

Perception, Resonance and Communications with Non-Corporeal Beings: The Legacy of Dr. Edgar Mitchell & Other Pioneers¹

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Introduction

Although many researchers hypothesize that what are commonly called UAP-UFO related “extraterrestrial beings” (they are also called ET’s, Aliens, or UFO related Non-Human Intelligence) come from a higher dimensional reality, and not from an ET physical planet, some models of communication with ET’s propose that the experience of encountering ET’s occurs in our head. Some define intelligence in terms of directed behavior which is based on our internal model of the environment. Furthermore, communication with another being requires they have the same or similar model of reality. Therefore, some authors argue there can be no real communication with ET’s because they have an abstract model of their environment which includes the entire Universe, whereas humans have a mental model which is defined by our culture (Csanyi, 1988). Despite these differences, communication with so called “Aliens” does in fact occur. So the question is what type of model can explain such communication. Bearden proposes a seven-dimensional hyperspatial model based on a mind link between two beings or systems (Bearden, 1979). The model is used to describe the entire Universe and all its lifeforms and is composed of levels of unconsciousness (and includes the collective human unconsciousness) which allow crosstalk between hyperframes in hyperspace. The model proposes that the collective unconscious is the source of a psychokinetic force which is capable of generating human and ET thoughtforms. Furthermore, different thoughtforms can be transformed into each other and into subatomic particles like photons and virtual photons by an amplification process that utilizes non-classical, longitudinal scalar waves.

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Bearden's hyperspatial model, which is consistent with Quantum Mechanics, proposes that the human collective unconscious is able to transcend ordinary space/time reality and further predicts the existence of all types of "reality" formats including those associated with ETs (Bearden, 1979). The model further emphasizes the particular importance of virtual reality formats which, according to Bearden, can be engineered allowing us access to ETs. The ET communication model presented here is similar to Bearden's in that it also involves virtual energy of the mind and higher dimensional or hyperspatial reality. The present theory focuses on the mechanism of transformation whereby human consciousness can transcend into the higher dimensional reality of ETs. The present theory also involves higher dimensional or hyperspatial reality. Higher dimensional here means at least one dimension higher than our ordinary reality which is composed of 3 dimensions of space and one dimension of time.

It's clear that "Aliens" can transit from their higher dimensional reality to our ordinary four dimensional (4D) reality. Although there are many possible higher dimensions, here we focus on five dimensions (5D) because the most difficult transition is from our ordinary 4D consciousness to the lowest higher dimension (5D). However, it is not clear how and to what extent human consciousness can transit into 5D. So before we understand how human and alien consciousness can travel between dimensions, we need to describe the relationship between 4D and 5D, and how information, albeit quantum information transfer occurs between dimensions. Understanding these mechanisms offers a road map for our consciousness to use to travel to higher dimensions. Understanding these mechanisms helps our left brain say OK this is real, this is scientifically validated, this is something I can do.

Understanding these mechanisms also helps us design, develop and test new technology to help raise our consciousness, liberate our consciousness and empower our consciousness to the point where we are better able to go to 5D and resonate with an alien consciousness. The goal here is to download information about their species, their way of life, and of course why they are here. The human mind is capable of non-local (at a distance) decoding of higher dimensional information from an ET and storing the stepped-down information as a memory engram in the brain. The more we understand how the brain decodes and stores information, the better able we are to navigate higher dimensional reality.

Higher dimensional space/time of course has other names and is often called zero point energy, (quantum) vacuum energy, virtual energy, the quantum foam etc. Higher dimensional reality is well acknowledged in the physics community which by now has numerous equations describing 5D reality (Pomeransky, 2006). Equations using even

higher dimensions (up to 22) are used in string theory (Hall, 2001). Different models now exist in the physics literature which add a fourth spatial dimension and/or a second time dimension to our ordinary 4D reality (Dienes, 1998). Our focus is from the quantum physics community, because higher dimensional reality is best described using quantum physics. Of particular interest here is the use of quantum fields and complex plasma fields to convey quantum information in 5D. Equally remarkable is the ability of the human brain/mind to be able to decode quantum information from higher dimensional realities.

How Can Our Normal 4D Reality Communicate with 5D Reality?

There are several hypotheses regarding the relationship between 4D and higher dimensional reality as well as how information can travel between dimensions (Javadi, 2014). New hypotheses in the field are mostly generated from scientists who have trained their consciousness to go beyond the ordinary five senses and 4D to seek new “higher-order” information. Scientists like David Bohm, Erwin Shroedinger, Bill Tiller, Peter Marcer, Elizabeth Rauscher and Edgar Mitchel have all had some kind of mystical experience that opened their conscious awareness. Hence their understanding of consciousness comes from a higher intuitive level. For example, David Bohm, who was a disciple of the Indian mystic Krishnamurti, called the higher dimensional/spiritual level of reality the implicate order and distinguished it from ordinary 4D reality of the explicate order (Bohm, 1973). Bohm saw these different realities as superimposed and embedded within each other and thus able to resonate with each other at the quantum level. Bill Tiller’s model (Tiller, 2001,2006) describes higher dimensional reality as an inverse order and distinguishes it from ordinary 4D by describing its properties as interverted. For example, a frequency (x) in 4D becomes its reciprocal $1/x$ in 5D reciprocal space/time. Tiller further describes deltrons which carry quantum information and act as a liason between 4D and 5D.

Another way that different systems or different dimensions can transfer information between them is via resonance. If two separate systems have physical, chemical or electrical properties that are similar, they can resonate in tune with each other. A simple example is two separate strings in a guitar. If they are tuned to the same note, they will resonate with each other. If one is plucked it will send information to the other by the sound it emits. In response, the second string will start to vibrate at the same note although it was never plucked. In this case the information transferred is about the frequency of the note they are tuned to. Frequency information and phase information are two common types of information which can be transferred between two separate systems. But in order for such information to be transferred, resonance is required. This phenomenon is well known in conventional science and is referred to as Resonance Energy Transfer and is typically used to explain long-range molecular interactions (Wu, 1994).

In the scientific literature, there are many types of resonance including paramagnetic resonance, stochastic resonance, magnetic resonance and electron spin resonance; although these phenomena are typically only used to explain non-local interactions between molecules and particles like photons and electrons. Edgar Mitchell proposed a new type of resonance, adaptive resonance to explain human activities like the collective unconscious, remote viewing, intuitive perception, focused attention and ET phenomena where accessing information about a target outside ordinary space/time reality is required (Mitchell, 2011). Adaptive resonance is so universal it is believed to apply to all biological entities anywhere in the universe. Adaptive resonance is a quantum phenomena relying on virtual/quantum energy fields generated internally by the observer allowing for simultaneous information transfer. In the example, Mitchell uses quantum fields generated from an object and perceived by a human consciousness as a virtual energy superimposed on the direct image of the object in our brain. Thus, information transfer between two objects and between an object and a brain/consciousness are described in this model. Mitchell further implies that such a consciousness could be that of an ET (Mitchell, 1999).

Mitchell also proposes that adaptive resonance is a primary means for accessing “transcendent” information. Distinguishing and perceiving virtual/quantum information from an external object or person would require our brain to function at the quantum level. But, according to the emerging field of Quantum Biology, quantum events are already going on inside our heads. Pooling all the individual quantum events together, in harmony, the entire brain can function at the quantum level. Assuming the brain contains appropriate antennae, the implication is that our brains can decode higher dimensional information like one can interpret a language. Microtubules (Pitkanen, 2006), DNA (Rein, 1996) and DNA complexes (Pereira, 2015) have been proposed as likely antennae. Although current theories only consider light information, it is reasonable to extend the function of these antennae molecules into the subtle energetic and quantum domains.

Another type of transferable information is shape information. In the 1990’s Rein proposed the concept of “Geometric Resonance” in biological systems (Rein, 1997). Biological systems apparently have the ability to “read” information in the environment and respond to it. Geometric resonance offers a mechanism for how information can be transferred between the same or even similar geometries in different dimensions. Here we use toroidal geometry as an example, because certain biomolecules like DNA have been observed (using electron microscopy) to exist in the shape of a toroid (Hud, 1995). The Geometric Resonance hypothesis predicts the energy emissions from a source geometry, like a toroid, will resonate with all other biomolecules having the same toroidal structure, even if the molecules are physically separated in space/time (Rein, 1997). The hypothesis also predicts that resonances between two toroidal geometries can occur if the two systems (molecules in this case) exist in different space time realities, ie. between 4D and 5D. However, in order to achieve this, the two systems must communicate or transfer information at the quantum level using quantum resonances (Criger, 1976).

Quantum resonance can readily be extended to explain communication between two systems which are each individual consciousnesses (Pereira, 2015). Quantum resonance can also explain non-local communication in general (Morimoto, 2003) and specifically in our case between the consciousness of a human (in 4D) and the consciousness of an ET (in 5D). Once resonance is established then information can be transferred back and forth between the two systems or beings.

Penrose (1973) envisioned a somewhat different geometric bridge between two dimensions in the form of a spinning 3D object. His mathematically based model predicted the toroid geometry was critical and the best geometry would be a toroid within a toroid, a structure known as a twistor. Penrose's theory is quite similar to the Geometric Resonance hypothesis in that information is transferred between two toroids although these toroids are not separated in space/time. More recently toroidal consciousness has been explored by other researchers. Messori, for example, proposed that the structure and function of space/time can best be depicted in terms of the twisting torque in a dual toroid (Messori, 2012).

However, toroids are a rather unusual and complex geometric shape because they contain another shape inside around their central channel. This space is technically called a catenoid. Catenoids are a familiar geometry in quantum physics because the catenoid is the shape of a wormhole which has been proposed to connect two distant regions of space/time (Dandoloff, 2010).

So far we have discussed information transfer between people, objects and consciousnesses of both humans and ETs. In these cases the two resonating systems will communicate via transferring information directly whether it be between classical EM fields, between two types of quantum fields or between an EM field and a quantum field. However, catenoid geometries just mentioned as well as wormholes have been proposed to bridge 4D and 5D realities by inter-converting the two realities (Wheeler, 1962). Thus, 5D etheric energy spirals into the center of the catenoid, reverses direction in the center (zero point) and gets converted to 4D energy as it exists the other end of the catenoid. And because the process is bidirectional, 4D EM fields can spiral into a catenoid and come out as 5D quantum energy. Inter-conversion is very different than information transfer between two dimensions. It readily applies to EM fields and quantum fields which can in principle be interconverted or transformed. Here we apply the same concept to different states of consciousness which can function in ordinary 4D space/time or higher dimensional 5D space/time.

In a model called the Toroidal DNA Antennae hypothesis, the author extended this acknowledged function of the catenoid to include consciousness (Rein, 1996). Thus this model specifically proposes that human toroidal DNA functions as a transducer to transmute and down-convert higher dimensional spiritual energy into usable 4D EM energy which the body can relate to and use to regulate and control various biochemical processes which function in 4D. Since the acknowledges functions of catenoids are bidirectional, the transducer function of DNA can also convert 4D energy into higher dimensional energies, thereby allowing ordinary consciousness to be “raised” to a higher order state.

Quantum Biology

Quantum Biology is the new branch of biology which characterizes macroscopic quantum phenomena which occur in biological systems at the molecular and cellular levels. With Popp’s discovery that the light emitted by even single-celled organisms was highly organized and exhibited quantum coherence properties (Popp, 1994), the new field of Quantum Biology emerged. Non-linear optical properties of light are of particularly interest because the physiological effects of light are often best described as quantum-like. Despite the light-blocking properties of the human skull, light is generated inside brain cells and can be stored in large biomolecules like DNA (Popp, 1984). Chemical reactions which generate light as a byproduct are well understood in biochemistry as chemii-luminescence (Cadenas, 1984). In addition to these ordinary photons, biological systems also contain specialized bio-photons, which are highly coherent - even more so than man-made lasers (Popp, 1999). In addition to being coherent, biophotons are also ultra-weak.

It is known that biological systems utilize light in unusual ways. For example, when light is confined to small spaces it reacts by changing its properties and acquiring quantum properties. Such light, referred to as “squeezed” light, is being studied by quantum physicists (Loudon, 1987). Biological systems are very sensitive to externally applied light to the point where some cells in our visual system can respond to a single photon (Fuortes, 1972). Such a hypersensitivity is in itself considered a quantum phenomenon. Some exotic properties of light in the brain can be considered quantum in nature (Gu, 1992).

One of the more common quantum properties in biological systems is quantum coherence. Biophotons themselves exhibit quantum coherence (Bajpai, 2003) in addition to ordinary coherence. If two separate systems share quantum coherence, they can resonate with and communicate with each other. When communicating between two systems separated by large distances, the phenomena of non-local quantum coherence is utilized (Mondal, 2017). If the two separate systems are in different dimensions, as discussed above, then quantum information can be shared between two dimensions, ie. 4D and 5D. If the two systems are separate individual consciousnesses which share quantum resonances, then extra-sensory information can pass between the two individuals in some type of mind-to mind communication.

Quantum Coherence:

Although there are many types of coherence, the phenomena we are discussing here is best described in terms of quantum physics. Quantum physics describes the behavior of atomic and subatomic particles which are considered open systems and responsible for the storage and transfer of quantum information. Quantum coherence at this level involves resonance between two separate systems which are superimposed or entangled (Vewinger, 2003). Two superimposed systems transfer information between them instantaneously. However, for this to happen, the atomic and subatomic components of each system first have to be “excited”. Experimentally, this is usually accomplished with an external EM field. Although not demonstrated in the lab, it is likely that consciousness can also excite atoms and create quantum coherence at both the atomic level and the macroscopic level. Thus, when trying to communicate with ET’s it is important to first focus our conscious intention internally and try to excite the atoms and molecules in our brain cells. Microtubules in the brain have been proposed to serve exactly such a function (Hameroff, 1996). Microtubules are likely to be involved in such communication since they exhibit the property of quantum coherence (Jibu, 1994).

Although quantum coherence can explain communication between humans and ET’s, such coherence is not particularly stable and environmental forces can easily destroy the coherence (creating decoherence) resulting in loss of communication. This phenomena could explain why ET’s come and go so quickly in and out of our consciousness and our 4D reality.

Phase Conjugation

In addition to quantum coherence, one of the more interesting quantum phenomena is phase conjugation, albeit an obscure nonlinear optical phenomena (Fisher, 2012; Zel'Dovich, 2013;). Phase conjugation offers an alternative mechanism for communication between the two systems as previously discussed. Like the catenoid, the new mechanism also involves energy inter-conversion. Phase conjugation is also called four-wave mixing and bourillion light scattering. Light has some amazing quantum properties especially when its put under constraints. Spatial constraints, like trapping light in a spherical chamber produces extremely anomalous behaviors (Chen, 1991).

Shining coherent laser light onto a phase conjugation mirror converts ordinary light into virtual light which is reflected back off the mirror. Thus, ordinary 4D light is converted into 5D virtual energy. In this case, the beam that is reflected back (the phase conjugate replica) doesn't bounce off at the appropriate angle like it does using an ordinary mirror, but retracing its steps and goes back to the source of the incident beam.

The anomalous behavior of light reflected off phase conjugation mirrors has been studied by experimental physicists. In the physics literature the reflected beam is referred to as "time-reversed (Miller, 1980)." In other referenced articles it is also described as "virtual" (ie. not real) (Goto, 2015). Negative time values, time dilation, time reversal, negative energy, negative mass and infinite distance occasionally appear in solutions to mathematical equations. Virtual energy is a loose term in the traditional physics literature which can be considered a burial ground for anomalous results. Such results makes no sense so the mathematical solution to the equations are discarded and put into a category labeled virtual phenomena or virtual reality. In quantum physics, however, virtual energy is a type of quantum field which is often associated with etheric energy (Andrews, 2004). Virtual energy has been described as the mirror image of the quantum field emitted by all objects and people (Mitchell, 2011). Today etheric energy in turn is associated with vacuum energy (Conrad, 1991) and zero-point energy (ZPE) (Boldyreva, 2016). ZPE is often described as higher dimensional, confirming its quantum nature (Stock, 1999). Nonetheless, the relevance here is that ET's reside in higher dimensional realities.

Virtual energy and light technology, however, are currently being used commercially in a very practical manner. For example, in radiotherapy, CT radiological scans are analyzed by digitizing all 3D coordinates of an object under investigation and then displayed using virtual light to create a CT simulation of the object (Segars, 2008). In addition, when creating “augmented reality” images, virtual light energy is used to superimpose virtual objects into real scenes during image modelling and image rendering techniques (Mukaigawa, 1999). Virtual lighting is also used for video conferencing applications (Brasso, 2005). As an aside, there are some concerns that the new industrial virtual lighting might be harmful and at least one study suggests it inhibits performance of visual tasks (Duffy, 2002).

So the question then arises as to the function of the virtual light energy generated in the brain as a result of phase conjugation. Virtual (light) photons have also been proposed as an interface between the EM level in the human brain and conscious experiences (qualia). For example, the model of Romijn (2002) suggests that 3D organizational patterns in the brain are composed of virtual photons which encode subjective experience.

Virtual energy and scalar energy are the terms used by radionics practitioners describing the kind of energy which is emitted by their radionics devices (Moscow, 2005). It is in fact one of these devices that Bearden refers to as capable of engineering the virtual energy of the collective unconscious (Bearden, 1979) ineffably connected to our perception of ET's (as discussed above). Longitudinal scalar waves are a type of non-classical EM field which has been proposed to propagate in 5D reality (Monstein, 2002). Scalar waves are emitted by all objects and people and carry information (the entire event history) about the object. Radionics information transfer technology requires the consciousness of the practitioner to tune in and create resonance with the object or person. In this way they can “decode” information from the target. This process involves some unknown non-local, quantum brain (or mind) mechanism in addition to some type of scalar/virtual energy. When the entity under investigation is an ET, achieving resonance is much more difficult and usually requires higher states of consciousness and higher-order quantum fields.

Phase conjugation now offers a mechanism for converting 4D (laser light) into 5D (virtual) energy. It turns out that this phenomenon, like with a catenoid, is considered to be bi-directional indicating that it also allows for 5D to 4D conversions (Qiao, 2018). Thus, in principle we can use our consciousness to go back and forth between our world and ET's world. Bearden (1979) believes this can be accomplished using the Moray amplifier which could function in this capacity because it utilizes longitudinal scalar electromagnetic energy. Therefore, it is important to understand how phase conjugation works and in particular its biological connections. Phase conjugation could occur at the quantum level in biological systems (McKinstrie, 2005).

Naturally occurring biophotons in the body act as a communication channel between separate neurons in the brain and function at the quantum level allowing instantaneous extracellular communication along some type of “energy” channels akin to the meridian system in Traditional Chinese Medicine. So if we can learn to control these naturally occurring biophotons in our brain using imagery and conscious intention, then we can direct our consciousness to the phase conjugation mirrors in our brains and bring our consciousness into 5D reality, interact with ET’s and finally bring our consciousness back into our brains in 4D.

Phase Conjugation and Consciousness

Historically speaking, the role of phase conjugation in human perception was one of the first models proposing a role for virtual energy in human brain functioning. In ordinary vision the light emitted by an object being perceived goes into the eye of the perceiver and produces an inverted image on the back of the retina. Marcer proposed that the eye also contained a phase conjugate mirror and therefore could convert incoming light from a perceived object into a virtual energy which was projected back to the source - in this case the object being perceived (Marcer, 1999). Therefore, the virtual energy reflection would create a virtual image of the object superimposed on the physical object itself. This rather novel phase conjugation mechanism to how we see objects and people outside of us was also researched by Edgar Mitchell (Mitchell, 1999; Mitchell, 2011). Mitchell extended Marcer’s idea to include all cells in the body and focused on the quantum resonance that occurs between the incoming and opposing outgoing waves. Since the two opposing fields are 180 degrees apart they will generate a standing wave oscillating around the zero-point where the two opposing fields cancel. All the information about the object being perceived (its memory, its entire event history) is contained within the standing wave. This mechanism can explain how the brain/mind can decode information about an object, a person or an ET. Ordinary standing waves are created by two opposing EM fields (Courtney, 2010). However, in the current situation we can also have a real EM field interacting with a virtual field or even two virtual fields opposing each other. Thus the resulting standing waves will be hybrids combining classical and quantum properties.

Mitchell also extended his model to explain non-local phenomena like healing at a distance or telepathy or remote viewing. Thus the object being observed no longer has to be the proverbial apple, but can be another person or an ET. Thus the model can be extended to explain information transfer from one individual consciousness to another or from a human consciousness to an ET's consciousness. Mitchell went on further to describe the information which is being transferred as quantum, holographic and complex as well as nonlocal (Mitchell, 1999). As long as there is resonance, classical or quantum, information can flow between any two systems. Mitchell used examples of remote viewing to indicate the connection between the mind and an object or an event outside ordinary 4D space/time reality. Mitchell further describes the role of the mind and consciousness itself in establishing resonance with an unfamiliar target. It is therefore apparent that meditation and mind control techniques can be used to raise our consciousness and make us better able to create the required resonance conditions. To what extent this is also possible with technology is not clear (Mitchell, 1999).

The phase conjugation process is analogous to holography where two laser beams interact to form interference patterns on a holographic plate (Yariv, 1978). The object beam is reflected off an object and contains the entire "event history" of the object which is carried by the laser. In Mitchell's model, the object beam is emitted directly from the object and may be real or virtual in nature. When this object beam interacts with a non-modulated reference beam, interference patterns are formed which contain the entire event history of the object. When such interference patterns are formed on a phase conjugation mirror, a virtual holographic image occurs when ordinary light (biophotons in this case) shines on the mirror. Thus, Mitchell (2011) and more recently Rein (2017) have proposed this phenomenon be used as a new definition of the mind which can now be considered a virtual hologram.

Where is the Phase Conjugation Mirror in the Body?

Although there is evidence for biomolecules forming geometries with a catenoid (as discussed above), is there similar evidence that biological systems can exhibit phase conjugation behavior? In previous studies connecting phase conjugation with human perception of objects (Marcer, 1999 ; Mitchell, 2011) the existence of a phase conjugation mirror (or plate or grating) had been hypothesized, but its exact location was hardly mentioned. Mitchell, however did propose it was found in the logic gates in the brain (Mitchell, 2011). Previous researchers studying holographic brain functioning had proposed ordinary holographic gratings were located in crystalline or liquid-crystalline structures (Ho, 1996) or in space/time patterns (generated from neuronal firing) (Pribram, 1974). Complex biomolecules can function as micro and nano devices with capabilities of acting like electrochemical switches (semiconductors) (with on/off modes) which when combined together into an array (or network) creates a new class of biological integrated circuits with logic gates (Bojinov, 2011).

The author (Rein, 2016) first pointed to two obscure research articles demonstrating that another class of biomolecules contain the complex porphyrin moiety which exhibits phase conjugation behavior in a test tube (Devane, 1984; Gosh, 1998) . Porphyrins are complex phenolic compounds used in coordination chemistry. They are commonly present throughout the human body found in glycoproteins which surround every cell (Ricchelli, 1995) and are distributed in bone cells (Lutton, 1997). However, because of the ubiquitous distribution of porphyrin molecules throughout the body, phase conjugation is likely to occur in many locations in the body. Furthermore, porphyrins exist in complex arrays of individual molecules all functioning as a whole in an organized, coordinated manner (Seth, 1994). Although the function of such porphyrin networks is generally unknown, Rein proposed that porphyrins networks in bone cells function as a phase conjugation mirror (Rein, 2016). In this model biophotons can act as a coherent input beam and be converted to virtual bioenergy by phase conjugation in porphyrin arrays (Rein, 2017).

This model further proposes that this virtual bioenergy is also created in the embryo. When it is generated in the brain region of the embryo, the virtual energy creates the mind. Thus the energetic nature of the mind is so proposed as being a virtual energy field. Thus, in addition to playing a role in perception and other cognitive brain functions, phase conjugation is likely generating virtual energy throughout the body with a function not currently understood.

Conclusion

Here it is assumed that ET's reside in higher dimensional 5D reality. Through geometry we can connect our ordinary 4D reality into 5D reality and transfer information back and forth between a human and an ET. Information transfer between a human and an ET is initially considered in terms of quantum resonance. The hypothesis is presented that biomolecules like DNA, which exist in a toroid conformation, can act as antennae to receive and broadcast higher dimensional energy. A mechanism is proposed for how 5D information can be stepped down and converted into 4D EM fields which the body can use. The same mechanism in the opposite direction can be used to convert our ordinary 4D consciousness into 5D. Once there we can interact with and exchange information with ET's.

A second mechanisms is introduced to explain information transfer back and forth between 5D and 4D using phase conjugation. Recent studies indicate certain biomolecules contain complex chemical structures, called porphyrins, which exhibit phase conjugation behavior in a test tube. Therefore human beings can use phase conjugation to convert ordinary 4D energy/consciousness into 5D energy/consciousness. Since phase conjugation is bidirectional indicating that the body can also convert 5D/ET energy into 4D/EM energy which can be used and interpreted by the 4D body.

Therefore, humans have the ability to connect with, communicate with and imbue certain aspects of 5D reality which includes ETs. An influx of 5D energy into the body will:

1. Raise our ordinary 4D consciousness into the 5D/ET realm
2. Cause our physical body to function more easily, more efficiently and more often at the higher-order quantum level. Therefore, molecules which function as cellular channels, for structural integrity, as nutrient-carriers, as transducers or antennae will function better. Better transducers will broadcast more EM healing energies. Better antennae will bring in more subtle energies and even divine energies.
3. Cause our emotional bodies to become consciously aware.
4. Make our mental and emotional systems more balance and refined. Positive emotions will predominate and control behavioral patterns.
5. Cause our mind to shift from lower to higher aspects and functioning. When the mind functions at a higher level it can resonate with divine energy and heal better.

References:

- Andrews, David L., and David S. Bradshaw. "Virtual photons, dipole fields and energy transfer: a quantum electrodynamical approach." *European Journal of Physics* 25, no. 6 (2004): 845.
- Bajpai, Rajendra P. "Quantum coherence in biophotons and living systems." *Indian Journal Experimental Biology* 41 (2003): 514-527.
- Basso, Andrea, Eric Cosatto, David Crawford Gibbon et al. "Digitally-generated lighting for video conferencing applications." U.S. Patent 7,805,017, issued September 28, 2010.
- Bearden, Tom E. "A mind/brain/matter model consistent with quantum physics and UFO phenomena." *Proceedings of 1979 Annual MUFON Symposium*, Phoenix, AZ, 1979.
- Bohm, David. "Quantum theory as an indication of a new order in physics: implicate and explicate order in physical law." *Foundations of Physics* 3, no. 2 (1973): 139-168.
- Bojinov, Vladimir and N. Georgiev. "Molecular sensors and molecular logic gates." *Journal of the University of Chemical Technology & Metallurgy* 46, no. 1 (2011): 3-26.

Boldyreva, Liudmila B. "The model of magnetic field based on the concepts of virtual particles and quantum harmonic oscillators possessing zero-point energy." *International Journal of Physics* 4, no. 2 (2016): 26-31.

Cadenas, Enrique. "Biological chemiluminescence." *Photochemistry and Photobiology* 40, no.6 (1984): 823-830.

Chen, Yijiang. "Self-trapped light in saturable nonlinear media." *Optics Letters* 16, no. 1 (1991): 4-6.

Collier, C. P., E. W. Wong, M. Belohradský, F. M. et al. "Electronically configurable molecular-based logic gates." *Science* 285, (1999): 391-394.

Conrad, Michael. "Transient excitations of the Dirac vacuum as a mechanism of virtual particle exchange." *Physics Letters A* 152, no. 5-6 (1991): 245-250.

Courtney, Charles RP, C-K. Ong et al. "Manipulation of microparticles using phase-controllable ultrasonic standing waves." *The Journal of the Acoustical Society of America* 128, no. 4 (2010): EL195-EL199.

Csanyi, Vilmos, and Gy Kampis. "Can we communicate with aliens?." In: *Bioastronomy—The next steps*, pp. 267-272. Springer, Dordrecht, 1988.

Dandoloﬀ, Rossen, Avadh Saxena, and Bjørn Jensen. "Geometry-induced potential on a two-dimensional section of a wormhole: Catenoid." *Physical Review A* 81, no. 1 (2010): 014102.

Devane, M. M. "Temporal investigation of phase conjugation, with enhancement, in magnesium tetraphenyl porphyrin." *Optics Communications* 52, no. 2 (1984): 136-140.

Dienes, Keith R., Emilian Dudas, and Tony Gherghetta. "Extra spacetime dimensions and unification." *Physics Letters B* 436, no. 1-2 (1998): 55-65.

Duffy, Vincent G., and Alan HS Chan. "Effects of virtual lighting on visual performance and eye fatigue." *Human Factors & Ergonomics in Manufacturing* 12, no. 1 (2002): 193-209.

Fisher, Robert A. *Optical Phase Conjugation*. Academic Press, NY, 2012.

Fuortes, M. G. F., and Paul M. O'Bryan. "Responses to single photons." In: *Physiology of Photoreceptor Organs*, pp. 321-338. Springer, Berlin, Heidelberg, 1972.

Ghosh, Abhik. "First-principles quantum chemical studies of porphyrins." *Accounts of Chemical Research* 31, no. 4 (1998): 189-198.

Goto, Yuta, Atsushi Okamoto, Atsushi Shibukawa, et al. "High-resolution and simultaneous measurement along the depth direction using virtual phase conjugation for optical tomography." In: *20th Microoptics Conference (MOC)*, pp. 1-2. IEEE, 2015.

Gu, Qiao. "Quantum theory of biophoton emission." In: *Recent Advances in Biophoton Research and its Applications*, pp. 59-112, 1992.

Hall, Lawrence, and Yasunori Nomura. "Gauge unification in higher dimensions." *Physical Review D* 64, no. 5 (2001): 055003.

Hameroff, Stuart, and Roger Penrose. "Orchestrated reduction of quantum coherence in brain microtubules: A model for consciousness." *Mathematics and Computers in Simulation* 40, (1996): 453-480.

Ho, Mae-Wan, Julian Haffegge, Richard Newton et al. "Organisms as polyphasic liquid crystals." *Bioelectrochemistry and Bioenergetics* 41, no. 1 (1996): 81-91.

Hud, Nicholas V., Kenneth H. Downing, and Rod Balhorn. "A constant radius of curvature model for the organization of DNA in toroidal condensates." *Proceedings of the National Academy of Sciences* 92, no. 8 (1995): 3581-3585.

Javadi, Hossein, and Farshid Forouzbakhsh. "Interactions between real and virtual spacetimes." *International Journal of Fundamental Physical Sciences* 4, no. 4 (2014): 114-121.

Jibu, Mari, Scott Hagan, Stuart R. Hameroff, Karl H. Pribram et al. "Quantum optical coherence in cytoskeletal microtubules: implications for brain function." *Biosystems* 32, no. 3 (1994): 195-209.

Loudon, Rodney, and Peter L. Knight. "Squeezed light." *Journal of Modern Optics* 34, no. 6-7 (1987): 709-759.

Lutton, John D., Nader G. Abraham, George S. Drummond et al. "Zinc porphyrins: potent inhibitors of hematopoiesis in human bone marrow." *Proceedings of the National Academy of Sciences* 94, no. 4 (1997): 1432-1436.

Marcus, Peter J., and Walter Schempp. "Quantum holography—the paradigm of quantum entanglement." In *AIP Conference Proceedings* 465, no. 1 (1999): 461-467.

McKinstrie, C. J., J. D. Harvey, S. Radic, and M. G. Raymer. "Translation of quantum states by four-wave mixing in fibers." *Optics Express* 13, no. 22 (2005): 9131-9142.

Messori, Claudio. "A cosmogonic model of human consciousness: Part III." *Journal of Consciousness Exploration & Research* 3, no. 11 (2012): 1174-89.

Miller, David A. B. "Time reversal of optical pulses by four-wave mixing." *Optics Letters* 5, no. 7 (1980): 300-302.

Mitchell, Edgar D. "Nature's mind: the quantum hologram." *National Institute for Discovery Science, Las Vegas, NV*, <http://www.nidsci.org/articles/naturesmind-qh.html> (1999).

Mitchell, Edgar D., and Robert Staretz. "The quantum hologram and the nature of consciousness." *Journal of Cosmology* 14, no. 1 (2011): 1-19.

Mondal, Debasis, Tanumoy Pramanik, and Arun Kumar Pati. "Nonlocal advantage of quantum coherence." *Physical Review A* 95, no. 1 (2017): 010301.

Monstein, Claudio and J. P. Wesley. "Observation of scalar longitudinal electrodynamic waves." *Europhysics Letters (EPL)* 59, no. 4 (2002): 514-519.

Morimoto, T., Y. Iwase, N. Aoki et al. "Nonlocal resonant interaction between coupled quantum wires." *Applied Physics Letters* 82, no. 22 (2003): 3952-3954.

Moscow, Peter. *Energetic Processes: Interaction Between Matter, Energy and Consciousness* 2 (2005).

Mukaigawa, Yasuhiro, Sadahiko Mihashi, and Takeshi Shakunaga. "Photometric image-based rendering for virtual lighting image synthesis." In: *Proceedings 2nd IEEE and ACM International Workshop on Augmented Reality (IWAR'99)*, pp. 115-124. IEEE, 1999.

Penrose, Roger, and Malcolm AH MacCallum. "Twistor theory: an approach to the quantisation of fields and space-time." *Physics Reports* 6, no. 4 (1973): 241-315.

Pereira, Contzen. "Quantum resonance & consciousness." *Journal of Consciousness Exploration & Research* 6, no. 7 (2015): 473-482.

Pitkänen, M. "Quantum antenna hypothesis." *Quantum Hardware of Living Matter*. Onlinebook. http://tgd.wippiespace.com/public_html/bioware/bioware.html#tubuc (2006).

Pomeransky, Andrei A. "Complete integrability of higher-dimensional Einstein equations with additional symmetry and rotating black holes." *Physical Review D* 73, no.3 (2006): 044004.

Popp, Fritz A., W. Nagl, K. H. Li et al. "Biophoton emission: new evidence for coherence and DNA as source." *Cell Biophysics* 6, no. 1 (1984): 33-52.

Popp, Fritz-Albert, Qiao Gu, and Ke-Hsueh Li. "Biophoton emission: experimental background and theoretical approaches." *Modern Physics Letters B* 8, no. 21(1994): 1269-1296.

Popp, Fritz-Albert. "About the coherence of biophotons." In: *Macroscopic Quantum Coherence, Proceedings of an International Conference of the Boston University*. World Scientific [www. datadiwan. de/iib/ib0204e_1. htm](http://www.datadiwan.de/iib/ib0204e_1.htm). 1999.

Pribram, Karl H., Marc Nuwer, and R. Baron. "The holographic hypothesis of memory structure in brain function and perception." *Contemporary Developments in Mathematical Psychology* 2 (1974): 416-457.

Qiao, Mu, Honglin Liu, and Shensheng Han. "Bidirectional image transmission ... using digital optical phase conjugation." *Optics Express* 26, no. 25 (2018): 33066-33079.

Rein, Glen. "Effect of conscious intention on human DNA." In: *Proc. Internat. Forum on New Science, Denver, CO*. (1996).

Rein, Glen. "Geometric resonances of DNA: the geometric continuum model." In: *Proc. Internat. Forum on New Science, Denver, CO*. (1997).

Rein, Glen. "Mind as a virtual phase-conjugated hologram." *Cosmos & History: Journal of Natural and Social Philosophy* 13, no. 2 (2017): 217-226.

Rein, Glen. "A quantum chemical approach to consciousness based on phase conjugation." *Cosmos and History: The Journal of Natural and Social Philosophy* 12, no. 2 (2016): 250-258.

Ricchelli, Fernanda. "Photophysical properties of porphyrins in biological membranes." *Journal of Photochemistry and Photobiology B: Biology* 29, no. 2-3 (1995): 109-118.

Romijn, Herms. "Are virtual photons the elementary carriers of consciousness?." *Journal of Consciousness Studies* 9, no. 1 (2002): 61-81.

Segars, William P., Mahadevappa Mahesh, Thomas J. Beck et al. "Realistic CT simulation using the 4D XCAT phantom." *Medical Physics* 35, no. 8 (2008): 3800-3808.

Seth, Jyoti, Vaithianathan Palaniappan, Thomas E. Johnson et al. "Investigation of electronic communication in multi-porphyrin light-harvesting arrays." *Journal of the American Chemical Society* 116, no. 23 (1994): 10578-10592.

Stock, Gerhard, and Uwe Müller. "Flow of zero-point energy and exploration of phase space in classical simulations of quantum relaxation dynamics." *The Journal of Chemical Physics* 111, no. 1 (1999): 65-76.

Tiller, William A., Walter E. Dibble, and Michael J. Kohane. *Conscious Acts of Creation: the Emergence of a New Physics*. Pavior Pub., (2001).

Tiller, William A. "Human psychophysiology, macroscopic information entanglement, and the placebo effect." *Journal of Alternative and Complementary Medicine* 12, no. 10 (2006): 1015-1027.

Vewinger, Frank, Manfred Heinz, Ruth Garcia Fernandez, et al. "Creation and measurement of a coherent superposition of quantum states." *Physical Review Letters* 91, no. 21 (2003): 213001.

Wheeler, John, A. *Geometrodynamics*, Academic Press, NY. (1962).

Wu, P. G., and Ludwig Brand. "Resonance energy transfer: methods and applications." *Analytical Biochemistry* 218, no. 1 (1994): 1-13.

Yariv, Amnon. "Phase conjugate optics and real-time holography." *IEEE Journal of Quantum Electronics* 14, no. 9 (1978): 650-660.

Zel'Dovich, Boris Ya, Nikolai F. Pilipetsky, et al. *Principles of Phase Conjugation*. Vol. 42. Springer, 2013.

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