

The Quantum Hologram Theory of Consciousness Reconciles the Physical and Psychic Nature of the UFO Phenomenon and is Compatible with Dr. Jacques F. Vallée's Consciousness Hypothesis¹

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Introduction

If the UFO phenomenon is not exclusively made possible by technologically advanced, interstellar, physical machines moving about and playing hide and seek (the “nuts & bolts” approach) but also displays an inseparable psychic nature, how can the Quantum Hologram Theory of Consciousness (QHTC)^{2,3} begin to explain the complex relationship of consciousness and UFO contact? Moreover, is there a compatible relationship between the QHTC and Dr. Vallée’s suggestion that the UFO phenomenon is like a cybernetic “influence system” dedicated to influencing the myths, assumptions, and meaning-making of human society-- an influence system that Dr. Vallee terms a “cybernetic control system”?⁴

In this light, the alleged cybernetic control system would operate under a mechanism allowing the “contact modalities” to take place.⁵ Consequently, the various ways by which humans are “piercing the veil,” expanding their awareness, and perceiving themselves as participants in a “multidimensional reality” could be compatible with the proposal that we are being influenced, nudged, or gently

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²Edgar Mitchell, "Quantum holography: a basis for the interface between mind and matter," in *Bioelectromagnetic medicine* (CRC Press, 2004).

³ Reinerio (Rey) Hernandez, "*The Quantum Hologram Theory of Consciousness and the Contact Modalities*", originally published in the Dr. Edgar Mitchell FREE Foundation website, November 1, 2013.

⁴Jerome Clark, "Jacques Vallee Discusses UFO Control System," Interview, *UFO Evidence* (1978), FATE Magazine, <http://www.ufoevidence.org/documents/doc608.htm>.

⁵ The "Contact Modalities" was a term first described in the above referenced paper titled "*The Quantum Hologram Theory of Consciousness and the Contact Modalities*", authored by Reinerio (Rey) Hernandez on November 1, 2013.

“steered” in a certain direction. And at least one of the mechanisms for this to happen could involve the relation between objects and their non-local, holographic, information fields as part of “one phenomenon” in which consciousness plays a primary role.

So, we must start by postulating a “greater reality” and a mechanism that can include and unify the physical and psychic attributes. Consciousness, as a major participant in this greater (more inclusive) reality, would be able to modify patterns in a non-local information field which (according to the QHTC) accompanies relativistic ($3S + 1T$) physical macroscopic objects.⁶ Moreover, an important process of resonance would connect both the classical physical and the quantum level domains.⁷

About the Concept of Consciousness in the QHTC

By embracing the concept of “quantum information,” the QHTC simultaneously includes and transcends a net classical physicalist explanation of the UFO phenomenon. However, the QHTC is not about the spacetime physical universe being ‘virtual’ or some kind of projection and/or illusion. The universe is understood as a physically real, spacetime organization of objects accompanied or complemented by a non-local, holographic information field supported by energy from the vacuum. No subtle ontological levels are posited in this model. Its non-local, quantum hologram (QH) contains all individual information fields, is connected to physical objects (including conscious beings with physical bodies) and carries information simply considered to be energy organized in patterns.⁸

Unlike string theories like “M Theory,”⁹ the QHTC doesn’t posit extra spatial dimensions. It is non-materialist in the sense that it recognizes a necessary quantum holographic information field but any sense of non-physical “multidimensionality” and of multiple non-physical ontological levels would actually refer to different organized energy patterns that may persist and be experienced in the quantum holographic medium even without being specifically connected to particular classical physical objects. These could give a sense of veridical multiple levels of reality to consciousnesses detached from their physical bodies while preserved as their organized information patterns.

⁶UFOTV. New Science Ideas Edgar D. Mitchell, *The Quantum Hologram and ESP - Astronaut Edgar Mitchell* (UFO Video, Inc, Venice, CA : Distributed by UFO TV, ©2005., 2005).

⁷Edgar Mitchell, "Nature's mind: The quantum hologram, in "Beyond UFOs: The Science of Consciousness and Contact with NonHuman Intelligence, Reinerio Hernandez, Rudy Schild and Jon Klimo, Eds., (Amazon Press, 2018).

⁸Edgar D. Mitchell, *The Quantum Hologram and ESP - Astronaut Edgar Mitchell*.

⁹Katrin Becker, Melanie Becker, and John H Schwarz, *String theory and M-theory: A modern introduction* (Cambridge university press, 2006).

In fact, my understanding of Dr. Mitchell's view on "consciousness" is that its manifestation gradually emerges from energy, matter, and information interacting with a non-local, holographic information field.¹⁰ Thus, consciousness would depend on and derive from quantum principles rather than exist independently or in any sense before them as an actual entity. However, I think that - even under this perspective - consciousness could be considered 'fundamental' in the sense that it would exist in a potential state becoming increasingly actual as a result of the evolution of ever more complex, stored, non-local information states in relation to complex physical forms. Moreover, according to Mitchell, it would survive without a physical body in the zero-point energy medium and, once manifested, its influence would assign meaning to information rather than blindly processing it.¹¹ This would make it primary (particularly, in terms of a volitional causal agent) in the sense of being on a par with other fundamental physical entities.

Dr. Mitchell wrote in "Nature's Mind: the Quantum Hologram"¹²:

"A third concept, chaos theory, is also necessary to understand the nonlinear evolutionary processes that caused consciousness to evolve toward the anthropic consciousness experienced by humans."

"It is precisely information, however, that is the basis of the phenomena of perception, cognition, memory, learning, etc, that is to say, consciousness and the subjective experience. Though the evidence is quite ample to postulate that non-locality is the unique, universal basis for perception and the subjective experience..."

"Finally, I conclude that the cited experiments and current understanding of non-locality in nature is sufficient to postulate that non-locality is the antecedent attribute of energy and matter which permits perception and is the root of the consciousness which manifests in the evolved organisms existing in three dimensional reality."

¹⁰Edgar Mitchell, "A dyadic model of consciousness," *World Futures: Journal of General Evolution* 46, no. 2 (1996).

¹¹Edgar D Mitchell and Robert Staretz, "The quantum hologram and the nature of consciousness," *Journal of Cosmology* 14, no. 1 (2011).

¹²Mitchell, "Nature's mind: The quantum hologram."

Mitchell and Staretz¹³ also brought up Luo's concept of "Intrinsic Awareness" (IA) by which, for example, atomic particles seem to be able to sense and react to their environments. It would not be consciousness itself but – perhaps - a form of irreducible information processing accompanying the very fabric of the cosmos and tantamount to the quantum principles of quantum entanglement, correlation, and non-locality. If we could fairly call it a "proto consciousness," the QHTC would entertain a variety of panpsychism.

About the Mechanism Described by the QHTC

The QHTC begins to provide ways to explain how interaction with a non-local, information medium (containing multiple information fields) can begin explaining psychic, paranormal and a variety of contact events with non-human intelligences (NHI) associated to the UFO phenomenon according to multiple researchers and, particularly, to the FREE Experiencer Survey published in the historic book titled "Beyond UFOs".¹⁴ The QHTC theory states that classical physical objects are accompanied by and connected under a holographic information field that accumulates memory from its history of informational quantum states to the point of developing consciousness which –in turn -can also purposefully direct or modify the information waves.¹⁵ In fact, according to Dr. Edgar Mitchell¹⁶, we are dealing with "nature's basic information system." The QH medium would be 'real' in the sense that it operates with energy supported by the zero-point energy of the vacuum when coherent quanta are emitted and absorbed by material objects. But it would also be 'virtual' in the sense that – as a non-local information and memory medium - for every macro-scale object there is a holographic information component that accompanies and complements them. Possibly, virtual quanta would be involved.

Objects would be a self-referencing quantum system and exchange information quanta from entangled, resonant, standing wave, transactional bonds among them. And their information would be carried in the wave phase relations. If objects are self-referencing, they would not need a reference signal to decode a two-dimensional information pattern as occurring in classic holography.¹⁷

¹³Staretz, Robert. Mitchell Staretz, Edgar, "Towards an Understanding of Reality and the Nature of Existence," Scientific, https://www.newdualism.org/papers/E.Mitchell/Mitchell-Nature%20of%20existence_v3a.pdf.

¹⁴"A Report on Phase I and II of FREE's Experiencer Research Study: The Results of a Quantitative Study," 2018, in *Beyond UFOs: The Science of Consciousness and Contact with Non-Human Intelligence*, Reinerio (Rey) Hernandez, Rudy Schild and John Klimo, Eds, November 1, 2018, Amazon Press.

¹⁵Mitchell and Staretz, "The quantum hologram and the nature of consciousness."

¹⁶Mitchell, "Nature's mind: The quantum hologram."

¹⁷Edgar D. Mitchell, *The Quantum Hologram and ESP - Astronaut Edgar Mitchell*.

Based on the work of Walter Schempp and Peter Marcer¹⁸ studying the connection between brain waves and the frequency domain pertaining to holography, the QHTC states that human beings also decode information through phase conjugate adaptive resonance (PCAR). But, according to Mitchell¹⁹, having the brains of intelligent, conscious beings, humans may be using more advanced structures like the brain's microtubules where coherent resonant standing quantum information waves would resist decoherence. Thus, in this model, the brain would act as a "phase gate."

These proposals would basically agree with Roger Penrose and Stuart Hameroff's^{20, 21} hypothesis of an Orchestrated Objective Reduction (Orch-OR) or collapse of quantum wave superpositions inside the brain's microtubules where standing wave coherence and orchestrated room temperature quantum wave collapses (associated to proto-conscious states) can take place.

Dr. Mitchell²² also pointed out that— through resonance - non-local, information exchanges between entangled particles at the subatomic level don't have to remain unavailable to our classical, macroscopic world because information exchange through resonance between classic macroscopic objects and their quantum information waves takes place. However, for the QHTC, the 3S + 1T physical universe is definitely real, and (to facilitate a more complete and precise information and more efficiently adapt to a physically real environment), humans and other macroscopic organisms would complement PCAR- decoded quantum holographic information with classical sensorial information.^{23,24} An important more complete picture is also provided by Dr. Rudy Schild.^{25,26}

¹⁸Peter J Marcer and Walter Schempp, "Model of the neuron working by quantum holography," *INF* 21, no. 3 (1997).

¹⁹Edgar D. Mitchell, *The Quantum Hologram and ESP - Astronaut Edgar Mitchell*.

²⁰Stuart R Hameroff, "Quantum coherence in microtubules: A neural basis for emergent consciousness?," *Journal of consciousness studies* 1, no. 1 (1994).

²¹Stuart Hameroff and Roger Penrose, "Consciousness in the universe: A review of the 'Orch OR' theory," *Physics of life reviews* 11, no. 1 (2014).

²²Mitchell, "Quantum holography: a basis for the interface between mind and matter."

²³Mindshift INstitute, "Mindshift Institute Interviews Dr. Edgar Mitchell," (YouTube, March 14, 2012), Interview. <https://www.youtube.com/watch?v=0PZJOUmf0ns>.

²⁴Mitchell, "Quantum holography: a basis for the interface between mind and matter."

²⁵The Dr. Edgar Mitchell FREE Foundation, "Dr. Rudy Schild: QUANTUM HOLOGRAM BRAIN WAVES," May 9, 2017, <https://www.youtube.com/watch?v=rXgYDdoTALY&t=3s>.

²⁶Rudy Schild - *Dark Matter and Dark Energy: The Force is Within You*, (Rudy Schild, 2012).

Allegedly, through the emission and absorption of an object's coherent quanta, the individual quantum holograms of all objects (whether accompanied by consciousness or not but still capable of emitting and decoding each other's information) would carry the complete event history of each object in a non-local, instantaneous way. Being a non-local structure, the QH medium would carry this information all over the universe (like a classical hologram) and would also have the property of 'distributedness', meaning that a small piece would contain all of the information. Moreover, it would also carry all the memory of physical events. Its support would be the zero-point energy field and (unlike a laser-produced hologram) smaller fragments would not lose information definition.²⁷

As a historical precedent to the QHTC we should recognize Karl Pribram's "Holonomic Brain Theory."²⁸ Pribram discovered that patches of brain neural webs displaying local field potentials were describable by Fourier transform wavelets. Even earlier, in the 1940s, Dennis Gabor (The "Father of Holography") had applied this type of Fourier transforms to his communication theory observing that they could refer to quantum processes and called his communication units "quanta of information."²⁹

The Fourier transforms used in classic holography (to reinterpret real waves unto a frequency domain) were useful to so interpret coherent brain activity in holographic terms. And the work of Schempp³⁰ (necessary in the QHTC) indicated that the brain itself could be interfacing with a non-local quantum hologram. However, in spite of the surprising presence of nonlocality, the mathematics of the PCAR, the QH may be limited to representing a connection between a holographic frequency domain and time-forward, causally-evolving, deterministic relations describing real 3D + 1 Time objects connected to their quantum information histories.

²⁷Staretz, "Towards an Understanding of Reality and the Nature of Existence."

²⁸Karl H Pribram, "Holonomic brain theory," *New Trends in Experimental & Clinical Psychiatry* (1989).

²⁹Karl Pribram, "Holonomic brain theory," *Scholarpedia* 2, no. 5 (2007).

³⁰Walter Schempp, "Quantum holography and neurocomputer architectures," in *Probabilistic and Stochastic Methods in Analysis, with Applications* (Springer, 1992).

For the year 2000 American Institute of Physics Conference, Schempp and Marcer³¹ summarized their ideas as follows:

“The theoretical physics of a quantum mechanical model of space, relativistic quantum holography, is described. It specifies three dimensions, such as is validated by the nature of our spatial experience, but where additionally, quantum non-locality, which Feynman described as the only mystery of quantum theory, is made manifest by means of observable phase relationships. For example, synchronicity between events, and other phenomena such as are described by the geometric/Berry phase, etc., which are outside the bounds of classical explanation. It can therefore be hypothesized: a) that we live in a entirely quantum mechanical world/universe and not a classical mechanical one (where quantum phenomena are confined to the microscopic scale) as is the current generally held scientific view, b) that three spatial dimensions are a fundamental consequence of quantum mechanics, c) that quantum holography is a natural candidate to explain quantum gravity, such that mass/inertia concerns not the eigenvalues of some operator, but rather the observable gauge invariant phases of a state vector, dimensions are a fundamental consequence of quantum mechanics, c) that quantum holography is a natural candidate to explain quantum gravity, such that mass/inertia concerns not the eigenvalues of some operator, but rather the observable gauge invariant phases of a state vector, postulated to be that of the universe itself, as a whole, and d) that this model provides a natural explanation in terms of relativistic quantum signal processing of any each individual’s perception and cognition will be of a three dimensional world, defined similarly in relation to each individual’s quantum state vector, describing its mind/body and associated gauge invariant phases or mindset, which have observable consequences, such that mental processes and events can cause neural events and processes! These testable hypotheses, if validated, will have profound implications for our understanding, radically changing our scientific perspective on the world, as we enter the new millennium.”

In “Nature’s Mind: The Quantum Hologram,” Mitchell³² (certainly informed by the work of Schempp and Marcer) wrote:

³¹Peter Marcer and Walter Schempp, "Why space has three dimensions: A quantum mechanical explanation" (paper presented at the AIP Conference Proceedings, 2000).

³²Mitchell, "Nature’s mind: The quantum hologram."

“Marcer (1997) has proposed that the condition of phase-conjugate-adaptive-resonance (pcar) is a necessary condition for an object in three dimensional reality to be perceived as it really is. That, is, resonance requires a virtual path mathematically equal but opposite to the incoming sensory information about the object. Further, that it is the incoming pace/time information (visual, acoustic, etc.), which decodes the information of the quantum hologram and establishes the condition of pcar so that accurate three dimensional perception is possible. That is to say, both quantum information and space/time information are used in the act of perception by organisms. I propose that the two equal but opposite paths required by the pcar condition are the mathematical equivalent of perception and attention or intention.”

In this same work, Mitchell wrote:

“Hammeroff (1994) and Penrose have presented experimental data on microtubules in the brain supporting quantum processes. The absorption/re-emission phenomena associated with all matter is well recognized. That such re-emissions are sufficiently coherent to be considered a source of information about the object is due to the theoretical and experimental work of Schempp and Marcer, based upon the transactional interpretation of quantum mechanics of Cramer (1986), the Berry geometric phase analysis of information (Berry, 1988; Anandan, 1992) and the ability of quantum phase information to be recovered and utilized (Resta, 1997). The mathematical formalism appropriate to these analyses is consistent with standard quantum mechanical formalism, and is defined by means of the harmonic analysis on the Heisenberg nilpotent Lie group G , algebra g and nilmanifold (see Schempp (1986) for a full mathematical treatment). The information carried by a quantum hologram encodes the complete event history of the object with respect to its three dimensional environment. It evolves over time to provide an encoded non-local record of the "experience" of the object in the four dimensional space/time of the object as to its journey in space/time and the quantum states visited. The question of the brain's ability, as a massively parallel quantum processor, to decode this information is addressed by Marcer and Schempp in "Model of the Neuron Working by Quantum Holography" (1997) and "The Brain as a Conscious System" (1998).”

Some Contact Modalities and the QHTC

Veridical out-of-body and near-death contact experiences could take place when the highly organized quantum information fields of different disembodied conscious agents more clearly interacting through PCAR (without interference from physical sensorial perception) meet in the non-local quantum holographic medium. Their personalities and memory patterns would persist in this medium sustained by energy from the vacuum.

The stronger the resonance with the non-local, quantum information, the more veridical the experience. Regular remote viewing while maintaining perception of the physical body would be a mild form of resonance but feeling oneself in another locale and even experiencing as if with the physical senses would involve greater resonant levels.

Physical UFO contact modalities and materializations would depend upon reconfiguring the physical information patterns of non-human craft and their 'non-human' bodies inside. This might be done by manipulating what quantum probabilities are actualized after modifying original holographic information fields with the holographic information fields of different spacetime coordinates. Various degrees of the mediumship-channeling and telepathy contact modalities would depend on creating a stronger than usual resonant state between greater portions of the personality and memory information fields of different conscious agents. The more conscious or organized information field would have more access to energy from the vacuum would be the dominant one.

Entheogen-based contact modalities would alter brain chemistry so that resonant information from other entities overcomes the threshold of subconscious or intuitive perception into conscious awareness.

As we can see, resonance would be the key to all these contact modalities.

A Brief Observation about Retrocausality

In spite of partially using (and extending) John C. Cramer's "Transactional Interpretation,"³³ there's little consideration of retrocausal signaling or influences in the QHTC. However, precognitive experiences and information about (or from) multiple possible futures ostensibly taking place during some paranormal and contact experiences are recognized and, besides Cramer, there are eminent scientists and experimentalists like Yakir Aharonov³⁴ that make a good case for retrocausality. Should it eventually be incorporated into an extended version of the QHTC? Since, according to the QHTC, the QH is inseparable from four-dimensional spacetime, any plausible considerations about retrocausal influences may have to be considered in relation to Einstein's "block universe."³⁵

Is the QH in the QHTC mainly understood as deterministic because it was developed using Fourier transform operators which are linear (therefore, possessing the properties of homogeneity and additivity)³⁶ and, accordingly, applicable to classical descriptions?

About Jacques F. Vallée's "Control Mechanism" Hypothesis

In books like Dimensions: A Casebook of Alien Contact³⁷ and Messengers of Deception³⁸ and some interviews, eminent computer scientist and ufologist Jacques F. Valle hypothesized that the UFO phenomenon might act like a symbolic, cybernetic, social control mechanism, seemingly dedicated to influence human culture, our sense-making, and myths. It's as though an intelligence we are connected with were intermittently stimulating us to elicit a lasting learning response exerting their stimulus more under what would be a closed-loop than an open-loop cybernetic feedback relationship.³⁹

In an interview with UFO researcher Jerome Clark, Vallée stated

³³John G Cramer, "Transactional interpretation of quantum mechanics," in *Compendium of Quantum Physics* (Springer, 2009).

³⁴Yakir Aharonov, Eliahu Cohen, and Tomer Shushi, "Accommodating retrocausality with free will," *arXiv preprint arXiv:1512.06689* (2015).

³⁵CW Rietdijk, "Four-dimensional reality continued. The implications of the block universe for the origin of matter, consciousness and a possible afterlife. The Einstein-Podolsky-Rosen paradox and its role in four dimensions," *Physics Essays* 31, no. 4 (2018).

³⁶Steven W Smith, "The scientist and engineer's guide to digital signal processing," (1997).

³⁷Jacques Vallee and Whitley Strieber, *Dimensions: A casebook of alien contact* (Contemporary Books, 1988).

³⁸Jacques Vallee, *Messengers of Deception: UFO Contacts and Cults* (Ronin Pub, 1979).

³⁹Norbert Wiener, "Cybernetics: Control and Communication in the Animal and the Machine--2nd," (1961).

“We tend to assume that the physical phenomenon is its most important aspect and that everything else is just a side effect and much less important. But perhaps we're facing something which is basically a social technology. Perhaps the most important effects from the UFO technology are the social ones and not the physical ones. In other words, the physical reality may serve only as a kind of triggering device to provide images for the witness to report. These perceptions are manipulated to create certain kinds of social effects.”⁴⁰

The concept of “control” is a crucial element of **Cybernetics**. A basic definition of “cybernetics” (given by James Watt) is:

*“Cybernetics is a **transdisciplinary** approach concerned with regulatory and purposive **systems**—their **structures**, constraints, and possibilities. The core concept of the discipline is circular causality or **feedback**—that is, where the outcomes of actions are taken as inputs for further action. Cybernetics is concerned with such processes however they are embodied, including in ecological, technological, biological, cognitive, and **social systems**, and in the context of practical activities such as designing, learning, **managing**, and **conversation**.”⁴¹*

According to testimonies from contact experiencers, most human interaction with NHI is not classified as “evil” or abusive, instead, based upon their three surveys of over 4,300 UFO Contact Experiencers from over 100 countries, only 4 percent stated that their experiences were mainly negative.⁴² This would coincide with a more ancient meaning of the word “cybernetics” which refers to “steering” rather than the negative connotations often implied by the word “control” in terms of a dictatorial, abusive, self-serving imposition.

Dr. Vallée came to the hypothesis of the “control system” by perceiving the absurdity of semantic constructions derived from contact experiences. He stated

⁴⁰Clark, "Jacques Vallee Discusses UFO Control System."

⁴¹James Watt, "The Reader View of Wikipedia - Cybernetics."

⁴²R Hernandez, J Klimo, and R Schild, "Beyond UFOs: The science of consciousness and contact with non-human intelligence, © The Dr. Edgar Mitchell Foundation for Research into Extraterrestrial and Extraordinary Experiences, FREE," (Inc, 2018).

“If you're trying to express something which is beyond the comprehension of a subject, you have to do it through statements that appear contradictory or seem absurd. For example, in Zen Buddhism the seeker must deal with such concepts as "the sound of one hand clapping" - an apparently preposterous notion which is designed to break down ordinary ways of thinking. The occurrences of similar "absurd" messages in UFO cases brought me to the idea that maybe we're dealing with a sort of control system that is subtly manipulating human consciousness.”⁴³

While Vallée’s statement of an influence mechanism “to create certain kinds of social effects” may still be true because UFO intelligences continue operating in a covert or semi-covert way, some of the negative connotations usually associated to the word “manipulation” may have been lessened after an analysis of the positive changes reported by a majority among thousands of contact experiencers in the scientifically designed, international, and anonymous FREE Experiencer Survey.

In “*Incommensurability, Orthodoxy, and the Physics of High Strangeness: A Six-layer Model for Anomalous Phenomena*” Dr. Jacques F. Vallée and Dr. Eric W. Davis⁴⁴ wrote:

“Everything works as if UAPs were the products of a technology that integrates physical and psychic phenomena and primarily affects cultural variables in our society through manipulation of physiological and psychological parameters in the witnesses.”

They also consider six “layers” useful for UAP analysis. “**Layer I**” refers to a highly advanced, revolutionary, physical technology that can be placed in the traditional “nuts & bolts” aspect. “**Layer II**” (provisionally called “anti-physical”) refers to UFOs not conforming to patterns predicted by modern physics. They may appear to change size, suddenly accelerate to hundreds of g forces, become semi-invisible, etc. “**Layer III**” refers to the psychology and the social conditions of the observers and how they interpret the phenomenon. “**Layer IV**” refers to strange physiological and psychological reactions in the witness; like hearing beeping sounds, a sudden inability to move, a metallic taste in the mouth, and a loss of volition. “**Layer V**” involves experiencing multiple types of psychic phenomena like telepathy, poltergeists, levitation, healing, personality changes, and unusual abilities. “**Layer VI**” is cultural and refers to society’s reactions to the UFO reports.

Can the QHTC and Vallée’s “Cybernetic Control System” Converge?

⁴³Clark, "Jacques Vallee Discusses UFO Control System."

⁴⁴Jacques F Vallee and Eric W Davis, "Incommensurability, Orthodoxy and the Physics of High Strangeness: a 6-layer model for anomalous phenomena," (2004).

As per the QHTC, all six “layers” useful for UAP analysis mentioned by Vallée could still emerge under a mechanism by which information can be exchanged and organized from simple states of complexity to highly complex ones. And all six layers would jointly impinge on the “*cultural variables in our society through manipulation of physiological and psychological parameters in the witnesses*”.

Another convergence could be that a conscious agent that sends a phase conjugate “attentional” wave to match an incoming information wave can instantly turn it into an “intentional” phase conjugate wave capable of modifying the QH information of other conscious agents. By changing the focus, the percipient can use the same reversal of the rotation of the phase vector in phase space to exert influence.^{45 46} However, I think that, if a conscious agent is more conscious than another, he-she-it can also resonate more influentially with individual, self-sustaining QH complexes acting as a cybernetic control agent. This is because, both in the “greater reality” described by the QHTC and in Vallée’s “Cybernetic Control System,” we are dealing with mutually modifying informational events and entities. Input, output, feedback, and control would take place through classical means and through a non-local, volitional, (also cybernetic) control system allowed by the QH mechanism.

In Dimensions: A Casebook of Alien Contacts, Dr. Vallée wrote:

*“If the world around us is a **world of informational events**, the symbolic manifestations that surround UFO reports should be viewed as an important factor. If we regard the physical world as an associative universe of informational events, consciousness is no longer simply a local function in the human brain. Instead, I propose to define consciousness as the process by which informational associations are retrieved and traversed. The illusion of time and space would be merely a side effect of consciousness as it traverses associations.”⁴⁷*

Isn’t this partly a description of the QHTC? Isn’t this another convergence?

⁴⁵Staretz, “Towards an Understanding of Reality and the Nature of Existence.”

⁴⁶R. Hernandez, Davis, R., Klimo, J. Schild, R., Swanson, C. , “Contact with Non-Human Intelligence and the Quantum Hologram Theory of Consciousness: Toward an Integration of the Contact Modalities,” (ISSUU Indiana Series Secure Utilities Underground, 2017), Scientific Article. https://issuu.com/experiencer/docs/contact_with_non-human_intelligence.

⁴⁷Vallée and Strieber, *Dimensions: A casebook of alien contact*.

A good reason for NHI exchanging information with us (and to “steer” us to exchange information differently) would be to be able to acquire new information, increase one’s degree of influence, participation in the overall QH, and to become more efficient and adapted to different local environments. This would also be facilitated by the PCAR mechanism and, if so, it may even be another way to decrease entropy. Regarding the importance of entropy, Vallée stated:

“Another interesting facet of the UFO phenomenon concerns information theory. According to modern physics, and in particular to Brillouin, Bagor, and Roghstein, information and entropy are closely related. The relationship has been expressed clearly by Brillouin: Entropy is generally regarded as expressing the state of disorder of a physical system. More precisely, one can say that entropy measures the lack of information about the true structure of the system. No information can be obtained in the course of a physical measurement, then, without changing the amount of entropy in the universe, the state of disorder of the cosmos. Now the physicist is faced with a new challenge: how to define disorder. And the task, as R. Schafroth has pointed out, is not easy: Some scientists pile up papers and books on their shelves in apparent disorder, yet they know perfectly how to find the document they want. If someone restores the appearance of order, the unfortunate owner of these documents may be unable to locate anything. In this case it is obvious that the apparent disorder was in fact order, and vice versa. Speculating on the relationship between these physical quantities, French physicist Costa de Beauregard wrote, “It must be in the nature of probability to serve as the operational link between objective and subjective, between matter and psychism.” He points out that, in pre-cybernetics physics, observation was regarded as a process without mystery, requiring no explanation, whereas free action, on the contrary, was “regarded as a physical impossibility and a psychological illusion.” In modern physics, these ideas have been revolutionized.”⁴⁸

In terms of non-local information waves, the QHTC may be compatible with the hypothesis that reality-challenging UFOs are a kind of mind-like, meaningful, information-control mechanism, part of a cybernetic process. This is because cybernetic control doesn’t just apply to physical exchanges but to a variety of processes.⁴⁹

⁴⁸Vallée and Strieber, *Dimensions: A casebook of alien contact*.

⁴⁹Watt, "The Reader View of Wikipedia - Cybernetics."; Wiener, "Cybernetics: Control and Communication in the Animal and the Machine--2nd."

I believe that this cybernetic “control system” hypothesis associated to the UFO phenomenon, might be geared to stimulate the co-creative production of an expanded awareness and **original** symbolic content, that is, new information affecting human consciousness, culture, meaning-making, and society, and – even through feedback – the UFO intelligence. However, since (besides the production of novel processes) - a cybernetic system affecting different life forms must include self-maintenance and a degree of homeostasis, any major changes must be careful and organically adaptive.

However, I think that Vallée is generally correct in observing that interaction with the UFO phenomenon tends to be irregular and seemingly absurd and that these might relate to what (according to him) resemble patterns of learning reinforcement like those studied by Ferster and Skinner:

“Patterns of Reinforcement by Charles Ferster and B. F. Skinner reporting on research sponsored by the Office of Naval Research. Although the design of their experiments is complex, the findings of Ferster and Skinner can be summarized in a few lines. Drastic modification of the behavior of an animal (including man) can be achieved by selectively reinforcing certain actions, for instance by giving food to a pigeon only when he presses a certain lever. However, certain ways of reinforcing behavior lead to better learning than others. If the training is too even and monotonous, the subject may stop in its development or even return to an earlier state. The best schedule of reinforcement is one that combines periodicity with unpredictability. Learning is then slow but continuous. It leads to the highest level of adaptation. And it is irreversible. It is interesting to observe that the pattern of UFO waves has the same structure as a schedule of reinforcement.”⁵⁰

If the cybernetic system in question were an open one, the non-human intelligence (NHI) exerting control behind the UFO phenomenon would straightforwardly regulate our decision-making and we would not innocently and willingly participate in the possibility of profoundly restructuring of our own myths, assumptions, and meaning-making patterns. But if the cybernetic system were a closed one (based on positive and negative feedback) it would also be pervious to our influences, including some risk to the control-exerting UFO intelligence themselves even. For some reason (perhaps to elicit in us the best possible adaptation to a greater reality) they would be attempting to provoke a more lasting, self-administered restructuring of our myths, assumptions, and meaning-making patterns without imposing it. Interestingly, Vallée reminded us that - by means of feedback—‘they’ could in theory be ‘invaded’ (or modified) by our own human agency.⁵¹

⁵⁰Vallée and Strieber, *Dimensions: A casebook of alien contact*.

⁵¹Clark, "Jacques Vallée Discusses UFO Control System."

A “closed loop control system” uses its feedback signal to generate output. Information sharing by standing wave resonance (not only between objects, conscious agents and objects, but also between conscious agents as allowed by the PCAR) might form an instantaneous, real-time feedback mechanism, for instance as experienced during telepathic events. As mentioned, a conscious agent capable more aware and resonant with organized elements in the overall QH would be able to exert more influence or “control.”

Something else to consider is that (according to the nexus between available thermodynamically free energy and information), any information gain resulting from the PCAR resonance would in theory reduce the total amount of entropy in the universe. However, an issue that will have to be considered elsewhere is how this type of information exchange may relate (or not) with the advance and retarded wave (also non local) exchange of inversely related entropic states posited by Claude Swanson⁵² in his Synchronized Universe Model (SUM).

Returning to the issue of the “nuts & bolts approach vs. Vallée’s “informational, cybernetic control mechanism” which (given the intelligent behavior exhibited by UFOs and associated NHI) implies conscious volition, I think that the PCAR mechanism (which can be understood as including instant, non-local feedback) reconciles opposites (the physical *res extensa* reality and the think that the PCAR mechanism (which can be understood as including instant, non-local feedback) reconciles opposites (the physical *res extensa* reality and the symbolic, a meaningful control-related, *res cogitans*). This could show that more advanced intelligences participating with us (in what could be simultaneously called a “resonant” and “cybernetic” phenomenon) may consciously take part not only in a more inclusive reality but also of a corresponding more inclusive form of logic. Unlike, two-value, classical logic, this more comprehensive logic may use an included middle (in which opposites are reconciled not only epistemologically but by participating in a more comprehensive ontological level), as pioneered by philosopher Stephane Lupasco⁵³ and by transdisciplinary physicist Basarab Nicolescu.⁵⁴

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⁵²Claude Swanson, *The synchronized universe: New science of the paranormal* (Poseidia Press, 2009).

⁵³Joseph E Brenner, "The philosophical logic of Stéphane Lupasco (1900–1988)," *Logic and Logical Philosophy* 19, no. 3 (2010).

⁵⁴Basarab Nicolescu, *Manifesto of transdisciplinarity* (Suny Press, 2002).

Greater and lesser degrees of resonance between the classical, macro domain and its associated, non-local, holographic information fields might be modulated by consciousness because consciousness would also be able to operate experiencing even greater degrees of freedom and possibilities by concurrently participating in a more fundamental realm. This realm would be potentially inclusive and transcendent both of the physical universe and to its non-local, quantum information hologram.

I doubt that creatively new meaningful experiential information and creatively modified space-time patterns can be introduced in the universe by simply rearranging the information available in a combination of non-locally connected deterministic histories within the quantum hologram. This would be so even if past, present, and future events coexisted.

If consciousness were truly fundamental, it would exist in a state of greater actuality than physicality and associated quantum hologram. Conscious, creative self-organization would ultimately be independent from physicality, its quantum principles, and its quantum holographic information field. These and other contingent elements would arise from the patterns implied under a fictional, self-imposed limitation.

The holographic interface between that greater state of actuality and classical physics might facilitate what mathematician, philosopher, and theologian William A. Dembski⁵⁵ recognizes as intelligent and creative acts of “specified complexity.”

Conclusion

The QHTC implies a greater reality whose mechanism based on energy, matter, information, and non-locality would give rise to consciousness. Its information exchange mechanism would – at least partially - accommodate the psychic and physical aspects of the UFO phenomenon and human interaction with it.

The QHTC model may be compatible with Dr. Jacques F. Vallée’s “Cybernetic Control Hypothesis,” considering that PCAR would also be able to function as a non-local, closed, cybernetic control mechanism.

⁵⁵William Dembski, "In defense of intelligent design," *The Oxford Handbook of Religion and Science, Oxford Handbooks in Religion and Theology*. Oxford University Press, Oxford.[347] (2006).

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