that the Casimir Effect is employed. Another methodology he explicitly brings up in regards to measurements and modeling (hologram) is the Zeeman Effect which he received from the Russians:

“I am into Continuous Wave Energy (CWE) using the Zeeman Effect (ZE), and refined by the Russkies under Zavoisky in ‘45, and picked up by the Japanese in the mid 80’s at Hitachi. It is even being used in conjunction with some deep space and HAARP projects and hyper spectral satellite transmissions groups to find gravity lenses, and ionosphere scintillation factors that corrupt GPS, etc. Anyway, in the human brain the combination of electric fields, biochemical plasma and magnetic dipoles [MT dipoles] set up conditions ripe for monitoring by CWE and the hyper spectral definitions come about by looking at the Zeeman Effect - the directions that the electrons take in the presence of the regular and applied magnetic field…you can peer right into the actual communications structures, the semiotics if you will, of the target. (Norseen, 2002, Part 8)

and right at the zone where Alfven Wave corridors of the brain Magnetite exchange ZPE in the dendritic neuropil at nanoscale [MTs], discrete bandwidth, channels. It is right here in the Marianas Trench of human thought/perception, that the person is exposed to the Universals of Quantum State potentials, and that each individual thought or Semiotic Identity is formed, only to then bubble or shoot right up to the surface of positive thought realms.

Just as you can look into an aquarium or a fish bowl and see the stuff at the bottom work its way up to the surface, you can track the origin of Semiotics from Alfven Wave Interactions with ZPE, from the plumbed depths of the Brain. (Norseen, 2002, part 6)

Norseen here specifically mentions the Zeeman effect, which is of special interest because of the importance of Zeeman data in the analysis and theoretical interpretation of complex spectra used in Atomic spectroscopy and spectroscopy in general--the study of the interaction between [matter](https://en.wikipedia.org/wiki/Matter) and electromagnetic [radiation](https://en.wikipedia.org/wiki/Radiation) [see chapter, ‘Physics of Neuroweapons’ for HFGW spectroscopy of Dr. Robert Baker]. Pieter Zeeman effect: splitting of a spectral line into several components in the presence of a static magnetic field (CWE radar of Norseen). It is analogous to the Stark effect, the splitting of a spectral line into several components in the presence of an electric field. Splits, via changing angular momentum, a spectral line say 400nm into a more energetic line, it’s normative line and a less energetic line, 3 lines. Since the distance between the Zeeman sub-levels is a function of magnetic field strength, this effect can be used to measure magnetic field strenth, e.g. that of the Sun and other stars or in laboratory plasmas. The Zeeman effect is very important I applications such as nuclear magnetic resonance spectroscopy, electron spin resonsnace spectroscopy, magnetic resonance imaging (MRI) and Mossbauer spectroscopy. A theory about the magnetic sense of birds assumes that a protein in the retina is changed due to the Zeeman effect. humans have similar proteins in their eyes.

In an interesting corollary, Persinger relates the Schumann Resonance to the Zeeman effect in the cerebrum:

“The operating intensity of the cerebrum has been measured and calculated to be in the 1 to 100 pT range with a wide band of coefficients. From this context it is interesting that kg/As \* 1/s or the mass of an electron divided by a unit charge multiplied by 7 Hz is 9.1 x 10-31 kg/1.6 x 10-19 As \* 7 Hz (1/s) or 40 x 10-12 T. This relationship is closely coupled to the Zeeman effect whereby the application of a magnetic field produces an additional or a third spectral line in an absorption spectrum by inducing different quantum levels. The change in angular frequency with an applied field of 40 x 10-12 T would be, according to classic Zeeman formula solutions, the product of 4 x 10-11 T \* 1.6 x 10-19 As divided by 12.56 \* 9.1 x 10-31 kg or about 0.6 Hz. However in non-angular systems it would be 7 Hz [Schumann Resonance].”

(Persinger, 2010, 818)

Another area that is of interest in terms of mapping is the ability to measure brain waves. The Casimir effect plays a direct role in these waves. As the effect creates the contracting and expanding of neuron cells. Duncan Laurie gave this encapsulation of Norseen’s presentation on the creation of brain waves:

The communications described are instantaneous, and to describe how that is possible, Norseen introduced two additional factors: Zero Point Energy and Alfven Waves. Zero Point Waves (ZPE) having been introduced earlier in the manuscript. This energy of the vacuum has actually been measured and is called the Casimir Effect. The Casimir Effect is measurable when two metal plates are placed extremely close together (1 nanometer). The vacuum created interferes with the flow of ZPE and has been scientifically measured. The result is that the plates are drawn together, as if by magnetic attraction. Norseen points out by comparison that the identical 1 nanometer distance is the distance between brain cells, thereby implying a stage for ZPE coupling. As these distances open and close between the cells, a signal impressed upon the ZPE [virtual particles in a vacuum] can be generated out in the 5-30 Hz. range.

How it becomes an instantaneous signal reaching anywhere in the universe is accomplished by the Alfven Wave (AW). Norseen’s definition of Alfven waves is that of a magnetic string stretched out, and then impinged upon by unique traveling magnetic resonant structures...like plucking a magnetic harp. Theoretically, Alfven waves interconnect all parts of the universe via magnetic fields. Magnetite within the brain cells connect local magnetic swirls to the magnetic river or storms existing locally or outside our magnetosphere. Norseen describes the AW as a universal plasma that extends between local and non-local events, capable of carrying semiotic communications via directed ZPE [virtual particles in a vacuum] pulsation. These signals are capable of penetrating the magnetic storm, in the same way radio signals penetrate our congested airways carrying selective information from point to point.

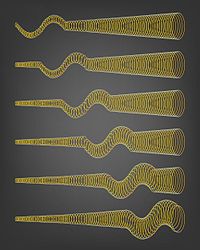
Here Norseen seems to suggest that to observe Brain state, you need an EM field (Alven Wave Grid), which can also be a correlate to a Gravitational Field, perhaps using gravitomagnetics. A Alfven Wave is a wave behavior of magnetic grid lines, if you could imagine those grid lines as the surface of an ocean, then the Alfven Waves would be surfable. A more technical definition is given:

Alfvén waves, being transversal, are incompressible: ∇⋅v⃗ =0∇⋅v→=0( note that ∇⋅h⃗ =0∇⋅h→=0 always, by the [Maxwell equations](https://encyclopediaofmath.org/wiki/Maxwell_equations)).

In a compressible fluid, the pressure acts as a restoring force, and one obtains sound waves. The combination is magneto-acoustic waves [[a3]](https://encyclopediaofmath.org/wiki/Alfvén_waves" \l "References), [[a4]](https://encyclopediaofmath.org/wiki/Alfvén_waves" \l "References), which have three modes: i) unchanged Alfvén mode, because it is incompressible; and sound waves modified into two coupled slow ii) and fast iii) modes. Considering a stratified fluid (e.g., an atmosphere) and adding gravity as a restoring force, one has magneto-acoustic-gravity waves [[a2]](https://encyclopediaofmath.org/wiki/Alfvén_waves" \l "References), [[a5]](https://encyclopediaofmath.org/wiki/Alfvén_waves" \l "References), [[a6]](https://encyclopediaofmath.org/wiki/Alfvén_waves" \l "References), [[a7]](https://encyclopediaofmath.org/wiki/Alfvén_waves" \l "References) and Alfvén-gravity waves decouple only if the horizontal wave-vector (which exists only in the direction transverse to stratification) lies in the plane of gravity and the external magnetic field. Adding rotation and the Coriolis force as the fourth restoring force leads to magneto-acoustic-gravity-inertial waves [[a2]](https://encyclopediaofmath.org/wiki/Alfvén_waves" \l "References), [[a8]](https://encyclopediaofmath.org/wiki/Alfvén_waves" \l "References), for which decoupling of Alfvén-gravity modes is generally not possible. Below, the Alfvén waves are uncoupled to other types of waves in fluids. [https://encyclopediaofmath.org/wiki/Alfv%C3%A9n\_waves](https://encyclopediaofmath.org/wiki/Alfvén_waves)

Although there are in these plasmas magnetogravity wave A magnetogravity wave is an [acoustic](https://en.wikipedia.org/wiki/Sound) [gravity wave](https://en.wikipedia.org/wiki/Gravity_wave) which is associated with fluctuations in the background [magnetic field](https://en.wikipedia.org/wiki/Magnetic_field). In this context, [gravity wave](https://en.wikipedia.org/wiki/Gravity_wave) refers to a classical fluid wave, and is completely unrelated to the relativistic [gravitational wave](https://en.wikipedia.org/wiki/Gravitational_wave). Although, as we know the Alfven Wave Grid would and does interact with gravity, thus producing gravitational waves, and one would also be able to interact with the Alfven EM Grid, as explained by Norseen, with gravitational waves. I am not aware of any working HFGW Surveillance at the time of Norseen’s engineering work at Lockheed-Martin, it would be shortly after Norseen ended his work at Lockheed that Dr. Baker would write to the NSA regarding such technology. In interviews Norseen indicated a small local Radar system was to be deployed to do neural scanning of suspected terrorists at airports. As we know a gravitational signal receiver/transmitter can do the type of spectroscopy that was done with Radar alone before, but with added resolution. One other note in relation to Alfven Waves is that they are usually associated with Solar plasmas, in the inner solar corona of Stars. It is known that during Solar Storms, vast EM discharges from the Sun that are shielded from the Earth by the Atmosphere, correlate with decreased ‘psi’ ability according to Dr. Persigner and earlier Russian studies. Also, what the relationship to geomagnetic plasmas in the inner core of the earth may also have a relationshiop to Dr. Persigner’s proposal to predict Earth Quakes based on EM discharges.

<https://en.wikipedia.org/wiki/Gravitoelectromagnetism> get more information expose on gravitoelectromagnetism section

[](https://en.wikipedia.org/wiki/File:PIA19822-MagneticBlackHoleWaves-AlfvenS-waves-20150709.jpg)

Magnetic waves, called Alfvén S-waves, flow from the base of [black hole](https://en.wikipedia.org/wiki/Black_hole) jets.

If a conducting liquid is placed in a constant magnetic field, every motion of the liquid gives rise to an E.M.F. which produces electric currents. Owing to the magnetic field, these currents give mechanical forces which change the state of motion of the liquid. Thus a kind of combined electromagnetic-hydrodynamic wave is produced.

— Hannes Alfvén, *Existence of Electromagnetic-Hydrodynamic Waves*, *[[4]](https://en.wikipedia.org/wiki/Alfvén_wave" \l "cite_note-4)*

[graviton may be candidate for zpe pulsation since it is at 1.6 x 10-35 m2  definitely in the quantum length, also imagined mathematically as being able to go into hyperdimensions]

Orchestrated Objective Reduction and Neuroweapons

As we’ve seen Dr. Norseen directly cites the work of Hameroff-Penrose on ORCH-OR as the model or physical explanation for Quantum Shift Keying, which is to say changing or monitoring the brain maps of a given target, thus directly affecting cognitive function of that brain targeted. The most direct explanation of ORCH-OR was given by Hameroff in his 2014 paper:

‘Orchestrated objective reduction’ (‘Orch OR’) is a theory which proposes that consciousness consists of a sequence of discrete events, each being a moment of ‘objective reduction’ (OR) of a quantum state (according to the DP scheme), where it is taken that these quantum states exist as parts of a quantum computations carried on primarily in neuronal microtubules. Such OR events would have to be ‘orchestrated’ in an appropriate way (Orch OR), for genuine consciousness to arise. OR itself is taken to be ubiquitous in physical actions, representing the ‘bridge’ between the quantum and classical worlds, where quantum superpositions between pairs of states get spontaneously resolved into classical alternatives in a timescale ∼ τ , calculated from the amount of mass displacement that there is between the two states. In our own brains, the OR process that evoke consciousness, would be actions that connect brain biology (quantum computations in microtubules) with the fine scale structure of space–time geometry, the most basic level of the universe [Norseen’s ZPE], where tiny quantum space–time displacements are taken to be responsible for OR. The Orch-OR proposal therefore stretches across a considerable range of areas of science, touching upon the foundations of general relativity and quantum mechanics, in unconventional ways, in addition to the more obviously relevant areas such as neuroscience, cognitive science, molecular biology, and philosophy. It is not surprising, therefore, that Orch OR has been persistently criticized from many angles since its introduction in 1994. Nonetheless, the Orch OR scheme has so far stood the test of time better than most other schemes, and it is particularly distinguished from other proposals by the many scientifically tested, and potentially testable, ingredients that it depends upon. It should be mentioned that various aspects of the Orch OR theory have themselves evolved in response to scientific advances and, in some cases, constructive criticism. We here list some recent adaptations and developments that we have now incorporated into the theory.

Cell and molecular biology

• Tubulin information states in Orch OR quantum and classical computation are now correlated with dipoles, rather than mechanical conformation, avoiding heat and energy issues.

• Tubulin dipoles mediating computation and entanglement may be electric (London force charge separation), or magnetic (electron ‘spin’ states and currents), as presented in this paper.

• Enhanced electronic conductance discovered by Anirban Bandyopadhyay’s group [88,89] in single microtubules at warm temperature at specific alternating current gigahertz, megahertz and kilohertz frequencies (‘Bandyopadhyay coherence’, ‘BC’) strongly supports Orch OR.

• BC and Orch OR may well be mediated through intra-tubulin quantum channels of aromatic rings, like in photosynthesis proteins, plausibly for quantum computing in microtubules.

• Anesthetics bind in these tubulin quantum channels, presumably to disperse quantum dipoles necessary for consciousness.

Brain science

• Alzheimer’s disease, brain trauma and other disorders are related to microtubule disturbances; promising therapies are being aimed at BC in the brain.

• Scale invariant (1/f, ‘fractal-like’) processes at neuronal and network levels might perhaps extend downward to intra-neuronal BC in microtubules, e.g. megahertz excitations.

• Orch OR conscious moments, e.g. at 40 Hz, are now viewed as ‘beat frequencies’ of BC megahertz in MTs, the slower beat frequencies coupled to neuronal membrane physiology and accounting for EEG correlates of consciousness. The Orch OR proposal suggests conscious experience is intrinsically connected to the fine-scale structure of space– time geometry, and that consciousness could be deeply related to the operation of the laws of the universe.

(Hameroff, 2014)

Hameroff writing on the information processing ability of MT to represent boolean values:

Hameroff and Watt [66] suggested that distinct tubulin dipoles and conformational states—mechanical changes in protein shape—could represent information, with MT lattices acting as two-dimensional Boolean switching matrices with input/output computation occurring via MAPs. MT information processing has also been viewed in the context of cellular (‘molecular’) automata (‘microtubule automata’) in which tubulin dipole and conformational states interact with neighbor tubulin states in hexagonal MT lattices by dipole couplings, synchronized by biomolecular coherence as proposed by Fröhlich [67–71]. Protein conformational changes occur at multiple scales [72], e.g. 10−6 s to 10−11 s transitions. Coordinated movements of the protein’s atomic nuclei, far more massive than electrons, require energy and generate heat. ….recent Orch OR papers do not make use of conformational changes, depending instead on tubulin dipole states alone to represent information. Within MTs, each tubulin may differ from among its neighbors due to genetic variability, post-translational modifications [73,74], phosphorylation states, binding of ligands and MAPs, and moment-to-moment conformational and/or dipole state transitions. Synaptic inputs can register information in dendritic–somatic MTs in brain neurons by metabotropic receptors, MAP2, and CaMKII, [Norseen’s Calpain] a hexagonal holoenzyme able to convey calcium ion influx to MT lattices by phosphorylation (Fig. 4 [64]). Thus tubulins in MTs can each exist in multiple possible states, perhaps dozens or more. However for simplicity, models of MT automata consider only two alternative tubulin states, i.e. binary ‘bits’. Another potential factor arises from the specific geometry of MT lattices in which helical winding pathways (in the A-lattice) repeat according to the Fibonacci sequence (3, 5, 8...) and may correlate with conduction pathways [75]. Dipoles aligned along such pathways may be favored (and coupled to MT mechanical vibrations) thus influencing MT automata computation. MT automata based on tubulin dipoles in hexagonal lattices show high capacity integration and learning [61]…. Finally, MT information processing may be directly related to activities at larger scale levels of neurons and neuronal networks through something of the nature of scale-invariant dynamics. Several lines of evidence point to fractal-like (1/f) self-similarity over different spatio-temporal scales in brain dynamics and structure [76,77]. These are generally considered at the scale levels of neurons and higher-level neuronal networks, but may extend downward in size (and higher frequency) to intra-neuronal MT dynamics, spanning 4 or 5 scale levels over many orders of magnitude. MT information processing depends on interactive dipole states of individual tubulin proteins. What are those states, and how are they governed?”

In this technical explanation of information processing an important point is that “ MT information processing depends on interactive dipole states of individual tubulin proteins”

Another important point he makes is that MT information processing is scale-invariant with fractal-like self-similarity. This is also seen not just in the Brain but also in the human eye where codes and rods match a Fibonnaci sequence in an octoganal antenna for EM. This is also seen in DNA. Helical structures are also designed by Dr. Baker in his HFGW receiver/transmitter, using a double helix like DNA. Given that these structures may be scale-free fractal based patterns there may be a reason that the Retina Antenna is similar to Brain Information processing. The manipulation of MT dipoles may be the key in QSK. It is also important to note that the binary model was a toy model created for a simple explanation of information processing. If we are talking about Quantum Computation then we are probably talking about qubits or qutrits. A qubit reduces to O or 1 with a temporary superpostion 0,1. A qutrit reduces to 0,1,2 with the superposed state maintaining it’s own state without a binary collapse, objective reduction. An final point regarding computation is that Hameroff-Penrose do not see human consciousness as something computable, rather they view it as non-computable, their collegue Badhyapadhyay has created a project, Artificial Brain (not AI), based on the resonant model of dipole switching (shifting) in MTs. [See AI chapter section “Artificial Brain”]

[what controls dipole states in MTs? Dipole states from wave collapse? Then gravity causes OR]

Hameroff goes into detail about the role of gravitation in the Objective Reduction, in a lengthy explanation, although necessary to understand, he writes:

In Penrose [23], the tentatively suggested OR proposal would have its onset determined by a condition referred to there as ‘the one-graviton’ criterion. However, in Penrose [93,95], a much better-founded criterion was used, now frequently referred to as the Diósi–Penrose proposal (henceforth ‘DP’; see Diósi’s earlier work [96,97], which was a similar gravitational scheme, though not motivated via specific general-relativistic principles). The DP proposal gives an objective physical threshold, providing a plausible lifetime for quantum-superposed states. Other gravitational OR proposals have been put forward, from time to time ([98–101], cf. [102–104]) as solutions to the measurement problem, suggesting modifications of standard quantum mechanics, but all these differ from DP in important respects. Among these, only the DP proposal (in its role within Orch OR) has been suggested as having anything to do with the consciousness issue. The DP proposal is sometimes referred to as a ‘quantum-gravity’ scheme, but it is not part of the normal ideas used in quantum gravity... Moreover, the proposed connection between consciousness and quantum measurement is almost opposite [Copenhagen Interpretation, Heisenberg], in the Orch OR scheme, to the kind of idea that had frequently been put forward in the early days of quantum mechanics (see, for example Wigner [105]) which suggests that a ‘quantum measurement’ is something that occurs only as a result of the conscious intervention of an observer. Rather, the DP proposal suggests each OR event, which is a purely physical process, is itself a primitive kind of ‘observation’, a moment of ‘proto-conscious experience’. This issue, also, will be discussed below.

It is a very important distinction that Hameroff-Penrose are making here in terms of the reduction or collapse of the quantum wave into a fixed state. In the Copenhagen Interpretation the observer plays a role in collapse, in D-P the collapse has no ‘conscious’ element, it rather is based on the effects of gravity.

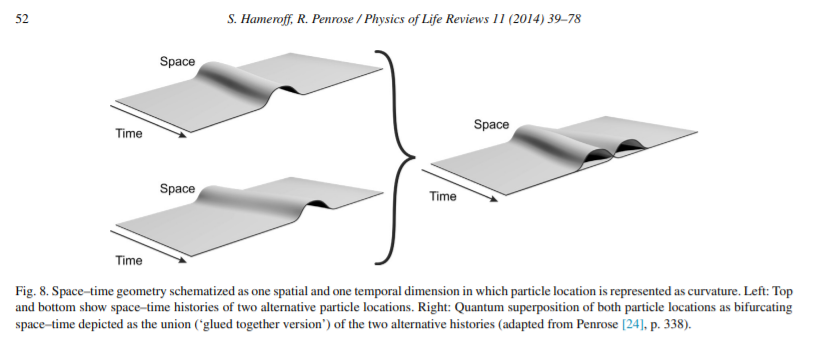
Hameroff continues on the distinction of D-P quantum gravity:

OR and quantum gravity Diósi–Penrose objective reduction (DP) is a particular proposal for an extension of current quantum mechanics, taking the bridge between quantum- and classical-level physics as a ‘quantum-gravitational’ phenomenon. This is in contrast with the various conventional viewpoints, whereby this bridge is claimed to result, somehow, from ‘environmental decoherence’, or from ‘observation by a conscious observer’, or from a ‘choice between alternative worlds’, or some other interpretation of how the classical world of one actual alternative may be taken to arise out of fundamentally quantum-superposed ingredients. The DP version of OR involves a different interpretation of the term ‘quantum gravity’ from what is usual. Current ideas of quantum gravity (see, for example, Smolin [120]) normally refer, instead, to some sort of physical scheme that is to be formulated within the bounds of standard quantum field theory—although no particular such theory, among the multitude that has so far been put forward, has gained anything approaching universal acceptance, nor has any of them found a fully consistent, satisfactory formulation. ‘OR’ here refers to the alternative viewpoint that standard quantum (field) theory is not the final answer, and that the reduction R of the quantum state (‘collapse of the wavefunction’) that is adopted in standard quantum mechanics is an actual physical process which is not part of the conventional unitary formalism U of quantum theory (or quantum field theory). In the DP version of OR, the reduction R of the quantum state does not arise as some kind of convenience or effective consequence of environmental decoherence, etc., as the conventional U formalism would seem to demand, but is instead taken to be one of the consequences of melding together the principles of Einstein’s general relativity with those of the conventional unitary quantum formalism U, and this demands a departure from the strict rules of U. According to this OR viewpoint, any quantum measurement—whereby the quantum-superposed alternatives produced in accordance with the U formalism becomes reduced to a single actual occurrence—is a real objective physical process, and it is taken to result from the mass displacement between the alternatives being sufficient, in gravitational terms, for the superposition to become unstable. In the DP scheme for OR, the superposition reduces to one of the alternatives in a timescale τ that can be estimated (for a superposition of two states each of which is assumed to be taken to be stationary on its own) according to the formula τ ≈ h/E G. An important point to make about τ , however, is that it represents merely a kind of average time

To abridge the above, rather then there being any kind of ‘conscious observer’ or environmental decoherence, the collapse or reduction is caused by the mass displacement between alternatives available which is given with:



This reduction is random and is given as an analogy to nuclear decay, occurring over a time series (t).



[need to explain, and learn, what a unitary is, there is a difference between a Unitary Operator in Matrices and a Hermetry, which is used in Heim and Artificial Brain, will need to learn more about this difference]

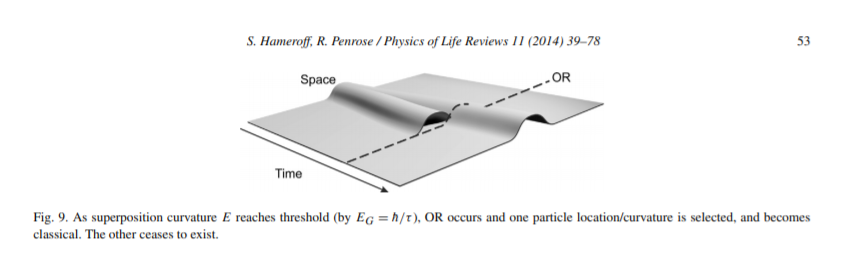
What does unitary mean in quantum mechanics?

In quantum physics, unitarity is the condition that the time evolution of a quantum state according to the Schrödinger equation is mathematically represented by a unitary operator.

It is helpful to have a conceptual picture of quantum superposition in a gravitational context. According to modern accepted physical theories, reality is rooted in 3-dimensional space and a 1-dimensional time, combined together into a 4-dimensional [Minkoswki] space–time. This space–time is slightly curved, in accordance with Einstein’s general theory of relativity, in a way which encodes the gravitational fields of all distributions of mass density. Each different choice of mass density effects a space–time curvature in a different, albeit a very tiny, way. This is the standard picture according to classical physics. On the other hand, when quantum systems have been considered by physicists, this mass-induced tiny curvature in the structure of space–time has been almost invariably ignored, gravitational effects having been assumed to be totally insignificant for normal problems in which quantum theory is important. Surprising as it may seem, however, such tiny differences in space–time structure can have large effects, for they entail subtle but fundamental influences on the very rules of quantum mechanics [92–95].

….

The degree of separation between the space–time sheets is a more abstract mathematical thing; it would be more appropriately described in terms of a symplectic measure on the space of 4-dimensional metrics (cf. [92,121]) but the details (and difficulties) of this will not be important for us here. It may be noted, however, that this separation is a space–time separation, not just a spatial one. Thus the time of separation contributes as well as the spatial displacement. It is the product of the temporal separation T with the spatial separation S that measures the overall degree of separation, and OR takes place when this overall separation reaches the critical amount. In the absence of a coherent theory of quantum gravity there is no accepted way of handling such a superposition as a separation (or bifurcation) of space–time geometry, or in any other way. Indeed the basic principles of Einstein’s general relativity begin to come into profound conflict with those of quantum mechanics [93,95]. Some form of OR is needed. The OR process is considered to occur when quantum superpositions between such slightly differing space–times take place (Fig. 9), differing from one another by an integrated space–time measure which compares with the fundamental and extremely tiny Planck (4-volume) scale of space–time geometry. As remarked above, this is a 4-volume Planck measure, involving both time and space, so we find that the time measure would be particularly tiny when the space-difference measure is relatively large (as with Schrödinger’s hypothetical cat), but for extremely tiny space difference measures, the time measure might be fairly long. For example, an isolated single electron in a superposed state (very low EG) might reach OR threshold only after thousands of years or more, whereas if Schrödinger’s (∼10 kg) cat were to be put into a superposition, of life and death, this threshold could be reached in far less than even the Planck time of 10−43 s. As already noted, the degree of separation between the space–time sheets is technically a symplectic measure on the space of 4-metrics which is a space–time separation, not just a spatial one, the time of separation contributing as well as spatial displacement. Roughly speaking, it is the product of the temporal separation T with the spatial separation S that measures the overall degree of separation, and (DP) OR takes place when this overall separation reaches a critical amount. This critical amount would be of the order of unity, in absolute units, for which the Planck–Dirac constant h¯, the gravitational constant G, and the velocity of light c, all take the value unity, cf. [24], pp. 337–339. For small S, the lifetime τ ≈ T of the superposed state will be large; on the other hand, if S is large, then τ will be small. To estimate S, we compute (in the Newtonian limit of weak gravitational fields) the gravitational self-energy EG of the difference between the mass distributions of the two superposed states. (That is, one mass distribution counts positively and the other, negatively; see [92,114,121].) The quantity S is then given by: S ≈ EG and T ≈ τ , whence τ ≈ h/E G, i.e. E G ≈ h/τ ¯ . Thus, the DP expectation is that OR occurs with the resolving out of one particular space–time geometry from the previous superposition when, on the average, τ ≈ h/E G. The Orch-OR scheme adopts DP as a physical proposal, but it goes further than this by attempting to relate this particular version of OR to the phenomenon of consciousness. Accordingly, the ‘choice’ involved in any quantum state-reduction process would be accompanied by a (miniscule) proto-element of experience, which we refer to as a moment of proto-consciousness, but we do not necessarily refer to this as actual consciousness for reasons to be described.



With such a simple mechanism of collapsing the wave function, rather then ‘observors’ or ‘decoherence’ we have a straight forward measure of reduction. In a later section Hameroff discusses the question of Quantum Computing in the Brain [see chapter, ‘Quantum Computing’], this would correlate with the ‘cryptological’ QSK of Dr. John Norseen. A long passage which goes over QC in MTs is given by Hameroff:

5.1. Quantum computing in the brain Penrose [23,24] suggested that consciousness depends in some way on processes of the general nature of quantum computations occurring in the brain, these being terminated by some form of OR. Here the term ‘quantum computation’ is being used in a loose sense, in which information is encoded in some discrete (not necessarily binary) physical form, and where the evolution is determined according to the U process (Schrödinger’s equation). … A proposal was made in Penrose [23] that something analogous to quantum computing, proceeding by the Schrödinger equation without decoherence, could well be acting in the brain, but where, for conscious processes, this would have to terminate in accordance with some threshold for self-collapse by a form of non-computable OR. A quantum computation terminating by OR could thus be associated with consciousness. ...Penrose and Hameroff teamed up in the early 1990s when, fortunately, the DP form of OR mechanism was then at hand to be applied in extending the microtubule–automata models for consciousness as had been developed by Hameroff and colleagues. ... the most logical strategic site for coherent microtubule Orch OR and consciousness is in post-synaptic dendrites and soma (in which microtubules are uniquely arrayed and stabilized) during integration phases in integrate-and-fire brain neurons. Synaptic inputs could ‘orchestrate’ tubulin states governed by quantum dipoles, leading to tubulin superposition in vast numbers of microtubules all involved quantum-coherently together in a large-scale quantum state, where entanglement and quantum computation takes place during integration. The termination, by OR, of this orchestrated quantum computation at the end of integration phases would select microtubule states which could then influence and regulate axonal firings, thus controlling conscious behavior. Quantum states in dendrites and soma of a particular neuron could entangle with microtubules in the dendritic tree of that neuron, and also in neighboring neurons via dendritic–dendritic (or dendritic–interneuron–dendritic) gap junctions, enabling quantum entanglement of superposed microtubule tubulins among many neurons (Fig. 1)…. In dendrites and soma of brain neurons, synaptic inputs could encode memory in alternating classical phases, thereby avoiding random environmental decoherence to ‘orchestrate’ U quantum processes, enabling them to reach threshold at time τ for orchestrated objective reduction ‘Orch OR’ by τ ≈ h/EG. At that time, according to this proposal, a moment of conscious experience occurs, and tubulin states [which would be Norseen QSK encoded] are selected which influence axonal firing, encode memory and regulate synaptic plasticity. ...The idea is that consciousness is associated with this (gravitational) OR process, but occurs significantly only when

(1) the alternatives are part of some highly organized cognitive structure capable of information processing, so that OR occurs in an extremely orchestrated form, with vast numbers of microtubule acting coherently, in order that there is sufficient mass displacement overall, for the τ ≈ h/EG criterion to be satisfied.

(2) Interaction with environment must be avoided long enough during the U process evolution so strictly orchestrated components of the superposition reach OR threshold without too much randomness, and reflect a significant non-computable influence.

Only then does a recognizably conscious Orch OR event take place. On the other hand, we may consider that any individual occurrence of OR without orchestration would be a moment of random proto-consciousness lacking cognition and meaningful content. We shall be seeing orchestrated OR in more detail shortly, together with its particular relevance to microtubules. In any case, we recognize that the experiential elements of proto-consciousness would be intimately tied in with the most primitive Planck-level ingredients of space–time geometry, these presumed ‘ingredients’ being taken to be at the absurdly tiny level of 10−35 m [Baker’s HFGW resolution] and 10−43 s, a distance and a time some 20 orders of magnitude smaller than those of normal particle-physics scales and their most rapid processes, and they are smaller by far than biological scales and processes. These scales refer only to the normally extremely tiny differences in space–time geometry between different states in superposition, the separated states themselves being enormously larger. OR is deemed to take place when such tiny space–time differences reach the Planck level (roughly speaking). Owing to the extreme weakness of gravitational forces as compared with those of the chemical and electric forces of biology, the energy EG is liable to be far smaller than any energy that arises directly from biological processes. OR acts effectively instantaneously as a choice between dynamical alternatives (a choice that is an integral part of the relevant quantum dynamics) and EG is not to be thought of as being in direct competition with any of the usual biological energies, as it plays a completely different role, supplying a needed energy uncertainty that then allows a choice to be made between the separated space–time geometries, rather than providing an actual energy that enters into any considerations of energy balance that would be of direct relevance to chemical or normal physical processes.

The previous depiction of Hameroff seems to confirm that it is indeed possible to have QSK targeted at the MTs of the brains neurons. One other pointer in the direction of confirmation of Quantum Consciousness is that Dr. Michael Persinger.

Hameroff:

Microtubule-based cilia/centrioles are quantum optical devices 19. Microtubule-based cilia in retinal rod and cone cells detect photon quantum information. This appears to be untested, so far.

**Michael Persinger Research on Consciousness**

As mentioned in the ‘Physics and Neuroweapons’ chapter Dr. Persinger was a research professor at Laurentian Univesity. He duplicated earlier Soviet experiments in his labs, as well as interfaced with people attached to Stanford Research Institute. He investigated a research track that mirrors that of various military intelligence research labs throughout the world, with the caveat that his research was done with public funds at a public university in the public interest. As such, he was never in a position to capitalize on his research as many other researchers in the field of neuroscience and physics have. As mentioned previously Dr. Persinger also concurred that ORCH-OR was a viable model for explaining Quantum Consciousness. He gives a very technical consideration to the issue:

The quantity of energy 10-20J has direct application to the neuroquantum approaches to consciousness [12,54]. The most popular is the “collapse of the wave function” [55] as cogently articulated by Hameroff and Penrose [56]. Their recent articulate article entitled “Consciousness in the universe: a review of the ‘ORCH OR’ theory” reviews the essential concepts.The dichotomy of the existence of the electron as a particle or a wave within space is reflected by its classical width, of about 2·10-15 m and its Compton wavelength, 10-12 m, derived from quantum concepts. Although there are several interpretations for this discrepancy, what is important here is that the discrepancy in length according to the Lorentz contraction requires a specific discrepancy between the speed of light (3·108 m·s-1) and some very negligible value less than that velocity.

The difference in energy equivalence for the electron at the velocities that would accommodate the Lorentz contraction is in the order of 10-20 J. This could suggest that the increment of energy required for the “collapse of the wave function” is congruent with the quantum increment associated with a single action potential. By extension, millions of action potentials would affect millions of these functions. That the action potentials from only *one* neuron could affect the global state of the entire cerebral cortices has been reported by Li *et al.*[57]. Energies in the order of a few increments of 10-20 J have been shown experimentally to alter the probability of an overt response [58].

[https://www.oatext.com/The-physical-bases-to-consciousness-Implications-of-convergent-quantifications.php#gsc.tab=0](https://www.oatext.com/The-physical-bases-to-consciousness-Implications-of-convergent-quantifications.php" \l "gsc.tab=0) Persinger, Michael ‘The Physical Basis of Consciousness: Implications of Convergent Quantifications

He takes the ORCH-OR theory one step further by suggesting that the reduction of the wave form is able to be performed by a ‘single action potential’ which can alter the state of whole brain, he identifies a measure of the energy behind this potential as 10-20J. Which he then points out that these potentials are “Energies in the order of a few increments of 10-20 J have been shown experimentally to alter the probability of an overt response [58]”. Indeed, this would seem to confirm to some degree the claims of Dr. John Norseen of altering brain behavior with Thought Injection. It is also worth noting that responses are ‘probabilities’ not deterministic.

Disruption of Remote Viewing by Magnetic Fields

Persinger Group prototypical study on interfering with remote viewing (transcommunication)

Persinger, Michael ‘Possible Diruption of Remote Viewing by Complex Weak Magnetic Field Around the Stimulus Site and the Possibility of Accessing Real Phase Space: A Pilot Study’ (2002)

-suggests that a changing EM field interferes with psychic abilities, static fields enable psi. Could also explain why Psi differs with solar storms, changing EM field in storm. “The results suggest weak, temporally complex magnetic fields generated within [the object]… may have interfered with the stimuli to the [psychic]…” pg. 994

DNA and Retina as Fractal Antennas:

Singh P. et al. (2018) DNA as an Electromagnetic Fractal Cavity Resonator: Its Universal Sensing and Fractal Antenna Behavior. In: Pant M., Ray K., Sharma T., Rawat S., Bandyopadhyay A. (eds) Soft Computing: Theories and Applications. Advances in Intelligent Systems and Computing, vol 584. Springer, Singapore. https://doi.org/10.1007/978-981-10-5699-4\_21

“We report that 3D-A-DNA structure behaves as a fractal antenna, which can interact with the electromagnetic fields over a wide range of frequencies. Using the lattice details of human DNA, we have modeled radiation of DNA as a helical antenna. The DNA structure resonates with the electromagnetic waves at 34 GHz, with a positive gain of 1.7 dBi. We have also analyzed the role of three different lattice symmetries of DNA and the possibility of soliton-based energy transmission along the structure [lattice symetries of DNA].”

soliton- from Norseen (1996) “Invariance can be captured in MT by quantum encryption of various combinations of photons, phonons and electrons, which may synergistically produce, via solitons, a binding property of emergent epiphenomenon, a biofield communication both local and non-local to the protein MT strings. Calpain induced start/stops in the dendritic-synaptic receptors, with varying degrees of glial cell neurochemical nutrient infusion, turn on or off the QSK coded learning sequences in the MT. As more and more of neuronal activity forms a topological geometry around these events, oscillating in concert, perceptual and then cognitive events transpire, suggesting a process for sensory to sentient computation” [see Norseen Research Notes: <https://docs.google.com/document/d/1-HtjPs9934DoGCXUNjfBzmKvkgYvea3FzANpx5ZC2J8/edit> ]

sol·i·ton

/ˈsälətän/

*noun*

PHYSICS

1. a quantum or quasiparticle propagated as a traveling nondissipative wave that is neither preceded nor followed by another such disturbance.

Singh references an earlier work from 2011: ‘Dna is a fractl Antenna in elecromagnetic fields’ M. Blank, R. Goodman International Jorurnal of Radiation Biology vol. 87, 2011, Issue 4

Fractal antenna- electronic conduction and self-symmetry as in DNA, greater reacitivy of DNA with EMF increases cancer

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Persinger Confirmation of Dr. Trower's 6.6Hz claim of 'aggression' in TIs

https://emfcommunity.com/barrie-trower-pulsed-frequencies-dangerous-human-brain/

"Specific analyses indicated diminished coherence within the theta band only within the right temporal lobes of the pairs. Sequential block analyses revealed that the paired brains’ responses to pulsed tones at 6.5 Hz occurred within the 30-40 Hz band over the caudal temporal lobes during the exposures to the effector field. Primary independent component analyses verified these patterns. During the 6.5 Hz tones there was a peak in the spectral power density (SPD) at that frequency over the right temporal lobe of the person listening but a trough in (SPD) over this region for the person who was not. Even subjective experiences, as measured by the Profile of Mood States (POMS), indicated significantly increased excess correlation for scales by which increased anger and decreased vigour are inferred. This experiment, based upon physical principles, suggests there is a technology that can generate reliable excess correlation of brain activity (and potentially consciousness and specific experiences) between two people separated by thousands of kilometers."

Experimental Production of Excess Correlation across the Atlantic Ocean of Right Hemispheric Theta-Gamma Power between Subject Pairs Sharing Circumcerebral Rotating Magnetic Fields (Part I)

Mandy A. Scott, Nicolas Rouleau, Brendan S. Lehman, Lucas W. E. Tessaro, Lyndon M. Juden-Kelly, Kevin S. Saroka & Michael A. Persinger\*

Journal of Consciousness Exploration & Research| September 2015 | Volume 6 | Issue 9 | pp. 658-684

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Journal of Consciousness Exploration & Research| September 2015 | Volume 6 | Issue 9 | pp. 685-707 Scott, M. A., Rouleau, N., Lehman, B. S., Tessaro, W. E., Juden-Kelly, L. M., Saroka, K. S. & Persinger, M. A., Experimental Production of Excess Correlation across the Atlantic Ocean of Right Hemispheric Theta-Gamma Power between Subject Pairs Sharing Circumcerebral Rotating Magnetic Fields (Part II)

The predominance of the indicators of coherence in cerebral activity over the right hemispheres of paired participants, particularly their temporal lobes, is consistent with the inferences and indirect measurements reported by several experimenters for at least a century (Gurney et al, 1886; Harrington, 1995).

Pg 697

In some temporal lobes maintained electrical stimulation can result in synaptic reorganization (Sutula et al, 1989). Because these spine matrices are the person’s memories that contribute to “personality” alterations not coupled to classical sensory input such subtle entanglement manifestations could alter the patterns that are reconstructed as “personal (episodic) memories” during recall which often involves the right prefrontal region. Persistent deep temporal lobe stimulation could alter the person’s behavioural patterns or “personality”.

Pg 699

Dotta et al, 2012). These emissions were associated with imaginative cognitive processes. Simplistically this suggests that the Schumann-human brain resonance, photon emissions, and the neurocognitive patterns associated with imagination display a persistent capacity for excess correlation. As stated by Vaziri et al (2002), “photons will for a long time remain the only means of quantum communication.”

Pg 700

1.42gHz is at the lower end of the microwave spectrum, noted that the low end of microwaves alters brain function.

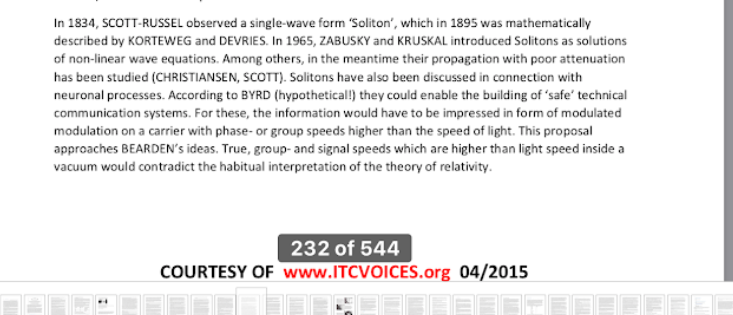
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[coincidentally Persinger is a Dutch name, trying to find note where I noted his father was Naval Intelligence and also was what got him into this line of research, father Milo, can confirm he was a Navy Combat Veteran and a Mason June 3, 1922 - May 27, 2007]

Persinger, Michael a., Persinger Milo A., Ossenkopp, K-P., & Glavin, G.B., Behavioral changes in adult rats exposed to ELF magnetic fields. International Journal of Biometerology, 1972, 16, 155-162

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Rouleau, Nicolas & Carniello, Trevor & Persinger, Michael. (2014). Non-Local pH Shifts and Shared Changing Angular Velocity Magnetic Fields: Discrete Energies and the Importance of Point Durations. Journal of Biophysical Chemistry. 05. 44-53. 10.4236/jbpc.2014.52006.

[this experiment is a redo of Soviet research from 1976 on remote pH changes between two spaces, also Kernbach did similar experiment, see Kaznacheyev, V.P. ‘Distant intercullar interactions ins a system of two tissue cultures’ Psychoenergetic Systems vol. 1 No. 3, March 1976

“A means by which information could be inexpensively exchanged over large distances without the requirement for classic “transmission” and the escalating expense of equipment would substantially alter the concept and form of communication. The concept of “non-locality” and “excess correlation” has been considered by many as the quintessential property limited to quantum phenomena. As indicated by Hofmann et al. [1], “observers of two or more entangled particles will find correlations in their measurements that cannot be explained by classical statistics”. Two-photon, three dimensional entanglements may be capable of applied quantum communication [2]. Such quantum energy “teleportation” may not be limited by distance [3]. “ pg. 45

[also see Vaziri, Experimental Two-Photon, Three-Demensional Entanglement for Quantum Communication’ (2002) wherein suggest the use of hyper space for cryptography or secure comms]

“Dotta and Persinger demonstrated that if the group and phase velocity of these rotating magnetic fields were dissociated, conspicuous excess correlations in photon emission as measured by photomultiplier tubes were evident. If both loci were exposed to the same computer-generator fields, the simultaneous injections of small aliquots of hydrogen peroxide into hydrochlorite solutions at both loci “doubled” the photon emission from one locus. The “excess correlation” was as if both loci were transposed to the same space” pg 45

[Hypothesized correlation facilitated by exposing 2 spaces at non-traditional distances (5m) to the same circular generated (“rotating”) magnetic fields with intensities of ~1µ T and changing angular velocities. Think beam me up scotty]

In this study, pH correlations only occur in accelerations in the angular movement of the EM field. Increased acceleration leads to increased entanglement, point durations (rhythm) also plays a role. They note that changes in pH correlate more with discrete (25cc) quantities then larger, thus dealing with discrete energies, which have smaller effects in larger volumes. Review ‘Discussion’ seciton for point durations relationship to protons/electrons in Hydrogen line. Also see thixotropy study.

Compare experimental setup from pg. 46 to S. Kernbach ‘Tests of the Circular Poynting vector emmitter in static E/H fields’. (2017)

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**Artificial Brain** section:

Persinger, Michael and Koren, S. ‘Theory of Neurophysics and Quantum Neuroscience: Implications for Brain Function and the limits of Consciousness’ (2007)

in this paper many of Aneriban Bandyaphadya’s Artificial Brain is written about several years before Bandy’s paper.

“However, the occurrence of a vast reservoir of 0,1 units, the basis of information, does not necessarily transform to the type of repetitive space-time patterns (such as the similarity between the sun and its planets and the nucleus and its electrons) that emerge within the various levels of discourse. One would expect the existence of basic gnomons. They are forms that, when added to some form, result in a new form similar to the original (Gazale, 1999). The existence of gnomons would allow specific continuities in patterns of organization of matter and energy from the smallest to largest increments of space. Access to these patterns of organization could allow significant alterations in the spatial arrangement of space and hence the shape of matter with very minimal energy. These values should be minuscule compared to the magnitudes of approximately 1017 J required to transform 1 kg of matter into energy or energy into matter.” pg. 173

[Gnomons remind me of amplifier theory of Jordan]

“If this approach is valid, then to produce the maximum effect of applied complex magnetic fields, the temporal configurations of the fields must contain information embedded into multiple patterns that can interact at more or less the same time within each of the levels of discourse from the level of the proton and electron to the entire organism [Bandy. Has 12 levels]. The simultaneous stimulation across levels of space and increments of time by patterns embedded within patterns within the applied fields might be described metaphorically as aligning the multiple tumblers in a lock [Norseen’s QSK] or reconfiguring a lattice such that all relevant levels of space are resonant at the same time [Bandy. Clocks, timecrystals]. Within this condition, a variant of a “condensate,” minimum energies should be required to alter all of the levels of space within the brain. That cells and enzyme systems can respond to stacked complexities of electromagnetic fields through “temporal sensing” has been shown by Litovitz et al. (1997).” pg. 168

“These forms, particularly those that involve temporal patterns derived from iterative processes, might be considered the intrinsic resonances through which applied electromagnetic fields might access the various levels of spatial organization within the brain. It may be relevant that the fractal dimensions of Mandlebrot, the Fibonacci sequences, and periodic continued fractions, leading to whorled figures, are ultimately composed of series 0,1 s (“pixels”). The occurrence of these repetitive patterns of space and their associated temporal patterns (Persinger, 1999) suggests a potential by which the similarities between levels of discourse might be explained. Experimental isolation of these “keys” might allow access to information maintained within the smallest increments…” pg. 173

Persinger notes how conscious manipulation is almost undetectable by the experient:

“e. If the hypothesis of M. A. PERSINGER AND S. A. KOREN developed in this article is supported, then information from substantially different space-time sources could occasionally enter into awareness during these temporal interfaces between successive “quanta” (Booth et al., 2005). The experiences would be integrated within the other typical information that compose the stream of consciousness of the experient and, unless the corresponding images or feelings were markedly noncongruent, would be considered a part of normal cognition (Tononi & Edelman, 1998). “ pg. 161-2

Persinger notes regarding Transport Chain of positive and negative: “this results in the transfer of an entire H atom. These dynamic processes require discrete increments of time and if they occur as particular temporal patterns they could be affected by the appropriate pattern of mangetic fields.” pg. 163

Persinger in this paper suggest there are 11d, with seven more ‘dimensions’ or scopes b/w proton length (10 -15m2) to Planck Length 1.6x10-35m2

meaning there are 12d as in Extended Heim Theory, when applying Heim to Quantum Mechanics.

Persinger supplies an explanation to ZPE as spoken of Dr. Norseen, here and in thixotropy paper.

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Persinger, Michael. (2015). Thixotropic Phenomena in Water: Quantitative Indicators of Casimir-Magnetic Transformations from Vacuum Oscillations (Virtual Particles). Entropy. 17. 6200-6212. 10.3390/e17096200.

Here I present quantitative evidence that thixotropic properties of water could reflect a universal interface for the transformation of virtual particles from zero-point, vacuum oscillations to real particles. pg. 6203

However the excess correlations were only manifested when the reactions within the two volumes of water occurred in the centers of rotating, phase-modulated magnetic fields that shared the same changing angular velocities. When a coupled decreasing phase/frequency-modulated pattern and accelerating group velocity pattern was followed by a coupled increasing phase/frequency modulated pattern immersed in decreasing group velocity the powerful excess correlation occurred. The duration of the excess correlation was about 7 to 8 min. Reverse order presentations or fixed angular velocities did not produce the effect. pg. 6207

When a coupled decreasing phase/frequency-modulated pattern and accelerating group velocity pattern was followed by a coupled increasing phase/frequency modulated pattern immersed in decreasing group velocity the powerful excess correlation occurred. The duration of the excess correlation was about 7 to 8 min. Reverse order presentations or fixed angular velocities did not produce the effect pg. 6207

see also next study:

[Volume 13, No 4 (2015)](https://neuroquantology.com/issue.php?volume=21&issue=64) > [Article](https://neuroquantology.com/article.php?id=1384)

DOI: [10.14704/nq.2015.13.4.891](http://dx.doi.org/10.14704/nq.2015.13.4.891)

Experimental Evidence of Superposition and Superimposition of Cerebral Activity Within Pairs of Human Brains Separated by 6,000 Km: Central Role of the Parahippocampal Regions

Nicolas Rouleau, Lucas W. Tessaro, Kevin S. Saroka, Mandy A. Scott, Brendan S. Lehman, Lyndon M. Juden-Kelly, Michael A. Persinger

For excess correlations between complimentary shifts in pH within two volumes of water separated by nonlocal distances the optimal frequency of the angular rotation was balanced with that obtained from the product of the magnetic moment of the proton and the intensity of the magnetic field divided by Planck’s constant. When this occured the magnitude of the shift attributed to excess correlation increased by almost a factor of 10. pg. 406

The toroid system is quite different from the circular array of solenoids employed in previous experiments. It may involve different mechanisms. The most conspicuous feature of this system is the 1 to 5 nT attenuation of the earth’s local static magnetic field during the production of the fields in the east-west direction. If these values were applied to the relationship between frequency and the product of the field strength and proton magnetic moment divided by Planck’s constant, the frequency is even less but conceptually significant. The frequency equivalence ranges between 0.021 Hz (47 s) to .106 Hz (9 s). The mass equivalences of energy values (1.4·10-35 J to 7·10-35 J) range between 1.5·10-52 kg to about 7·10-52 kg. The former is the upper boundary for the rest mass of a photon (Tu et al., 2005). Although there are clearly other explanations the orthogonal directions of the attenuated static field and the dynamic toroid field could create the conditions for the type of photon involvement (Vaziri et al., 2002) derived from the Lorentz Lemma that would allow superimposition with the Schumann Resonances (Nickolaenko and Hayakawa, 2014) that occupy the space between the earth’s surface and the ionosphere and most if not all human brains (Persinger and Saroka, 2015; Saroka and Persinger, 2014).

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Karbowski, Lukasz & Murugan, Nirosha & Persinger, Michael. (2015). Novel Cosic resonance (standing wave) solutions for components of the JAK–STAT cellular signaling pathway: A convergence of spectral density profiles. FEBS Open Bio. 17. 10.1016/j.fob.2015.03.004.

Abstract: Cosic discovered that spectral analyses of a protein sequence after each constituent amino acid had been transformed into an appropriate pseudopotential predicted a resonant energy between interacting molecules. Several experimental studies have verified the predicted peak wavelength of photons within the visible or near-visible light band for specific molecules. Here, this concept has been applied to a classic signaling pathway, JAK–STAT, traditionally composed of nine sequential protein interactions. The weighted linear average of the spectral power density (SPD) profiles of each of the eight ‘‘precursor’’ proteins displayed remarkable congruence with the SPD profile of the terminal molecule (CASP-9) in the pathway. These results suggest that classic and complex signaling pathways in cells can also be expressed as combinations of resonance energies

cosic theory utilizes casp-9 used in crispr genetic engineering go into potential to alter genes using resonance theory and waves as investigated by Berlin-Buch group of Berlin Brain Institute in 1930s.

However there may be an equally valid energy-based process [2] involving the correlative spatial resonance [3] and resulting spectral power density (SPD) of the specific properties of the units of molecules. The approach allows the potential inclusion of energy-based processes that are dependent upon the sequential units of molecular structure. The comparison would be analogous to de Broglie’s matter waves, which assumed that a sequence of particles could also be expressed as a pattern of waves. Here we present evidence that the JAK (Janus Kinase)– STAT (Signal Transducer and Activator of Transcription) pathway, one of the classic signaling pathways within the cell whose final component affects the nucleus, can be described as a resonance pattern that is composed of the spectral characteristics of the pathway that converge at the nuclear interface as CASP-9. The protein interactions can be considered a transfer of resonant energy between interacting molecules through an oscillating physical field that could be expressed within the domain of classic photons. Pg 245

Cosic and Koruga (quantum consciousness with Hameroff) were both at U. of Belgrade, Serbia (former Yogoslav Soviet).

Persinger has written on treating viruses using Cosic Resonance using LED lights. In studies it has been used on Ebola as a model, could be investigated for Covid-19, see M. Persinger et al ‘Cosic’s Resonance Recogntionion Model for Protein Sequnces and Photon Emmision Differentiates Lethal and Non-Lethal Ebola Strains: Implications for Treatment’ (2015)

application of appropriately patterned onochromatic (narrow band) LED. See also ‘Zika Virus viewed thorugh the Resonant Recognition Model…’ J.L. Hernandez Caceres, G. Wright EJBZI Vol. 14 (2018) Issue 1

Tesla 369: Cosic studied a lot about fellow Serb Tesla. Ttesla studied ELF according to Cosic from 3 to 69hz, perhaps the origin to the reference of Tesla to the secret of 369.

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Saroka, Kevin & Persinger, Michael. (2013). Potential production of Hughlings Jackson's "parasitic consciousness" by physiologically-patterned weak transcerebral magnetic fields: QEEG and source localization. Epilepsy & behavior : E&B. 28. 395-407. 10.1016/j.yebeh.2013.05.023.

Recent biomolecular studies [29] have shown that the same field patterns and intensities by which the sensed presence and out-of-body experiences are generated influenced T-type calcium channels and correlative changes in molecular pathways such as slowing of proliferation of cancer cells within cultures. pg. 396

using waves to replicate pharmacological delivery of medicine or other drugs:

the term transcerebral stimulation (TCS) has been employed. We had reasoned that the more the complex pattern of the applied fields approached the form of intrinsic cerebral patterns, the less the intensity required to produce subjective and electroencephalographic changes. The rationale was similar to strategically developing molecular structures of pharmacological agents to be congruent with neurotransmitters for receptor subtypes. For analgesic effects in rats, for example, exposures of only 30 min to appropriately patterned magnetic fields with intensities of only 1 μT were equivalent to a subcutaneous injection of ~5 mg/kg of morphine [31] mediated through μ opioid receptors. pg. 396

There is a loss of self due to cerebral injury (pg. 396) [cerebral injury is a gateway to computer overtaking individual control]

moderately strong correlations between geomagnetic activity and right frontal lobe (pg. 397) also note solar storms interfere with remote viewing

Identification of experiencing a sensed presence was correlated from 0.78 to 0.86 with increased power (μV2 /Hz) within the theta range over the right parietal and frontal regions [43]. pg. 397

Increasing suggestibility:

In the St-Pierre and Persinger 2006 review, some of the experiments had involved groups who had been administered a norm-referenced interactive suggestibility scale (Hypnosis Induction Profile) developed by Spiegel and Spiegel [50]. Although some studies had shown that greater stimulation by these physiologically-patterned magnetic fields over the right hemisphere but not the left definitely increased suggestibility [51], this elevation was not associated with the occurrence of the sensed presence pg. 397

also see Persinger, ‘Ehnaced hypnotic suggestibility…” 1996

In our studies, the magnetic fields were created by transforming a series of numbers, each between 0 and 256, to a voltage between −5 V and +5 V (127 = 0 V). The point or “pixel” duration was either 1 ms or 3 ms. This value is the duration of each voltage that composes the pattern…. Accurate and precise point durations are essential for producing the sensed presence [54,55]. Similar “temporal sensing” sensitivity for cells has been shown for frequency-modulated weak magnetic fields [56]. pg. 397

Designing an electromagnetic pattern that is compatible or “resonant” with the electrophysiological patterns of a “targeted” brain structure rather than attempting to “focus” a magnetic field is more feasible. Lagace et al. [63] demonstrated its effectiveness for the rat brain pg. 398

s. We [51] have found that the components of the sensed presence display gender-specific characteristics that are congruent with the general patterns of cerebral sexual dimorphism. On average, young women display a shorter latency to sense or report these experiences compared young men. pg. 398

[investigate the effect on queer males, who typically have some female brain physiology, and lesbians who have some male brain physiology.]

The occurrence of these “spontaneous” experiences may be more prevalent than recognized [78,79]. Persinger and Koren [80] reported the case of a young woman who had a history of an early right prefrontal brain injury. She frequently experienced what she attributed to an “entity” that sexually stimulated her and appeared as an apparition. Most of the experiences, including the feeling of the outline of a “baby”, were over the left upper back of the body. Although the family preferred a more religious interpretation, the source of the stimulation was traced to a defective electronic clock that she placed near her skull when she slept. The clock generated a field with an almost identical complex temporal pattern and intensity as the frequency-modulated pulse employed in the laboratory that generated the effects in the present study pg. 405.

We suspect that there are many different neuroanatomical pathways and cortical configurations that would converge to produce the sensed presence, each with their own unique characteristics. The phenomena would be similar to the multitude of pathways that mediate the amnesic syndrome through the dorsal hippocampal commissure as described by Gloor et al. [73]. Considering the complexity of the human brain, one would expect that a multitude of cerebral cortical patterns whose net vectorial solution is similar could produce the sensed presence. This value can be obtained from a large number of combinations in a manner similar to Wackermann's [74] approach. As a group, the male participants from film crews over the years showed the enhancement during the second component of the presence protocol. The female participants showed more sensed presences during the first component. Over both components, there were equal numbers of sensed presences and out-of-body experiences for both the decreasing frequency-modulated and increasing frequency-modulated exposure components. We [51] have found that the components of the sensed presence display gender-specific characteristics that are congruent with the general patterns of cerebral sexual dimorphism. On average, young women display a shorter latency to sense or report these experiences compared young men. One explanation is that the parietotemporal regions of the average female brain display more EEG coherence than the average male brain [75]. Hence, the first field component with the enhanced right hemispheric stimulation would have increased the likelihood of the “intrusive” experience. For the men, the initial right hemispheric stimulation was required before the bilateral application could facilitate the interaction. pg. 404

In addition to expectation factors, most of these participants in the film crew study were circadian-shifted or mildly sleep-deprived because of traveling. We have found that elevated “stress” as well as circadian shifts enhance the sensitivity and decrease the latency to respond to weak magnetic fields, assuming that they did not enter Stage 2 (“sleep spindles”) too quickly. If the subject “falls asleep”, there is no reporting. The neurochemistry associated with “stress”, particularly elevated corticotrophin releasing factor (CRF) and cortisol, seems to enhance the intensity of these experiences if they are occurring. pg. 405

psychopharmacology. The mechanisms by which weak applied magnetic fields influence cerebral activity have shifted from Faradic induction and, hence, forces, to the concepts more compatible with quantum energy [76]. The increased energy “storage” [47,77] from an applied 10-mG (1 μT) magnetic field within the cerebral cortical volume would be in the order of 10−9 J. If each action potential is associated with energies of ~ 10−20 J [76], then the applied energy would be equivalent to about 1010 neurons firing at about 10 Hz. This number of neurons is within the critical mass associated with “conscious awareness”. pg. 405

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Persinger, Michael & St-Pierre, Linda & Saroka, Kevin. (2015). LORETA predicts electromagnetic sensitivity and "hearing voices" in a predictable, increasingly prevalent subpopulation: Possible QEEG-based differential diagnosis. Neuropsychiatric Electrophysiology. 2. 10.1186/s40810-015-0007-7.

Parahypocampal sensitive to EM fields in right hemisphere:

Mulligan et al. (2010) while replicating the innovative measurements of Babayev and Allahverdiyeva (2007), showed that quantitative shifts in gamma and theta activity over the right (frontal) hemisphere were strongly correlated with both geomagnetic activity and ionospheric power density. The sensitivity of the right hemisphere was demonstrated during whole body exposure to experimentally-generated, weak 7 to 8 Hz magnetic fields (Mulligan and Persinger, 2012). The stratum stellare of Stephan (Layer II) of the entorhinal cortices of the human parahippocampal gyrus contains star-shaped cells that are organized into small elevations (verrucae gyri hippocampi) on the cortical surface that can be recognized visually (Gloor, 1997) . These cells exhibit intrinsic oscillations within the 8 Hz range with amplitudes whose energies approach that associated with the loss or gain (Lindauer Threshold) of 1 bit of information. This is the fundamental frequency for the Schumann Resonance (7–8 Hz with increasing harmonics every ~6 Hz, i.e., 13–15 Hz, 19–21 Hz, 25–27 Hz) that is generated within the biosphere between the earth’s surface and ionosphere. pg. 3

[Subject] ...exhibited persistent and conspicuous enhanced power in the low beta-range over the temporal lobes and specific changes in current source densities within the left inferior temporal gyrus and right parahippocampal region pg. 1

For those patients who are actively experiencing, according to their verbal reports, inner voices application of these physiologically patterned fields with equal intensities across both temporal lobes markedly attenuates the numbers of “different voices” or eliminates their occurrence. Asymmetrical application with greater intensity over the right hemisphere enhances or initiates the experiences pg. 2

The patient had some control over the occurrence of the intrusive voices, although at times they could occur spontaneously. When she “heard” these voices her verbal behaviour would become more monotonic (“machine-like”) and her pronoun usage shifted from “I” to “we”. QEEG indicated a persistent (measured on different days) 21–23 Hz higher amplitude (~70 μV) activity over T3 and T7 when she referred to “I” at which times she exhibited normal prosody. pg. 5

When the “we state” was reported there was marked fast, high amplitude 17–23 Hz activity from both T3 and T4 as shown in Figure 1. In addition she reported “transmissions” which usually involved more complex information from these voices as well as series of numbers. When this occurred there was a “normalization” of the EEG (Figure 2). When the “transmissions ended”, the unusual profile of T3 and T4 enhancements returned. There was additional similar activity over F7 and F8 which was transient. She was not talking during this period (after panel 1623). pg. 5

During the experiences that would be classically labeled as “intrusions” the activation score for the low beta power within the right parahippocampal region more than doubled. This area and related hemispheric discrepancy are similar to that associated with “panics” that can occur suddenly in this group of patients. pg. 6

Our interpretation is that the lowered base power within the delta range (upon which higher frequencies can be strongly dependent) within the left temporal lobe facilitates the conditions for inter-temporal lobe coherence and the experiences of “others” (Booth and Persinger, 2009). The enhancement of power within the left inferior frontal region, traditionally associated with expression of overt language (Petkov et al., 2009), could encourage the amplification of the person’s own array of “articulemes”. They are the neurocognitive patterns accompanying discrete neural activity that initiate sequences of stylopharyngeal and laryngeal muscle contractions. Anomalous organizations within the right prefrontal (Keenan et al., 2000) could increase the probability that the reconstruction of experiences would be attributed to non-self sources. pg. 6-7

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Caswell, Joey & Dotta, Blake & Persinger, Michael. (2013). Cerebral Biophoton Emission as a Potential Factor in Non-Local Human-Machine Interaction. NeuroQuantology. 12. 10.14704/nq.2014.12.1.713.

Subsequent experiments have suggested the plasma membrane of the cell as the most likely source (Dotta et al., 2011). BPE has also been examined in the context of the human body (e.g., Kobayashi et al., 2009). Furthermore, this phenomenon has been suggested as a potential mechanism in cellular communication (Sun et al., 2010). A number of more exotic applications have been proposed in this area. Bokkon’s innovative theories (2005; 2009) have implicated biophotons in visual imagery. In order to test this hypothesis, recent experiments examined the relationship between BPE, visualization, as well as intention, which suggest that imagining white light consistently produces an increase in photon emission from the right side of the head compared to both mundane thoughts and baseline conditions (Dotta & Persinger, 2011). pg. 2

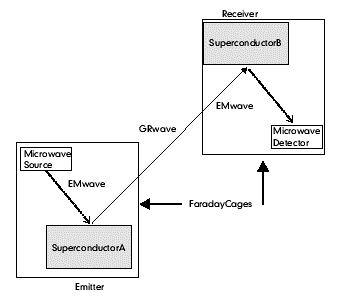
To our knowledge this is the first experiment to demonstrate a quantitative relationship between the deviation from random fluctuations in an electronic device and the photon emissions from cerebral function. We (Dotta et al., 2012) had previously demonstrated that “imagining” (a type of intention) compared to mundane (passive or non-intention) thinking was associated with conspicuous and reversible photon emission from the right hemisphere that was strongly correlated with left prefrontal brain activity. pg. 10

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**First, does there exist a realistic mechanism of gravitational connection between all pairs of the 10^17 Tubulin Electrons?**

A positive result in an experiment proposed by [Raymond Chiao](http://www.tony5m17h.net/QuanConResonance.html" \l "elegravdyn) and described in [gr-qc/0204012](http://xxx.lanl.gov/abs/gr-qc/0204012) [ which is an "... abbreviated writeup of ...[his]... March 23, 2002 Wheeler Symposium lecture, and book chapter for Wheeler Festschrift ..." which book chapter is at [gr-qc/0208024](http://xxx.lanl.gov/abs/gr-qc/0208024) and, in its final version, at [gr-qc/0303100](http://xxx.lanl.gov/abs/gr-qc/0303100) ] might provide an affirmative answer. In that paper, Chiao says:

"... [Superconductors will be considered as macroscopic quantum gravitational antennas and transducers](http://www.tony5m17h.net/coscongraviton.html" \l "ChiaoEMGR), which can directly convert upon reflection a beam of quadrupolar electromagnetic radiation into gravitational radiation, and vice versa, and thus serve as practical laboratory sources and receivers of microwave and other radio-frequency gravitational waves. ... a superconductor can by itself be a direct transducer from electromagnetic to gravitational radiation upon reflection of the wave from a vacuum superconductor interface, with a surprisingly good conversion efficiency. By reciprocity, this conversion process can be reversed, so that gravitational radiation can also be converted upon reflection into electromagnetic radiation from the same interface, with equal efficiency. ... under certain circumstances involving "natural impedance matching" between quadrupolar EM and GR plane waves upon a mirror-like reflection at the planar surface of extreme type II, dissipationless superconductors, the efficiency of such superconductors used as simultaneous transducers and antennas for gravitational radiation, might in fact become of the order of unity, so that a gravitational analog of Hertz's experiment might then become possible. ... These developments suggest the possibility of a simple, Hertz-like experiment, in which the emission and the reception of gravitational radiation at microwave frequencies can be implemented by means of a pair of superconductors used as transducers. ... The schematic of this experiment is ...



... we did not detect any observable signal inside the second Faraday cage, down to a limit of more than 70 dB below the microwave power source of around 10 dBm at 12 GHz. ... Note, however, that since the transition temperature of YBCO is 90 K, there may have been a substantial ohmic dissipation of the microwaves due to the remaining normal electrons at our operating temperature of 77 K, so that the EM wave was absorbed before it could reach the impedance-matching depth at z0. It may therefore be necessary to cool the superconductor down very low temperatures before the normal electron component freezes out sufficiently to achieve such impedance matching. [see [gr-qc/0304026](http://xxx.lanl.gov/abs/gr-qc/0304026) ] ... An improved Hertz-like experiment using extreme type II superconductors with extremely low losses, perhaps at millikelvin temperatures, is a much more difficult, but worthwhile, experiment to perform. Such an improved experiment, if successful, would allow us to communicate through the Earth and its oceans, which, like all classical matter, are transparent to GR waves. ... I would especially like to thank my father-in-law, the late Yi-Fan Chiao, for his financial and moral support of this work. This work was partly supported also by the ONR. ...".

Note that the Faraday cages of Chiao's schematic correspond to the Tubulin Cages of the Tubulin Electrons in the Quantum Tubulin Electron model of Quantum Consciousness, and that if Chiao's gravity antenna can receive gravity signals by graviton links, then Tubulin Electrons in their cages should be able to receive gravity signals establishing graviton links, as needed for the Penrose-Hameroff model of Quantum Tubulin Electron Quantum Consciousness.

Note also that the negative result of the preliminary experiment was probably [due to failure of the impedance-matching mechanism for converting EM waves to gravity waves](http://www.tony5m17h.net/QuanconResonance.html" \l "elegravdyn) [see [gr-qc/0304026](http://xxx.lanl.gov/abs/gr-qc/0304026) ], and therefore not a failure of the gravity antenna concept, which is the important concept with respect to the Quantum Tubulin Electron model of Quanum Consciousness.

<http://www.tony5m17h.net/QuantumMind2003.html>

Frank Smith, Aug. 2002.

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Superconductors as quantum transducers and antennas for gravitational and electromagnetic radiation

Raymond Chiao, Department of Physics, UC Berkeley (2002)

[see in relation to superconductors used in Akimov generators]

Abstract: Superconductors will be considered as macroscopic quantum gravitational antennas and transducers, which can directly convert upon reflection a beam of quadrupolar electromagnetic radiation into gravitational radiation, and vice versa, and thus serve as practical laboratory sources and receivers of microwave and other radio-frequency gravitational waves. An estimate of the transducer conversion efficiency on the order of unity comes out of the Ginzburg-Landau theory for an extreme type II, dissipationless superconductor with minimal coupling to weak gravitational and electromagnetic radiation fields, whose frequency is smaller than the BCS gap frequency, thus satisfying the quantum adiabatic theorem. The concept of “the impedance of free space for gravitational plane waves” is introduced, and leads to a natural impedance-matching process, in which the two kinds of radiation fields are impedance-matched to each other around a hundred coherence lengths beneath the surface of the superconductor. A simple, Hertz-like experiment has been performed to test these ideas, and preliminary results will be reported.

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‘Replication experiment on distant influence on biological organisms conducted in 1986’ Serge Kernbach International Journal of Unconventional Science Issue E2, pg. 41-46 (2017)

[self-similarity (fractal, f1) as a method for breaking symmetry, how is it used for non-linear solutions as well? Here applied to Brain, could be also applied to other self-similar patterns at other scales not just brain scale if it is true]

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EYES AS ANTENNAS!!!!!!!

start section with Pavlita example using eyes to transfer em to cavity resonator, take a screenshot of the film.

definitions:

fractal antenna- electronic conduction and self-symmetry as in DNA

“Mainly the Fibonacci Sequence-based structure or the periodical array of basic phyisological units (such as phtoreceptors within the retina) is responsible for optimizing the signal communication in biological living systems” in ‘Fractal and Periodical Biological Antennas, Hidden Topologies in DNA, Wasps and Retina in the Eye’ (2018) Bandy group

also see ‘Biological Infrared Antenna and Radar’ (2019)

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Singh et al. ‘DNA as an Electromagnetic Fractal Cavity Resonators Its Universal Sensing and Fractal Antenna Behavior’ (2018).

“We report that 3d-A-DNA structure behaves as a fractal antenna, which can interact with EM fields [and of course gravitational fields] over a wide range of frequencies. Using the lattice details of human DNA, we have modeled induction of DNA as a helical antenna. The DNA structure resonates with the EM waves at 34Ghz, with a positive gain of 1.7dBi.” (Singh, 2018)

Originally based on proposal in 2011, but can argued to originate with Kazhinsky in 1920s, ‘DNA is a fractal Antenna in electromagnetic fields’ M. Blank, R. Goodman International Journal of Radiation Biology Vol. 87, 2011 Issue 4

the greater reactivity of DNA with EMF the higher the chance of cancer [adverse mutation or mutation in general]

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Singh et al. ‘Frequency Fractal Behavior in the Retina Nano-Center-Fed Dipole Antenna Network of a Human Eye’ (2018),

“It has been argued that thte proteins vibrate in the presence of electromagnetic signal like a cavity resonator….Protein synthesis is stimulated by electromagnetic fields of the specific frequency in the RF range….Since we now have evidence that proteins vibrate electromagneitcally, we can revisit the electromagneitc interaction in the cells, considering the whole cell as a cavity resonator.” pg. 3

[microwave cavity resonators are used to detect HFGW]

‘Microwave cavity gravitational radiation detectors’ Carlton M. Caves Physics Letters B Vol. 80, Issue 3, (1979) pages 323-6 Abstract: “The coupled electro-mechanical system consisting of a microwave cavity and its walls can serve as a gravitational radiation detector. A gravitational wave interactes with the walls, and the resulting motion induces transitions from a highly excited cavity mode to a neraly unexcited mode.”

[is this also true of klystron, wouldn’t any early Radar system also be a gravitational radiation detector as early as Radar existed? ]

eyes retina nano-center is a dipole antenna network.

“If a rotation of the ight wave underlies the laser emission then the possibility of helical electron transmission increases” pg. 9

“the network of cells acts as an array of helical antennas.” pg. 9

Octagonal [so GW is Quaternion, Bandy. Writes about Octo some shit in Artificial Brain, EHT uses octo some shit two, so whats up with this repeating fractal pattern at various scales?]

“Octagonal order in rods and cones (photoreceptors)”

3 types of cones, s, m, l wavelengths trichromatic(r,g,b); r=400nm, g=550nm, b=700nm

[does green manipulate red and blue?????!!!!]



[would there be any trace if you alter RNA process rather then change the permanent record of the DNA? RNA gets thrown out. ]

Glossary:

**QSK - quantum shift key, suggested as the cryptologic encoding/decoding**

**process occurring during orchestrated reduction (OR) of quantum**

**entanglement in the MT at the neuropil during sentient activity (Norseen 1996)**

**ZPE - zero point energy, (casimir effect), suggested as the initial energy**

**trigger from the natural environment to begin OR in the MT at the**

**neuropil (Norseen 1996)**

Cryptomnesia occurs when a forgotten memory returns without its being recognized as such by the subject, who believes it is something new and original.

Bibliography:

Hameroff, S., Penrose, R. ‘Consciousness in the Universe’ in Physics of Life Reviews 11 (2014) pp. 39–78

Persinger, M. A., Saroka, K. S., Koren, S. A. & St-Pierre, L.S. The Electromagnetic Induction of Mystical and Altered States within the Laboratory Journal of Consciousness Exploration & Research| October 2010 | Vol. 1 | Issue 7 | pp. 808-830

Persinger, Michael and St-Pierre, Linda (2015) ‘The physical bases to consciousness: Implications of convergent quantifications’

Behavioural Neuroscience and Biomolecular Science Programs, Laurentian University, Canada