

Society for Scientific Exploration

27th Annual Meeting June 25-28, 2008 Boulder, Colorado

Program and Abstracts

EMERGING PARADIGMS AT THE FRONTIERS OF CONSCIOUSNESS & UFO RESEARCH

> Dominique Surel, Arrangements Bob Wood, Program

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PROGRAM & ABSTRACTS Society for Scientific Exploration -27th Annual Meeting Boulder, Colorado June 26-28, 2008 www.scientificexploration.org

Host: Dr. Dominique Surel

Program Committee: Bill Bengston, Courtney Brown, Dominique Surel, Garret Moddel, Bob Wood, Chair

WEDNESDAY, EVENING, JUNE 25

6:00 OPENING RECEPTION and Registration

THURSDAY MORNING, JUNE 26 (Registration 8:00)

- 9:00 Welcome by Hosts
- 9:05 Welcome by the University of Colorado
- 9:10 Welcome by Program Chair Wood
- 9:15 Presentation of Dinsdale Award
- 9:20 Jerome Clark presentation

THEME: UFOs AND PHYSICAL REALITY

- 10:00 Robert Wood, Introduction to UFO Issues and Evaluation of Two Original-paper 'Leaked' Documents
- 10:30 BREAK
- 10:50 John Alexander, UFOs: The Good News and the Bad News
- 11:10 Paul Hellyer, Will It Be Star Wars or Star Dreams?
- 11:50 York Dobyns, Invisible Rocketry: How to Produce an Apparently Reactionless Drive without Violating Newton's Third Law
- 12:10 Stoyan Sarg, Gravito-inertial Propulsion Effect Predicted by the BSM - Supergravitation Unified Theory
- 12:30 Break for a 1 ¹/₂ hour lunch
- 12:30 YOUNG INVESTIGATORS MEETING, Pizza lunch

THURSDAY AFTERNOON

THEME: UFOs AND CONSCIOUSNESS

- 2:00 Simeon Hein, What Remote Viewing Tells Us about Extraterrestrials and UFOs
- 2:20 Dale Graff, Exploring the Boundaries of Perception

- 2:40 Shelley Tanenbaum, The Human Side of UFOs: Gifts and Challenges of Individuals Who Report ET Encounters
- 3:00 <u>Claude Swanson</u>, The Common Elements of Parapsychology and UFO Experiences: Lessons for Physics
- 3:40 BREAK

THEME: CONSCIOUS INTENT

- 4:00 Gary E. Schwartz*, Mark Boccuzzi, Lynne McTaggart, and Melinda Connor: Effects of Distant Group Intention on the Growth of Seedlings
- 4:20 Peter Moddel, Intent and the Process of Becoming Conscious: A Phenomenological View
- 4:40 <u>Todd Richards</u>, Functional Magnetic Resonance Imaging and Electroencephalographic Evidence of Correlated Brain Signals Between Physically and Sensory Isolated Subjects
- 5:20 Glen Rein, Water Memory: Carrier of Conscious Intention
- 5:40 Cam Danielson, An Investigation into Repeated Exposure to Hemi-Sync® Technology in Controlled Workshop Environments
- 6:00 Maria Syldona, Higher States of Consciousness Beyond Time, A Comparative Perspective from Eastern Cosmologies and Western Science

THURSDAY EVENING

8:00 **TOPIC: UFOs: Separating Real Science from National Enquirer Reports** (Hellyer, Clark, Swanson, Alexander, James Carrion (special guest, International Director of Mutual UFO Network, Wood Moderator)

FRIDAY MORNING, JUNE 27

9:00 ANNOUNCEMENTS

THEME: REMOTE VIEWING AND PK ACROSS SPACE AND TIME

- 9:10 Paul Smith, Why ESP is Consciousness' Only Hope
- 9:50 Courtney Brown, Quantum Mechanics, Remote Viewing, and Time: Wheeler's Delayed-Choice Experiment in a Macro Environment

- 10:10 Garret Moddel, Can You Still Win Yesterday's Lottery? or Retrocausation: Is it Compatible with Known Physics?
- 10:30 BREAK
- 10:50 Dean Radin, Gazing at the Mind's Eye
- 11:30 R.G. Jahn*, E.B. Fassassi, J.C. Valentino, and E.S. Hoeger, Random Robot Redux: Replications and Reflections
- 11:50 Roger Nelson, The Global Consciousness Project: Findings in the Event Experiment
- 12:10 John C. Valentino, Beyond the Laboratory: Preliminary Findings in a New Phase of Random Event Generator Applications

FRIDAY AFTERNOON - OUTING

12:30 Board the buses for the afternoon outing with boxed lunches 4:30 Board the buses for return to hotel

FRIDAY EVENING

7:30 **TOPIC: Remote Viewing the Future: Hot Controversies** (Hein, Radin, Smith, Graff, Brown, Moddel moderator)

SATURDAY MORNING, JUNE 28

8:50 ANNOUNCEMENTS

- THEME: CONSCIOUSNESS AND PHYSIOLOGICAL CONTROVERSIES
- 9:00 Henry H. Bauer, Straightforward and Obvious Disproof of HIV/AIDS Theory
- 9:20 Joie P. Jones, An Extensive Laboratory Study of Pranic Healing Using Cells in Culture Subjected to Gamma Radiation
- 9:40 Joie Jones and Yury Kronn*, Receiving, Recording and Transmitting Remote Healing Intent Using a Technological Interface
- 10:00 Joie P. Jones* and Young K. Bae: The Imaging of Acupuncture Points and the Characterization of Signal Pathways Using fMRI and Quantitative Ultrasonic Methods
- 10:20 BREAK
- 10:40 Dick Blasband, An Anomalous Legal Decision

- 11:00 Beverly Rubik, Does Gamma Brain Wave Emission Correlate with Higher Consciousness?
- 11:20 Lucas Portelli*, Kevin McCabe, Mark Hernandez, Frank S. Barnes, Reduction of Pathogen Load by Applying Non-Invasive Low-Frequency Electric or Magnetic or Electromagnetic Fields
- 11:40 LUNCH BREAK

SATURDAY AFTERNOON

THEME: MICRO-ON-MACRO INFLUENCES

- 1:30 <u>Bernard Haisch</u>, Quantum Mechanics and Consciousness: A New Measurement
- 2:10 Imants Barušs, Toward a Post-Quantum Theory of Consciousness
- 2:30 J. Kenneth Arnette, Philosophical Substance Abuse: Distorting Descartes and Dismissing Dualism
- 2:50 Tom Dykstra, Protein Semiconductors in Relation to Insect Olfaction
- 3:10 BREAK
- 3:30 Charles F. Emmons, Phenomenological and Objective Methods in Consciousness Research: The Case of Spirit Mediumship
- 3:50 Larry Goldberg, Self-Organization, Quantum Computation, and Conscious Choice
- 4:10 Richard Shoup, The Constants, Reductionism, and the Ultimate Origins
- 4:30 BUSINESS MEETING
- 5:10 ADJOURN

SATURDAY EVENING - BANQUET

6:30 BANQUET:

Bill Bengston: Some Patterns of the Acceptance of Anomalous Phenomena: A Survey of SSE Members Bob John: Fourth of July Speech

Bob Jahn: Fourth-of-July Speech

Poster sessions: Members with posters can interact with others in a nearby private room when no meeting sessions are active.

Underlining identifies invited speakers. * shows who speaks

Dinsdale Award Lecture

Jerome Clark

Abstract:

The long debate about the existence or nonexistence of extraordinary phenomena, from supernatural entities and fantastic monsters to mystery airships and UFOs, has long been predicated on an unexamined literalism. Either these things exist, it is presumed, or they are the products of error and deception. To a degree, this is a defensible approach. Beyond that, however, the frame of reference is woefully inadequate, failing to explain vividly felt encounters with otherworldly beings and beasts which over all of history human beings have experienced, even as no compelling evidence of their presence in consensus reality has ever emerged. Clark's lecture discusses anomalous events vs. experience anomalies, which – though epistemologically unrelated –have a curiously parasitic relationship, and calls for a radical new understanding of the strange occurrences that have plagued, infuriated and fascinated human beings at all times and places.

About the author:

Jerome Clark has been interested in anomalistics all his life. He is the author of nearly 20 books on the subject, including the multi-volume *UFO Encyclopedia* (1990-1998), and has won a number of literary prizes, including the Benjamin Franklin Award (twice) from the Publishers Marketing Association for lead titles in the Popular Science and Environment category.



He has been an editor of *International UFO Reporter* for more than two decades and has served on the board of the Center for UFO Studies for as long. He worked on the editorial staff of the popular paranormal monthly *Fate* between 1976 and 1989. Recently, he returned to the magazine as book-review editor. Besides his work in ufology and Forteana, he is a music critic and songwriter who has had songs placed with popular country and folk performers including Emmylou Harris, Tom T. Hall, Seldom Scene, Mary Chapin Carpenter, and others. He lives in southwestern Minnesota

Evaluation of Two Original-paper 'Leaked' UFO Documents Robert M. Wood

Abstract:

Skeptics in the UFO community have often claimed that "leaked" documents can be fabricated, then copied, and therefore the researcher is unable to establish provenance or authenticity. This author happens to have obtained two documents on original paper, thereby permitting the use of forensic techniques for dating.

One document is entitled "An Encyclopaedia of Flying Saucers", written by New Yorker Vernon Bowen in the mid 1950s and subsequently lent to the military allegedly for review and approval prior to publication. It was returned from an Army FOI (Freedom of Information) office at Fort Meade, Maryland to a mailbox in 1999, and was classified either Confidential or Top Secret/Majic on pages dealing with the Air Force. In addition, numerous pen and pencil notations were made on the original pages, and these have been dated according to first available use of the inks involved. Several of the handwritten notes strongly support the hypothesis of a strong, sophisticated program to study UFOs and to be kept from the public.

A second document, called "The Burned Memo" because there are clear burn marks evident where it was apparently pulled from a fire, identifies a number of code word projects from the Nixon era, some of which are known and now unclassified and some of which are unknown and possibly still classified. The inferences of keeping JFK and the public in the dark about these programs are, if true, discomfiting. Each of the eight tab pages will be discussed. Some of the projects mentioned seem to deal with consciousness research.

In conclusion, the evaluation of the two "originalpaper" documents strongly supports the hypothesis that there was a high level UFO research or control program called MJ-12 using the code word Majic.

Robert M. Wood

About the author:

Dr. Bob Wood was graduated from the University of Colorado's Aeronautical Engineering School, and went to Cornell to obtain his PhD in Physics, with oral exams by Philip Morrison, Jim Krumhansl and Bill Sears of the aeronautical school there. Bob spent 43 years working for one company (Douglas, then McDonnell Douglas – now Boeing) in a wide variety of classified and unclassified research management situations. It was in the late 60s that he became aware of the potential importance of the UFO issue and was involved both in some attempts to explore breakthrough technology (unsuccessful) and a short foray into remote viewing. He became aware of the Society for Scientific Exploration and has served on the Council for a total of 8 years. Active locally in numerous non-profit activities, he has been asked to be the Program Chair for the Boulder meeting.



SEEKING to INTERVIEW RESEARCHERS
who are involved in topics related to Consciousness and/or survival (whatever your views).
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Charles F. Emmons, Prof. of Sociology, Gettysburg College
(For post-conference contacts: email cemmons@gettysburg.edu)
SSE Member
Sabbatical Project: "The Scientific Search for Spirit"



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CPAK 2008 - PRESENTED BY THE BINARY RESEARCH INSTITUTE

UFOs: The Good News and the Bad News John B. Alexander

Abstract:

This presentation addresses both the overwhelming evidence supporting the physical reality of UFOs and how institutions respond. A central thesis is that the U.S. Government is not involved in UFO research. That statement is made after many years of direct involvement in the field and attempts to interest various organizations in conducting appropriate studies. This includes firsthand experience in briefing senior leaders in many governmental and civilian industrial organizations.

Included in the presentation is a description of activities designed to create Congressional Hearings on the topic. While there was such a proposal from a Congressman in position to initiate hearings, powerful opposing forces were encountered. However, once the UFO proponent group, The Disclosure Project, held their noisy accusations at the National Press Club in Washington in 2001, all existing support quickly dissipated.

Addressed are the basic problems in reasoning espoused by many UFO enthusiasts. Most pronounced is their inability to distinguish between the personal interests of government employees and official organizational involvement in the topic. There are many people in government positions that have had personal observations of UFOs. That, however, does not translate into official programs based on established requirements to either collect data or conduct research on the topic. Despite extensive evidence of national security implications from UFO interactions, and dangers to commercial aircraft, there is a total lack of institutional support for research. Given the severe budgetary constraints imposed by the war in Iraq, propensity for new research is likely to get worse. Unfortunately, we are still living with the effects of the fatally flawed Condon Report.

About the author:

John B. Alexander, Ph.D., Full SSE member and Councilor

Will It Be Star Wars or Star Dreams?

Paul Hellyer

Abstract:

Now that we know space ships from other planets have been visiting Earth for decades, if not centuries or millennia, we Earthlings are faced with serious choices. If we extend the "welcome mat," instead of treating the visitors as "enemy aliens," we can learn from them and cooperate beneficially.

That is only the beginning, however. The opportunity to extend our scientific knowledge in many fields is so vast that it is impossible to catalogue. It may be necessary to begin our quest by unlearning some of the "truths" we were taught, to clear the deck for exploration of the broader reality.



Paul Hellyer

About Paul Hellyer:

Hon. Paul Hellyer was first elected in 1949. He subsequently held senior posts in the governments of Lester B. Pearson and Pierre E. Trudeau who defeated him for the Liberal Party leadership in 1968. The following year, after achieving the rank of senior minister, later designated Deputy Prime Minister, Hellyer resigned from the Trudeau cabinet on a question of principle related to housing.

A man of many interests, Hellyer's ideas are not classroom abstractions. He was born on a farm and his business experience includes manufacturing, retailing, construction, land-development, tourism and publishing. This multi-faceted career, in addition to a near lifetime in politics, gives Hellyer a rare perspective of world events.

In recent years Paul Hellyer has become involved with the extraterrestrial presence and technology. He believes that the time has come for full disclosure of what governments know, and how far advanced they are in replicating the visitor's technology, especially in the field of energy.

Invisible Rocketry: How to Produce an Apparently Reactionless Drive without Violating Newton's Third Law York Dobyns

Abstract:

space propulsion studies, Advanced especially for interstellar travel, frequently examine the prospects of using antimatter as a fuel source. Most such studies presume a fairly "lean" mix in which antiprotons comprising a small fraction of the total fuel mass undergo annihilation in more complex nuclei, heating the fuel mixture to temperatures at which the exhaust velocity will be a significant fraction of c. The simple protonannihilation reaction antiproton unsuited to seems such applications since a majority of the energy in this reaction ultimately emerges in the form of neutrinos, which cannot readily be manipulated for thrust. However, this objection disappears if the proton-antiproton pair is accelerated to relativistic velocity before annihilation. Assuming the non-neutrino reaction products are captured and reprocessed for energy, the drag suffered from this capture will be less than the thrust applied to the initial pair, the remaining momentum being carried away by the neutrinos. The recoverable energy can be used to accelerate the next pair, leading to a closed-cycle process which generates thrust without requiring an exhaust port or producing a visible plume of reaction products. The fuel efficiency will depend on the proportion of the intermediate reaction products that have time to decay to neutrinos, which will in turn depend on the length of free path available for these reaction products to decay. Implications of this fuel and drive system for the hypothesis that some UFOs are ETI spacecraft are discussed. A direct empirical test of this hypothesis may be achievable by comparing the direction of observed UFO maneuvers with the locations and observation records of neutrino telescopes which have been operating for several decades.

About the author:

York Dobyns is a physicist (Ph.D. Princeton 1987) who spent 19 years as part of the Princeton Engineering Anomalies Research program.

Gravito-inertial Propulsion Effect Predicted by the BSM - Supergravitation Unified Theory Stoyan Sarg

Abstract:

The Basic Structures of Matter - Supergravitation Unified Theory (BSM-SG) is based on an alternative concept of the physical vacuum [1,2,3,4]. At the basic level the theory suggests a physical model of two fundamental particles associated with the Planck's scale parameters (time and length). In pure empty space, as assumed precondition of the physical vacuum, they interact by close range forces according to a law called Supergravitation (SG) and congregate in formations possessing vibration properties with embedded frequency ratio equal to the fine structure constant, ~ 1/137. Such formations are embedded in the superfine structure of the physical vacuum and the elementary particles. In the physical vacuum space, the SG forces are strong at atomic distances. The suggested model works well in different fields of Physics. It provides a relation between the electrical, magnetic and gravitational fields with new understanding of the gravity and inertia. The unveiled oscillating properties of the electron [5] permit understanding the physical mechanism of quantum mechanical interaction between the electrons in EM activated plasma and the physical vacuum. The new understanding about the physical vacuum allows predicting a possibility of unidirectional change the gravitational force acting on a material object. By proper modulation the parameters of the physical vacuum, the gravito-inertial mass of a specifically designed spacecraft would be reduced, so it could be accelerated with less energy. Technically the new space drive mechanism could be realized by electromagnetically activated neutral plasma surrounding the spacecraft. In such approach secondary effects, such as optical glow, hissing noise, light bending and disturbed propagation of EM waves and Earth magnetic field would take place in the surrounding zone. In atmospheric environment, the spacecraft may exhibit a reduced turbulence since the mass of the air molecule should be also affected. The predicted space drive should work also in a deep space. In this case a gas cloud surrounding the spacecraft is necessary. Initial laboratory experiments confirm some of the predicted effects, such as, weak propulsion, optical glow, hissing noise and reduced turbulence. Extensive research in this new field is still necessary.

About the author:

Stoyan Sarg, Toronto, Canada s.sarg@helical-structures.org References:

- 1. S. Sarg, New approach for building of unified theory, may 2002 http://lanl.arxiv.org/abs/physics/0205052
- 2. Stoyan Sarg, *Basic Structures of Matter Supergravitation Unified Theory*, Trafford Publishing, 2006, ISBN 1412083877
- S. Sarg, BSM-SG Unified Theory, IX International Scientific Conference, Space, Time, Gravitation, 7-11 Aug 2006, St. Petersburg, Russia. (Conference Proceedings, 2007).
- 4. Books review in Physics in Canada, v. 62, No 4, 206-207, (2006)
- S. Sarg, A physical model of the electron according to the Basic Structures of Matter Hypothesis, Physics Essays, vol. 16 No. 2, 180-195, (2003)

What Remote Viewing Tells Us about Extraterrestrials and UFOs

Simeon Hein

Abstract:

Since the inception of the military remote viewing program in the 1970's, remote viewing has been used by government and civilian viewers to learn about a range of phenomena including esoteric subjects. This has sometimes included viewing of extraterrestrial activity and UFOs. Some of the original military and SRI viewers, including Pat Price and Ingo Swann, viewed such subjects either for their own interest or, unofficially, for the U.S. Government. Many civilian viewers and groups, like the Farsight Institute, viewed the same phenomenon from many different perspectives. Recent RV activity has focused on more specific aspects of the phenomena like UFO crash retrievals. What do these RV sessions tell us about the nature of the UFO phenomenon and the extraterrestrial presence. Is the data from such research scientific or accurate? Can it be verified? This talk will focus on showing what such remote sessions look like, what their defining characteristics are, whether we should trust such data, and what this information suggests about a possible extraterrestrial presence on Earth

About the author:

Simeon Hein, Ph.D. Institute for Resonance <u>www.LearnRV.org</u> Boulder, CO 80302 303 440-7393

Dr. Simeon Hein has Ph.D. in sociology. His areas of interest include nonlinear research methods, complexity theory, and subtle energies. He has taught Resonant Viewing at the Institute for Resonance since 1997. His books include *Opening Minds: A Journey of Extraordinary Encounters, Crop Circles, and Resonance* and *Planetary Intelligence*.

Exploring the Boundaries of Perception Dale E. Graff Sponsored by Harold Puthoff

Abstract:

I examine a range of unusual experiences to identify common elements and consider interpretations that may differ from those of the experiencer. A study of these experiences also provides insight into the boundaries of perception and the dualities of sensing and knowing.

These experiences include apparitions, hauntings, out-of-body experiences, near-death experiences, synesthesia, spontaneous healings, UFO sightings and abduction accounts. They are from personal incidents reported to me through numerous workshops and seminars and from my own informal experimental investigations and spontaneous experiences. Some insights regarding UFO incidents are from my access to the Project Blue Book files and the UFO hot line reports when employed by the Air Force as a civilian physicist at the Foreign Technology Division (FTD), from discussions about an astronaut's UFO sighting when I was an aeronautical engineer on the Gemini space program and from my position as Chief of the Advanced Concepts Office when preparing responses to queries about UFO sightings and other unusual incidents sent to the Defense Intelligence Agency (DIA).

In my search for elements common to various unusual experiences I found that trauma had a role in some of the experiences and how they were perceived. Some had a symbolic or archetypal significance and some resembled lucid dreams. Some of the common elements were structural and had similar visual dynamics such as grids, and rotating indistinct imagery. I discuss the possible implications of these visual dynamics from a pattern recognition perspective and examine factors that relate to shifts in the boundaries of perception. I suggest that the mental state of lucid dreaming provides a convenient reference for evaluating a variety of experiences and discuss the role that psi, especially telepathy, has for various unusual experiences.

Different modes of psi such as telepathy, clairvoyance, remote viewing, precognition and macropsychokinesis (macroPK), support a holographic interpretation of reality. An interdisciplinary study of the boundaries of perception can lead to new paradigms for understanding the conscious-subconscious domain. Understanding macroPK from a holographic viewpoint may provide clues into material transfer mechanisms.

As we learn more about the boundaries of perception and our subconscious, our psyche, the more feasible it will be to understand a variety of experiences and to know when psi contact with others, either from terrestrial or from non-terrestrial sources has occurred.

About the author:

Dale E. Graff 230 St. Michael's Road Hamburg, PA 19526-8002 Email: mtnviewer@dalegraff.com BS Aeronautical Engineering; MS Physics 10 Years with Aerospace Corporations 30 Years in Technical Intelligence (FTD, DIA) Remote Viewing Research/Applications (Stargate) 1976-1993

Web Site: www.dalegraff.com

The Human Side of UFOs: Gifts and Challenges of Individuals Who Report ET Encounters Shelley Tanenbaum Sponsored by Robert G. Jahn

Abstract:

There are intelligent and gifted adults and children who are marginalized because our current paradigm has no place for them. These individuals report experiences of ET abduction that are both traumatizing and transformative – challenging our concepts of time, space, material existence and religious and/or spiritual beliefs. In the early 1990's, Dr. John Mack, an internationally respected Harvard psychiatrist was confronted by this ontological dilemma and chose to learn from these people instead of dismissing or pathologizing them.

This presentation will not attempt to prove or disprove that people have been abducted by aliens. Instead, it will focus on a list of gifts and challenges that are common among "abductees", based on my work with Dr. Mack and subsequent contact with this extraordinary group of individuals. The list was written for those who report this phenomenon as well as those who wish to understand and appreciate this group more fully. Copies of the list will be available at the presentation.

We who wish to comprehend the mysteries of the Universe and our own existence must at times suspend disbelief and enter into a real dialogue that dares to hold the impossible. In our listening, greater truth can be revealed to us all.

About the author:

Shelley Tanenbaum, PsyD., John E. Mack Institute (formerly PEER, the Program for Extraordinary Experience Research). Dr. Tanenbaum is a clinical psychologist, senior Hakomi therapist and creator of Intuitive Life Movement[™]. She currently resides in Boulder, CO.



The Common Elements of Parapsychology and UFO Experiences: Lessons for Physics

Claude Swanson

Abstract:

There are many common phenomena which are observed in UFO research and parapsychology. These include the out-of-body experience, time travel (both in consciousness and physical), levitation, telepathic communication, psychokinesis, and experiences in higher dimensions with lessons about the soul and reincarnation. Many of these phenomena cannot be explained by current physics, and call for a reconsideration of some of its foundational assumptions.

"Best evidence" will be reviewed for many of these phenomena, summarizing the new principles which appear to occur. The beginnings of a theoretical model will be discussed which may be able to address these anomalies, and an application of the model to some typical cases will be discussed.



Claude Swanson

About the author:

Dr. Swanson was educated as a physicist at MIT ('69) and received his Ph.D. in physics from Princeton University (1976). He has worked as a consultant in applied physics for more than two decades, as well as pursuing research into the physics of anomalous phenomena. His primary interest is in identifying areas of anomaly and developing an expanded physics model which can account for such phenomena. He has written a book, "The Synchronized Universe-New Science of the Paranormal," summarizing some of his findings.

Website: www.SynchronizedUniverse.com.

Effects of Distant Group Intention on the Growth of Seedlings¹

Gary E. Schwartz*, Mark Boccuzzi, Lynne McTaggart, and Melinda Connor

Abstract:

As reviewed in The Energy Healing Experiments (Schwartz, 2007) and The Intention Experiment (McTaggart, 2007), a body of evidence exists suggesting that human intention – both individual and collective – can have local and distal effects on living systems. With the emergence of Intention Experiments workshops conducted by L. McTaggart (www.theintentionexperiment.com) it became possible to conduct doubleblinded experiments on the effects distant group intention on the growth of barley seeds. Six experiments (one in Europe, four in the US, one in Australia) involving a total of 1940 subjects attempted to increase the growth of barley seeds tested at the Laboratory for Advances in Consciousness in Health at the University of Arizona in Tucson. Each barley seed experiment consisted of a 5 day double-blinded condition and a separate 5 day non-blinded control condition. Each testing condition consisted of four sets of seeds (A, B, C, D), n=30 seeds per set. On the double-blinded intention days, the experimenter prepared the four sets of randomly selected seeds, photographed each set of seeds, and emailed the photos to McTaggart at the workshop site. A member of the audience selected one of the sets (A - D) to be the set targeted for increased growth. A group intention protocol described in McTaggart (2007) was employed for ten minutes while the subjects saw an image of the seed set that had been selected projected on a screen. After the distant group intention intervention, the experimenter (who was kept blind to the set selected), planted the 120 seeds under standardized conditions. At the end of 5 days, the seeds were harvested and their lengths measured in mm. As a second control condition, on separate weeks 120 seeds were selected and placed into four sets, planted, and harvested after 5 days, but no distant group intention was involved. The total number of seeds tested was n=1440. A complex analysis of variance with Experiments (1-6), Intention (targeted growth versus not-targeted), and Day (intention day versus control day) was performed. The main effect of Day was highly significant (p<.0000001) as was the Intention by Day interaction (p<.003). A separate analysis of variance revealed that the Intention effect was significant for the intention day (p<.007) but not the control day (p = .205). Over the six experiments for the 5 day double-blinded intention condition, the mean intention targeted seeds grew 56 mm compared to 48 mm for the non-targeted seeds. For the 5 day non-intention control condition, the matched "targeted" set was 38 mm compared to 40 mm for the matched "non-targeted" control seeds. These data suggest that distant group intention can have selective effects on increasing the growth of seeds.

About the author:

Gary E. Schwartz is a Professor of Psychology, Medicine, Neurology, Psychiatry, and Surgery, and Director of the Laboratory for Advances in Consciousness and Health, at The University of Arizona in Tucson. He is also Corporate Director of Development of Energy Healing at Canyon Ranch.

¹This research was funded by a grant from the Canyon Ranch Institute.

Intent and the Process of Becoming Conscious: A Phenomenological View

Peter Moddel Sponsored by Garret Moddel

Abstract:

Although it seems reasonable to assume the world exists independently of our witnessing it, there is reason to suggest the contrary. Everything we know is formulated in terms of concepts. That is how we bring things to consciousness and think about them. But concepts are formed in the mind and therefore all we know about the world is, to some degree, a mind creation.

To approach the question of how the world must be without the intervention of mind, specific moments in the process of concept formation need to be elucidated. To say this more succinctly: to understand *objectivity*, *subjectivity* needs to be better understood.

What actually happens when something is observed? Or the same question in different terms: what goes on during a moment of consciousness? A step towards an answer is the realization that conscious rational thought, which deals in concepts, is itself incapable of formulating concepts. In consciousness, thoughts succeed one another. To form a concept, instead of sequencing there needs to be an interpenetration of many potential impressions.

The ability to perform an act, say stirring your coffee, requires the influx of innumerable past experiences that blend and come to expression in the effortlessness accomplishment of the task. In a parallel manner, myriad impressions and associations coalesce to give rise to an object that registers in conscious thought. There is a coming together and when it reaches the 'crunch', the moment of fusion, consciousness enters and presto: there is a subject acknowledging an object. We are not privy to the transformation of many to one and become aware only at the completion of the task, as the concept of some object alights in our mind. Out of a non-conscious process, consciousness arises together with a) the first person perspective, b) the observed object and c) the observing subject. The mind performs consciously and unconsciously in tandem.

And what guides such a process? What can there be that prevails over the working of the out-of-conscious mind and sets the process of cognition in motion fusing qualities into an object of perception? To name it, no novel terminology is needed. We constantly mention it, referring to it as *intention*. *Intent* is the impetus to form meaning or to perform a specific act. Ignored in classical science and without a place in cybernetic emitter/receptor descriptions of communication, the ubiquity of intent has been left unacknowledged and yet without it, no unit of meaning would enter our minds and we would be zombies in a world totally out of reach.

Terms implying intent are commonly employed when describing the mind and the natural world. Rather than being a case of the speaker resorting to personification, one can argue that, in fact, intent is a constituent part of what is being described.

About the author:

Peter Moddel lives in Fribourg, Switzerland. Email: p@moddel.net

Functional Magnetic Resonance Imaging and Electroencephalographic Evidence of Correlated **Brain Signals Between Physically and Sensory Isolated Subjects**

Todd Richards

Abstract:

Studies reporting the existence of anomalous correlated brain signals in pairs of physically and sensory isolated humans have appeared scarcely but consistently in the scientific literature for the last 40 years. We present evidence that Functional MRI and electroencephalographic (EEG) methods can be measure correlated brain signals used to between individuals who are physically isolated but who are "connected".



In one of our studies, eleven healers sent forms of distant intentionality (DI) that related to their own healing practices at random intervals to the recipient who was in the fMRI scanner. Significant differences in brain signal between experimental (send) and control (no send) procedures were found (p = 0.000127). Areas activated during the experimental procedures included the anterior and middle cingulate area, precuneus, and frontal area. It was concluded that instructions to a healer to make an intentional connection with a sensory isolated person can be correlated to changes in brain function of that individual.

About the author:

Dr. Todd Richards is professor of radiology at the University of Washington. He performs neuron-imaging research related to consciousness, learning disabilities, pain, and chemical abnormalities in the brain. He teaches classes in advanced MR imaging techniques such as functional brain imaging, diffusion tensor imaging, perfusion imaging, and MR spectroscopic imaging.

Email: toddr@u.washington.edu

Water Memory: Carrier of Conscious Intention Glen Rein, PhD

Abstract:

The ability of water to store information has been postulated to parallel quantum information storage in contemporary quantum computers (Ahn, 2000). In addition to chemical information storage utilized in homeopathy (Thomas, 2007), EM fields can also be imprinted into water (Rein, 1992; Smith, 2004). EM information storage has been used as a mechanism to explain how EM fields influence biological systems, since direct experimental data indicates EM-treated water can produce biological effects weeks long after the source has been removed (Fesenko, 1995).

Similar experiments are reported here using a healing-arts practitioner as the source of bio-energy. Human lymphocytes were used as the biological target in these experiments. Lymphocytes were partially purified from freshly drawn human blood obtained from a local blood bank. Lymphocytes were fed with commercial tissue culture medium and maintained in a typical CO2 incubator. Lymphocyte proliferation was measured 24hr after incubating cultures with radio-labeled thymidine (which is incorporated into DNA).

Data presented here demonstrate that Dr. Leonard Laskow could imprint water (in tissue culture medium) with different intentions. Tissue culture medium treated with a stimulating intention produced a marked increase in cell proliferation when added to cultured lymphocytes. A decrease in cell proliferation was observed when the intention was to reduce the number of cells. The magnitude of these effects was between 25 and 40% relatively to untreated controls. Statistical significance was reached at the 0.01 level. The results indicate that specific conscious intentions can produce polarity-specific biological effects and that this information can be stored in water for weeks. References:

- Ahn J. "Information storage and retrieval through quantum phase." Science. 2000; 287:463-5.
- Fesenko EE et al "Preliminary microwave irradiation of water solutions changes their channel-modifying activity". FEBS Lett 1995; 366:49-52.
- Rein G. "Storage of non-Hertzian frequency information in water". Proc Internat Tesla Soc. 1992; S. Elswick, ed. Internat Tesla Soc Pub, Colorado Springs, CO.
- Smith CW "Quanta and coherence effects in water and living systems". J Altern Complement Med. 2004; 10:69-78.
- Thomas Y. "The history of the Memory of Water." Homeopathy.2007;96:151-7.

About the author:

After becoming an Assistant Professor at Mt. Sinai Medical School, Dr. Rein left academia and founded the Quantum Biology Research Lab (PO Box 428, Ridgway, CO 81432) with the help of a grant from the Fetzer Institute. His research has since focused on characterizing non-classical forms of electromagnetic energy by virtue of their effects on biological systems and water.

An Investigation into Repeated Exposure to Hemi-Sync® Technology in Controlled Workshop Environments Cam Danielson

Abstract:

The Monroe Institute (TMI), through its patented sound technology, has demonstrated changes in focused states of consciousness for thousands of individuals over the last 30 years. While ongoing research at the Institute on the nature of different states of consciousness is yielding rich insights into human development, a continuing challenge for the leadership of TMI is to understand how repeated exposure to Hemi-Sync® technology in controlled workshop environments affects the quality of individual lives. Does repeated exposure to TMI programs increase the capacity of the participants to deal with the demands of their lives in terms of doing meaningful work, developing and supporting mutually rewarding relationships, and in acquiring skills and attitudes that provoke continual growth and development?

Analysis of responses from more than 700 TMI program participants to demographic, psychographic (including personality typology), and program effect items demonstrated statistically significant differences in self-efficacy and life satisfaction between those having only attended the initial program – Gateway Voyage – and those attending 3 or more programs.

The findings indicate that individuals choosing to attend TMI have a predilection for transformational growth – the radical, vertical leaps in being as opposed to the less risky, more pragmatic, horizontal extensions of being. A challenge of this orientation is finding effective means for managing the tension between what is and what could be. To look too closely for too long at the limitations in "the way things are", particularly when tolerance is low to begin with based on personality typology, can create bruised sensitivities, alienation, and despair. In effect, why would people with this orientation find much to be happy about?

Based on the statistical analysis which clearly indicates respondents who have attended multiple programs have a higher degree of self-efficacy and life satisfaction, the answer to the question of happiness could be a state of ego development beyond self-authoring; a movement towards what Robert Kegan calls self-transforming. The results of this study indicates a group of individuals who recognize the limitations in any perspective and more willingly engage others for the challenge it poses to their worldview as the means for growing more expansive in their experiences – to consciously grow beyond where they are rather than merely having it happen to them as a function of circumstances.

Higher States of Consciousness Beyond Space and Time: A Comparative Perspective from Eastern Cosmologies and Western Science Maria Syldona

Abstract:

As Western science explores in order to discover the truth about the universe, and everything in it, so have Eastern science traditions explored for millenia. Though formulated distantly in time from each other, each in its own way has come to some strikingly similar discoveries and theories.

One of these Eastern science traditions, Kashmir Shaivism, is of particular interest to Western science. Among the most valuable contributions to developing insights into phenomena studied by Western science is the conceptualization of universal manifestation. Within it is a potential wealth of scientific insight. It describes in detail how a totally vibrational universe manifests into apparent physicality.

This model of the manifestation of the universe sheds light on phenomena beyond space and time, such as discovered in Western research on UFO's and REG's. It also illustrates parallels to quantum physics concepts such as the nature of sub-atomic particles/waves. Quantum processes involved in producing large amounts of energy and new sub-atomic particles have parallels here, as well.

Yet another important concept, holography, is represented in the manifestation model. This is reflected in the notion that human beings are holograms of the universe. Inherent in both the universe and humankind is not only the involutionary action that leads to manifestation, but also (and perhaps even more importantly) an evolutionary action to promote higher states of consciousness. Although this aspect of the model is profound within itself, it, too, has implications for contemporary Western science research. For example, the concept of transformation of energy is addressed, and along with it, the notion that <u>when a measurement is taken may mean the difference between measuring one type of energy, or a completely different kind.</u>

The parallels demonstrated serve to illustrate the potential value of the study of Eastern science traditions in furthering the pursuits of Western science. These tenets have obvious implications for the understanding of higher states of consciousness and evolution, both universal as well as human.

About the author:

Dr. Syldona's interdisciplinary background encompasses engineering, psychology, Eastern science traditions, electrophysiology and education. Her research experience includes post graduate work at Stanford and Brown Universities and SUNY Stonybrook. She has published research findings in several areas in peer-reviewed journals.



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Why ESP is Consciousness' only Hope

Paul Smith

Abstract:

In 1996 at the second Tucson consciousness Conference, Susan Blackmore maintained that psi tells us nothing about consciousness. I will argue that this claim is mistaken, and make a case for psi -- especially the form of ESP (or "anomalous cognition") -- as the last real defense available for resisting attempts to define all human mentality (including consciousness) as being strictly physical.



Paul Smith

About the author:

Paul H. Smith is a retired US Army intelligence officer and Desert Storm veteran, and an alumnus of seven years in the military's StarGate remote viewing program. He is author of "Reading the Enemy's Mind: Inside Star Gate -- America's Psychic Espionage Program" (a Readers Digest "Editor's Choice," and book bonus feature in the March 2006 issue). With undergraduate and masters degrees in Middle East studies, Smith is now a doctoral candidate in philosophy at the University of Texas at Austin, writing on philosophy of mind, philosophy of science, and consciousness. He is the president and chief instructor of the for-profit Remote Viewing Instructional Services, Inc., and is also this year's president for the non-profit International Remote Viewing Association.

Quantum Mechanics, Remote Viewing, and Time: Wheeler's Delayed-Choice Experiment in a Macro Environment Courtney Brown

Abstract:

Wheeler's delayed-choice experiment demonstrates that observation can influence the behavior of quantum phenomena backward in time. That is, prior to the time at which a decision is made regarding whether or not to observe a quantum phenomenon, the phenomenon's behavior is influenced such that it is in correspondence with the subsequent decision. Remote-viewing experiments have been conducted that parallel Wheeler's delayed-choice setup. In these experiments, remote-viewing sessions were conducted in a lengthy public demonstration of remote viewing using full scientific controls. Targets were chosen from a pool by a truly random and publicly known event after the remote-viewing sessions were conducted and the data made publicly available in encrypted format. Passwords to decrypt the remoteviewing data were made available online to the public only after the targets were assigned to all remote-viewing sessions, as determined by the publicly known random event. Thus, the target assignment process works by having a truly random process determine which target is assigned to each of the remote-viewing sessions, and this happens significantly after the times at which the remote-viewing sessions are conducted. While precognition is a frequently studied aspect of psi phenomena, this lengthy set of public experiments allows for the collection of a sizable body of data for each individual target using structured data-collection procedures under generally optimal viewing and experimental conditions. This enables a thorough objective and statistical comparison between the remote-viewing data and the target characteristics. The results of this set of experiments offer strong support for a quantum mechanism that mediates the remote-viewing experience, since no classical mechanism is known to be capable of replicating the phenomenon. This presentation proposes an explanatory linkage between the precognitive remote-viewing experience and Wheeler's delayedchoice experiment.

About the author:

Courtney Brown, Ph.D.

The Farsight Institute (remote-viewing) Emory University (separate affiliation: mathematics and political science) Web site: <u>www.courtneybrown.com</u>

Can You Still Win Yesterday's Lottery? or Retrocausation: Is it Compatible with Known Physics? Garret Moddel

Abstract:

In a recent issue of New Scientist (April 5, 2008, p. 39) the process of precognition is described as Class III physical impossibility, meaning that if it existed, "it would represent a collapse of the foundations of physics." Yet, ample experimental evidence exists for precognition (knowing of an event in advance of its occurring), including precognitive galvanic skin response to emotive images and to loud noises, precognitive EEG response to light flashes, observation of presentiment in the brain using fMRI imaging, and much more. How precognition can be made consistent with known physics – and logic – is the subject of this presentation.

A similar apparent contradiction arises with regard to retro-psychokinesis (affecting the outcome of an event that has already occurred). In accordance with the "bilking paradox" one cannot make a change in that past that could block one's present existence (killing one's grandfather in his youth is the common example). And yet, ample experimental evidence for this too exists, including post-determination of prerecorded clicks on an audio tape, modification of previously logged outputs of electronic random number generators and a random mechanical cascade, and more.

Must we upset the applecart and retract physical law as we know it? There are two parts to the answer. The first – and easier part – is to consider whether physical phenomena are time-symmetric: When a film of billiard balls colliding is played backwards, are the laws of motion obeyed? Can electromagnetic emission and absorption be viewed as being time-symmetric? The answer to both is yes.

The second part to the answer is in regard to whether time's arrow can be reversed. The direction of this arrow is defined by the natural tendency for a system to drift to a state of greater randomness, i.e., greater entropy. Does this fundamental tendency allow for retrocausation? The answer for *physical* systems is yes, as long as the process results in a greater randomness despite the retrocausal influence. For example, it is theoretically possible for a subject to reduce the randomness in the output of a random number generator retrocausally because the overall process still increases the total entropy.

More subtle is the question of whether *information* can be passed backwards in time and used to make physical or mental changes. It turns out that the bilking paradox can be resolved, again using entropy, but information entropy rather than thermal entropy. The solution is that retrocausation should not be looked at as a binary process – either total control of the past or none. Instead, the *degree* to which retrocausation is allowed equals the degree to which it cannot cause bilking, and this is described using information entropy. It is possible to define clearly how much information can be transmitted backwards in time.

One outcome of this analysis is that one cannot treat the information transmitter, the channel, and the receiver independently. These three entities comprise a fundamentally interconnected system.

About the author:

Garret Moddel, University of Colorado, Boulder, CO 80309-0425; moddel@colorado.edu

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Gazing at the Mind's Eye

Dean Radin

Abstract:

Two experiments were conducted to explore the nature of the mind's eye. In one, an eyetracking system was used to test whether seers could "see" the future. In another, meditators and non-meditators were asked to use their mind's eye to perceive a beam of photons in a distant, light-tight optical apparatus. Both experiments provided intriguing glimpses of the role of the human mind in weaving the fabric of reality. A third experiment, still under way, is designed to test whether the mind's eye can influence the speed of light.



Dean Radin

About Dean Radin:

Dean Radin, PhD, has been Senior Scientist at the Institute of Noetic Sciences since 2001. He also holds an adjunct appointment at Sonoma State University and is on the Distinguished Consulting Faculty at Saybrook Graduate School. His initial career as a concert violinist was diverted into science after earning a Masters degree in electrical engineering and a PhD in psychology from the University of Illinois, Champaign-Urbana. For a decade he worked on advanced telecommunications R&D at AT&T Bell Laboratories and GTE Laboratories; for over two decades years he has focused on consciousness research at Princeton University, University of Edinburgh, University of Nevada, and three Silicon Valley think-tanks, including SRI International, where he worked on a classified program investigating psi phenomena for the US government. He is author or coauthor of over 200 technical and popular articles, a dozen book chapters, and several books including the bestselling The Conscious Universe (HarperOne, 1997) and Entangled Minds (Simon & Schuster, 2006). He has appeared on television shows as diverse as *Oprah*, Larry King Live, and the BBC's Horizon, and has presented lectures in venues ranging from the physics department at Cambridge University to Google headquarters.

Email: dean@noetic.org

Random Robot Redux: Replications and Reflections

R.G. Jahn*, E.B. Fassassi, J.C. Valentino, and E.S. Hoeger

Abstract:

A previous program of human/machine anomalies experiments utilizing a randomly driven mechanical robot has been extended with a sequence of new trials specifically addressing particular physical and subjective correlates. Despite the modest size of this database, acquired under less than ideal laboratory conditions, the absolute and statistical scales of the anomalous effects well exceed those typical of experiments of this class. Beyond gross replication of the earlier results, the new data display structural aspects that offer additional insights into the fundamental nature of such mind/matter phenomena in general, and suggest potential pragmatic applications in various technical practices. Details of the results and their interpretations will be included in the presentation.

About the authors:

R.G. Jahn, E.B. Fassassi, J.C. Valentino, and E.S. Hoeger are affiliated with Princeton Engineering Anomalies Research and International Consciousness Research Laboratories

* Presenter

The Global Consciousness Project: Findings in the Event Experiment

Roger Nelson

Abstract:

A 10-year database of random trials in continuous parallel sequences generated in a world-spanning network has a rich potential for analysis of factors that might affect physical randomness. The design of the Global Consciousness Project (GCP) successfully shields the data from environmental influences like temperature and electromagnetic fields, but the vetted, normalized database can be probed for responses to a variety of other geophysical influences. However, our primary analyses apply to factors that are psychological and sociological. In particular, the formal "event experiment" is a replication series comprising a composite test of the general hypothesis that *there will be non-random structure in the GCP data collected during major world events*.

As of June 2008, we have examined about 250 events, and find structure associated with them, in confirmation of the composite hypothesis with million to one odds against chance. We can infer that this is related to human consciousness because the GCP data are affected during times of importance to people. A particular case is structure found during destructive earthquakes on land where they matter to humans, but not when the quakes are in the oceans. We see changes in the data when many people are focused on an event, sharing thoughts and especially emotions, indicating that some form of coherent interconnection is fundamental. We see a significant link with emotions. Large effects arise only for strong emotions, and the most powerful effects are produced by events that evoke or embody either fear or compassion.

We have determined that events engaging large numbers, millions of people, reliably show larger effects than those attracting attention from thousands or tens of thousands. The effects are driven by pair-wise correlation of the REG devices during events. We have identified multiple independent response measures which show deviations tracking the same global events. These include Network Variance and Covariance, and anomalous time and distance relationships for the measures.

Among the questions we are actively pursuing are indications that the GCP network response may begin minutes or hours before an event. We are looking carefully at an apparent distance scale for the correlations between REGs in the network, and at the possibility there may be a time-symmetrical response to the events. Other questions that deserve attention are significant long term trends in our measures that may reflect a collective mood or attitude prevailing over months and years, and suggestions of regular correlations for an exact 24-hour cycle but not for slightly longer or shorter artificial "days", which may reflect a persistent, general effect of human consciousness.

About the author:

Roger Nelson, Global Consciousness Project http:/noosphere.princeton.edu <u>rdnelson@princeton.edu</u>

Beyond the Laboratory: Preliminary Findings in a New Phase of Random Event Generator Applications

John C. Valentino Sponsored by: Robert G. Jahn

Abstract:

The launch of *Psyleron*, an organization that provides Random Event Generator devices, software, and data processing services to research laboratories, corporate enterprises, and home users, has enabled new opportunities for rapid data acquisition and enhanced practical understanding of the underlying phenomena. Online data collection makes it possible for multiple simultaneous operators to generate large databases and to explore variables on a scale not previous possible. The combination of subjective and objective correlations being reported by the users adds to the knowledge base regarding the enhancement of the anomalous effects under study, providing new insights and suggesting new applications for these devices. After an overview of the composite effort, the presentation will focus on preliminary findings, how they relate to conventional assumptions about such effects, and their implications for future research and beneficial deployment.

About the Author:



As a young intern at the PEAR lab, Valentino involved himself in developing new REG hardware and software, analyzing experiments, and engaging others in consciousness research.

While pursuing an education in business and engineering, he remained actively involved as an operator-experimenter and came to believe that progress in this field would require a new approach to REG studies. This led him to found *Psyleron*, where he has served as CEO since 2005.

Straightforward and Obvious Disproof of HIV/AIDS Theory

Henry H. Bauer

Abstract:

Infection by HIV is supposedly followed by a "latent period" of roughly 10 vears before symptoms of illness--AIDS--appear. At the beginning of the AIDS era, in the early 1980s, the appearance of those symptoms was followed quite soon by death, within months or at most a year or two; so life spans following the initial infection would have averaged 11 or 12 years. AZT, the first anti-AIDS drug to be approved by the FDA, was introduced in 1987. It was supposed to stave off death by maybe as much as a year or so; the drug itself is highly toxic, but even a few extra months of life were regarded at the time as a worthwhile benefit. So from 1987 on, life spans after infection should have been maybe 13 or 14 years instead of 11 or 12. In 1990, AZT began to be given to HIV-positive people before they showed symptoms of AIDS, in order to extend the latent period. So from 1990 on, life spans from the time of infection should have increased again, to more than 15 years or so. In the mid-1990s HAART--Highly Active AntiRetroviral Treatment--was introduced; it involves so-called "cocktails" of several drugs, each drug being administered at considerably lower doses than had been used in AZT monotherapy. It's not uncommon to see HAART described as "life-saving" and HIV/AIDS as being now a chronic and manageable disease. Thus HAART supposedly allows life spans after infection of twenty years or more.

It follows that the average age at which people die of AIDS (or of "HIV disease", as it's coming to be called) should have moved significantly higher since the 1980s, by at least a decade. But the official statistics show no such change in the age distribution of deaths from HIV disease between 1987 and 2004. Most people who die of HIV disease do so in their late thirties or early forties nowadays, just as two decades ago.

Furthermore, the age distribution for testing HIV-positive also has a maximum around forty years of age. Since the age distributions for infections and for deaths superpose, there is no indication at all of a latent period.

That the peak rate for death from HIV disease is around 40 years of age in itself speaks against HIV being an infectious disease: those who die from infections tend to be the distinctly old and the distinctly young, not people in the prime years of adulthood.

Racial disparities are yet another strike against HIV/AIDS theory. Rates of testing "HIV"-positive and rates of death from HIV disease are both much higher among blacks than among other racial groups; yet blacks who die from HIV disease survive to appreciably older ages than do Asians, whites, or Native Americans.

About the author:

Henry H. Bauer can be reached at hhbauer@vt.edu.

An Extensive Laboratory Study of Pranic Healing Using Cells in Culture Subjected to Gamma Radiation Joie P. Jones

Abstract:

Pranic Healing is a biofield therapy established in China thousands of years ago but rediscovered and reformulated in recent times by Mei Ling and his student Master Choa Kok Sui. Practitioners believe that they are able to tap into what is termed "prana" or "Qi", the "universal force," and to use this energy to promote or enhance healing.

The objective of our long-term program is to critically evaluate Pranic Healing in a laboratory setting using rigorous mainstream scientific methods. In an initial study (presented at the 20^{th} Annual Meeting of the SSE, June 7-9, 2001, La Jolla, CA), we investigated possible mediation effects of Pranic Healing on HeLa cells in culture subjected to gamma radiation. In a preliminary set of 70 experiments using 4 different healers we found that Pranic Healing could indeed significantly enhance the survival rate of cells subjected to radiation.

Here we report on a far more extensive study involving some 854 single experiments using ten different individual Pranic Healers. Several studies also involved groups of healers. In experiments using a single Pranic Healer, typical survival rates increased from an expected 50% to over 90% for cells treated both before and after radiation. The distance between the healer and the cells proved unimportant. Shielding the cells and the healer from electromagnetic and gamma radiation had no effect on the results. The experience of the healer proved to be slightly important. Experiments involving a group of Pranic Healers, suggests that group healing enhances the desired effect. Even though these results are remarkable, healers produced no effect whatever in about 12% of the total runs. Although the reasons for these failures are not fully understood, further experimentation indicates that appropriate preparation of the laboratory space is essential to produce a significant outcome. That is, poorer results are seen in a dirty environment. In a "conditioned" laboratory, the experiments were successful 88% of the time. In an "unconditioned" lab the success rate was only 10% while no experiments were successful in a "dirty" laboratory. These observations may well explain the lack of repeatability of many subtle energy experiments.

These findings are difficult to explain in terms of a Newtonian physics world view, which serves as the basis for contemporary biology and Western medicine; however, the data seem consistent with a quantum mechanical world view.

About the author:

Joie Jones, Department of Radiological Sciences, University of California Irvine, Irvine, CA USA

Receiving, Recording and Transmitting Remote Healing Intent Using a Technological Interface

Experiments Demonstrate Increase in Survival Rate of Cells and Expose the Damaging Role Energetic Pollution Plays in the Healing Process

Joie Jones and Yury Kronn*

Abstract:

Following research by Prof. Joie Jones demonstrating the ability of Pranic healers to dramatically increase the survival rate of HeLa cells in culture subjected to gamma radiation, we organized new research to further explore the governing laws and properties of the energy involved in this healing process.

We were able to resolve problems of standardization and repetition in experiments employing "energetic" (Subtle Energy) influences by using Dr. Kronn's Vital Force Technology (VFT), which is able to generate, record and reproduce specific Subtle Energy patterns. Three SE patterns were created and then recorded using the VFT equipment. Two of the healing energies were remotely transmitted by healers of two different healing schools, and the third was created by the Vital Force Technology equipment without direct human participation. These energy patterns were infused into a Ringer solution and the solution was added to petri dishes with HeLa cells. The same amount of "uncharged" Ringer solution was added to the control samples.

Experiments were conducted in three labs with very different levels of "energetic" purity: the "conditioned" lab that was energetically cleaned by Pranic healers, the "non-conditioned" lab, and the energetically polluted ("dirty") lab that had been used for animal experiments. All three energy patterns increased the survival rate of cells an average of 88% in comparison with 50% in the control samples in the conditioned lab. The <u>number</u> of Petri dishes with increased survival rates was 90%. In the non-conditioned and the dirty labs, the number of dishes with increased survival rates was 10% and 0% correspondingly, indicating that energetic pollution is a very significant factor in the survival rates of cells.

The results of these experiments stimulated us to explore ways to counteract the negative effects of energetic pollution on the healing process. "Protective" and "space cleaning" Subtle Energy patterns were created. The "protective" energy pattern dramatically improved results in the non-conditioned and dirty labs: 87% and 78% correspondingly. The "space cleaning" pattern applied to the dirty lab produced a 90% success rate, the same as in the conditioned lab.

Conclusion:

- 1. Subtle Energy can be programmed for specific purposes by the trained human mind as well as by the Vital Force Technology equipment.
- 2. The "intent" of the human mind can be technologically captured and reproduced; proving that the Subtle Energy field records and carries the informational content of the "intent", and indicates that Subtle Energy is an energy belonging to the Universe like electromagnetic energy.
- 3. An energetically polluted environment drastically diminishes the healing effect of Subtle Energy.
- 4. Special protective energy is able to dramatically increase healing effects. This suggests a new method for improving the effectiveness of various healing modalities.

About the authors:

Yury Kronn, Chief Scientist, Energy Tools International, Eagle Point, OR USA Joie Jones, Dept. of Radiological Sciences, University of CA, Irvine, Irvine, CA USA



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He is a father of three and grandfather of three.

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Professor Dr. Michael Laitman had written over 30 books which are available in English, Hebrew, Russian, Spanish, Portuguese, French, German, Turkish, Lithuanian, Bulgarian and more. for more info visit: www.kabbalahbooks.info















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The Imaging of Acupuncture Points and the Characterization of Signal Pathways Using fMRI and Quantitative Ultrasonic Methods Joie P. Jones¹ and Young K. Bae² Sponsored by Joie P. Jones

Abstract:

Over the past decade our group has been investigating acupuncture using medical imaging techniques such as functional MRI and ultrasonic imaging. In our first study (see *Proc. Natl. Acad. Sci. USA*, Vol. 95, 2670-2673, March 1998), we demonstrated that activation of specific acupoints in the foot along a specific meridian elicited increases in cortical blood flow in circumscribed regions of the visual cortex, comparable in magnitude and brain location to those obtained by stimulation of the visual cortex by flashes of light.

In a second study (presented at the 20th Annual Meeting of the SSE, June 7 – 9, 2001, La Jolla, CA), we used ultrasound to stimulate the acupoint site. Using highly focused ultrasonic pulses having intensities much higher than those used for ultrasonic imaging but well below cavitation levels where damage would occur, we stimulated a vision related acupoint and found that corresponding brain activity, recorded by fMRI, was indistinguishable from that produced by acupuncture needles. Conventional ultrasonic imaging, previously used to monitor the placement and application of the acupuncture needle, was unable to identify any remarkable anatomical features associated with the acupoint. However, a later study (presented at the 21^{st} Annual Meeting of the SSE, May 29-31, 2002, University of Virginia), showed that acupoints correspond to regions of enhanced elasticity (and enhanced ultrasonic attenuation) and that these regions of altered acoustical properties can change in size, shape, and even location in short periods of time (less than one day).

In the present study, we describe a 2-D ultrasound transducer array system we have developed which enables us to record three-dimensional data in real-time so that off-line analysis and reconstruction can produce a 3-D "real-time" attenuation image of the acupoint during stimulation. Such images clearly show the acupoint extending and twisting itself around the needle, confirming the feeling of "stickiness" felt by practitioners during the stimulation process. This rotation of an acupoint is consistent with the rotation of a chakra as described in the Oriental Medicine literature. Finally, using fMRI to monitor the stimulation of acupoints by ultrasound, we obtained precise measurements of the time between acupoint stimulation and brain activity. Using these methods we discovered three distinct pathways by which information is transmitted from the acupoint to the brain. The first, and previously well-documented pathway, is along the nerves where we record brain activity 180 to 200 ms following acupoint stimulation. A second and very fast pathway shows brain activity less than 0.8 ms following acupoint stimulation (our measurement error) and may be instantaneous. This activity is two orders of magnitude faster than any know biological process and may be produced by an electromagnetic pulse generated by the acupoint. A third and very slow pathway shows brain activity 15 to 25 seconds following acupoint stimulation. This slow activity correlates precisely with the flow of Qi along the meridians as observed by subjects sensitive to this process.

About the Authors: Department of Radiological Sciences, University of California Irvine¹, Irvine, CA, USA; Bae Institute of Immune Enhancement², Tustin, CA, USA

An Anomalous Legal Decision

Richard A. Blasband

Abstract:

In the winter of 2003 the Veterinary Medical Board (VMB) of the State of California brought a complaint against the veterinarian, Dr. Gloria Dodd of Gualala, CA for what they alleged was false advertising in her claims that homeopathic remedies and nonlocal diagnosis and non-local radionic treatment could help sick animals. Dr. Dodd claimed that she had complied, but the VMB thought otherwise and requested a hearing before the courts of the state with the intention of revoking Dr. Dodd's license to practice. Through their evaluation of the records of Phido, a canine patient of Dr. Dodd, the agents of the VMB concluded that ,"Its a smoke and mirror power of magic type of practice"..."bizarre" ... "no medically scientific basis for the idea that she can detect disease in a patient who is 3000 miles away...ludicrous that she can broadcast therapy across the same distance...claims defy basic established principles of physics", and so on.

The case was heard in mid-Winter of 2006 at the Oakland, CA court before Administrative Law Judge Steven C. Owyand. Hans U. Stucki was the attorney representing Dr. Dodd. Via videotape expert witnesses and satisfied lay clients of Dr. testified to the efficacy of Dr. Dodd's assistance to them in the treatment of some very sick, refractory animals. As an alleged expert in knowledge of non-local transmission of information I testified in person. None of our testimony or any of the cases were rebutted by the complainants. It is believed by me that the complainants thought that the case would be a slam-dunk in their favor because Dr. Dodd's mode of practice and beliefs were so thoroughly different than theirs and the official position of the VMB.

To my surprise and our great pleasure Judge Owyand, a Chinese gentleman, in court appeared to ignore accepted "theory" and go for the clinical evidence which favored Dr. Dodd. Dr. Dodd was placed on probation with the proviso that she rectify a few minor problems relating to her practice and that she establish physical contact with her clients. The last proviso was appealed by Dr. Dodd and a stay was issued by Superior Court, thus permitting Dr. Dodd to continue working with animals non-locally.

Of course the VMB could not let it go, so on May 24th they submitted an order of remand to the Administrative Law Judge, questioning in many ways whether testimony in the original hearing by the defense was by "qualified experts". In an e-mail to me following this Mr. Stucki expressed confidence that this would not change the rulings. If sustained this case could set a precedent for those practicing at the far edges of health care.

About the Author:

Richard A. Blasband, M.D., is a psychiatrist in Sausalito, CA who practices psychiatric orgone therapy and healing by mental intention. He is also Research Director of the Center for Functional Research which is devoted to the experimental investigation of the interface between life energy and consciousness. His professional memberships include SSE and the International Consciousness Research Laboratories. He has published over 60 papers on his areas of interest.

Does Gamma Brain Wave Emission Correlate with Higher Consciousness? Beverly Rubik

Abstract:

Gamma emission at 40 Hz from the prefrontal lobe of the brain has been explored by Davidson and his colleagues* and is purported to be associated with higher states of consciousness in advanced Tibetan Buddhist meditators. The monks reported heightened feelings of oneness and compassion for all beings when 40 Hz emission was maximal. In the present study, the Peak Achievement Trainer, a type of neurofeedback that can assess and train various cognitive functions, was used to measure the 40 Hz emission band and also feed back information in realtime regarding brain wave parameters to subjects, who were either meditators or non-meditators. Recordings and real-time analyses of brainwaves at 40 Hz from the pre-frontal lobe area were made over a period of 45 minutes for each subject. Artifacts at 40 Hz due to muscle tension or movement were filtered from the data. Real-time audioand/or visual biofeedback of brainwave data was provided to the subjects, who were asked to try to increase 40 Hz emission from the prefrontal brain area while they ascertain what feelings, thoughts, functions, and moods were associated with that state of consciousness. Subjects later reported on these states during an interview process. Data showing the measured levels of 40 Hz of meditators and non-meditators during baseline and during attempts to increase 40 Hz emission are compared. The subjects' self-assessments of their 40-Hz state, along with commonalities and differences between subjects and the two groups, is compared. In addition, the results from a volunteer who smoked Salvia divinorum, a legal entheogen, during a separate session will be shown and discussed.

*Lutz A, Brefczynski-Lewis J, Johnstone T, Davidson RJ. Regulation of the neural circuitry of emotions by compassion meditation: effects of meditative experience. Plosone 3(3):e1897. March 2008.[www.plosone.org]

About the author:

Beverly Rubik, Ph.D., biophysicist, is renowned for her research on the biofield at Institute for Frontier Science in Emeryville, CA. She has published over 80 papers and 2 books. Dr. Rubik presently serves on the editorial boards of *Journal of Alternative & Complementary Medicine*; *Integrative Medicine Insights;* and *ReVision*. She is also adjunct professor in Integrative Health at Saybrook Graduate School in San Francisco; a consultant on maverick healthcare products; and a holistic health advisor.

Reduction of Pathogen Load by Applying Non-Invasive Extremely Low Frequency Electric or Magnetic or Electromagnetic Fields

Lucas Portelli^{*1}, Kevin McCabe², Mark Hernandez², Frank S. Barnes¹ Sponsored by Garret Moddel

Abstract:

Since ancient times, electricity or closely related phenomena have been documented based on its effects in biological systems. More recently, the identification the electric battery was coincidently done in this same fashion: Volta's famous frog leg. Since then, therapeutic uses of electricity have been mostly in the form of neurostimulators or outside mainstream medicine. Part of the reason for this are false claims of cures and the difficulty of identifying mechanistic effects due to the complexity of biological systems. All this has created fertile ground for misinterpretation of the current results by both believers and skeptics outside and inside of the scientific environment.

The purpose of our experiments has been to study the interaction of biological systems with electromagnetic fields, with the goal of developing the foundations for a scientifically supported, minimally or non-invasive, in-vivo and biocompatible treatment for disease. Our main concern relates to the thresholds at which effects (either direct or indirect) of these fields can be observed. Ongoing experiments such as finding the inactivation threshold of bacteria with respect to electric and magnetic fields as a function of time of exposure, field intensities and frequencies will further a link between anecdotal reports and a full understanding of these interactions. So far, our results indicate that partial inactivation effectively may be a function of the electric field intensity and frequency, and is closely related to other variables such as the composition of the solution surrounding the bacteria. We will review some of the basic aspects of electromedicine, and cite contrasting views of this technology.

About the authors:

¹Electrical Engineering, University of Colorado at Boulder, Boulder, CO. ²Civil, Environmental and Architectural Engineering, University of Colorado at Boulder, Boulder, CO.

Quantum Mechanics and Consciousness: A New Measurement Bernard Haisch

Abstract:

In 1935 Einstein, Boris Podolsky and Nathan Rosen, published the now famous EPR paper that challenged the Heisenberg uncertainty principle: "Can Quantum Mechanical Description of Physical Reality Be Considered Complete?" They argued as follows. Assume that two identical particles, call them A and B, are initially at rest and that they are somehow then propelled in opposite directions. At a given instant, we can measure the position of particle A with perfect precision even according to the Heisenberg uncertainty principle, knowing that we thereby sacrifice any possibility of simultaneously measuring its velocity. Similarly, we can measure the velocity of particle B with perfect precision at that instant even according to the Heisenberg uncertainty principle, knowing that we thereby sacrifice any possibility of simultaneously measuring its possibility of simultaneously measuring its possibility of simultaneously measuring to the Heisenberg uncertainty principle, knowing that we thereby sacrifice any possibility of simultaneously measuring its position.

Owing to conservation of momentum, if the precisely measured position of A is x at a given instant in time, then the precise position of B must be -x at that time. Similarly, if the precisely measured velocity of B is v, then the precise velocity of A must be -v. We have seemingly succeeded in determining the precise velocity of A and the precise position of B without having had to measure these quantities. They can be inferred with perfect precision from the value of the other particle. Einstein believed that this thought experiment demonstrated that there were indeed precise values of position and velocity for each particle created at the outset of the experiment, not by subsequent observation, that could be determined in this indirect way.

In 1964 John Bell published his now famous inequality showing that a reformulation of the EPR experiment could be experimentally tested. In 1982 Alain Aspect carried out the Bell experiment and found that quantum physics was correct and Einstein wrong. Quantum properties are not real and hidden, but instead are created in the act of measurement.

In 2003, Nobel Laureate Anthony Leggett published a more rigorous version of the Bell experiment. A Leggett inequality experiment was carried out recently in the Institute for Quantum Optics and Quantum Information at the University of Vienna and published in *Nature* in April 2007. Reporting on this *New Scientist* said:

Their results, published in 2007, suggest "...that there is nothing inherently real about the properties of an object that we measure. In other words, measuring those properties is what brings them into existence." (*New Scientist*, 23 June 2007) Or as quantum researcher Vlatko Vedral of the University of Leeds puts it: "Rather than passively observing it, we in fact create reality."

Quantum mechanics is now telling us unambiguously that consciousness creates reality. And since quantum physics is at the root of everything, this has profound consequences for the interpretation of our own nature, the universe, and, yes, even why it may make more sense to trace everything back to a conscious intelligence rather than inanimate fields and forces.



About the author:

Bernard Haisch, Ph.D., Calphysics Institute, is an astrophysicist and author of over 130 scientific publications. He served as a scientific editor of the *Astrophysical Journal* for ten years, and was Principal Investigator on several NASA research projects. After earning his Ph.D. from the University of Wisconsin in Madison, Haisch did postdoctoral research at the Joint Institute for Laboratory Astrophysics, University of Colorado at Boulder and the University of Utrecht, the Netherlands. His professional positions include Staff Scientist at the Lockheed Martin Solar and Astrophysics Laboratory; Deputy Director of the Center for Extreme Ultraviolet Astrophysics at the University of California, Berkeley; and Visiting Scientist at the Max-Planck-Institut fuer Extraterrestrische Physik in Garching, Germany. He was also Editor-in-Chief of the *Journal of Scientific Exploration*.

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Toward a Post-Quantum Theory of Consciousness Imants Barušs

Abstract:

It has been becoming increasingly recognized that computationalism has run its course as an explanatory scheme in cognitive science. Thus, for example, as Jerry Fodor, one of the philosophers who has been instrumental in its development has said recently in his book *The Mind Doesn't Work That Way*: AI would have thought that the last forty or fifty years have demonstrated pretty clearly that there are aspects of higher mental processes into which the current armamentarium of computational models, theories, and experimental techniques offers vanishingly little insight.[®] In particular, computationalism cannot adequately address the hard problem of consciousness, namely the manner in which an experiential stream arises from a biological organism.

One way of getting past this impasse is to reject Santiago Ramón y Cajal's neuron doctrine as the wrong level at which to look for consciousness. That is to say, consciousness may not be an emergent property of cellular activity, but could somehow be related to more fundamental subatomic events. This has been suggested, for example, by Ian Marshall, who has associated consciousness with Fröhlich's Bose-Einstein like condensation in the brain. Similarly, Mari Jibu, Yasushi Takahashi, and Kunio Yasue have proposed that memory is encoded as a spinor field constituting a system of corical proteins and water. Such theories suggest the occurrence of some form of organic quantum computing thereby retaining some of the features of computation without the usual reliance on cellular networks.

Another fix has been to suggest, most famously by Eugene Wigner, that consciousness is a non-physical reality that terminates the von Neumann chain in an act of measurement of quantum events. For Henry Stapp, choice enters into the picture, not with the selection of a particular eigenvector but, in keeping with the constraints of contextuality, the selection of those observables which are to be measured. With the postulation of such dynamics, volitional acts can be clearly distinguished from perceptual ones, as noted by Evan Harris Walker, so that discussions of consciousness include the manner in which free will could be directly exercised on physical matter. Of course, the need for state vector collapse has been challenged by decoherence theories.

Perhaps there is something to both of these approaches, namely that volition and consciousness are non-emergent essential ingredients of reality that find expression at the subatomic level. Jean Burns has proposed that volition is exercised within the scope of quantum fluctuations to change the position or momentum of particles. The occurrence of such events in the brain would provide a mechanism for mental influence on one's actions.

What happens if we second quantize and extend this notion to quantum fields? In particular, consider a Klein-Gordon field on a Friedmann-Robertson-Walker spacetime with mode functions chosen so as to allow the zero vector of the Fock basis to be the vacuum state. Volitional agency within the scope of the field fluctuations would correspond to changes in the activity of creation and annihilation operators affecting the eigenvectors representing reality. Although we have considered only a single scalar field and the experiential intentional stream of consciousness is not thereby theoretically determined, this type of strategy allows for volition to be seen as being exercised at a fundamental level of reality.

Of course, as Michael Lipkind has pointed out, A[field theoretic] approaches can easily degenerate into purely belletristic expressions.@ Quantum field theory might not be the right way of incorporating psychological variables into a physical theory but it could point toward a postquantum theory of consciousness.

About Imants Barušs: Imants Barušs obtained an interdisciplinary BSc, a MSc in mathematics, and PhD in psychology with specialization in consciousness. He has been teaching for 21 years in the Department of Psychology at King's University College at The University of Western Ontario where he has risen to the rank of professor. His research is concerned with fundamental issues regarding the nature of consciousness and its relationship to the physical world. He is the author of 4 books and over 40 papers and reviews, and belongs to various professional organizations including the Society for Scientific Exploration and the New York Academy of Sciences.

Philosophical Substance Abuse: Distorting Descartes and Dismissing Dualism J. Kenneth Arnette

Abstract:

Rene Descartes gave his conception of what later became known as substance dualism, setting off a vigorous, ongoing debate about the mind-body relationship. The primary tenets of his view included: (1) a "substance" is "a thing capable of existing independently:" (2) mind and body both are substances, but (3) mind is thinking and nonextended, whereas (4) body is non-thinking and extended; (5) the body has the property of exclusionary occupation of space; and (6) the human being is an interactive union of mind and body. Descartes never provided a mechanism of mind-body interaction, but felt that mind and body could share some characteristics. The focus of the present work is not on interaction, but on the possible nature of the hypothesized non-material mental substance. Descartes made radical distinctions between mind and body, but it is also true that subsequently these distinctions have been distorted by materialists to consist of the following description: the non-physical mind has neither mass nor energy, is not in any way localizable, does not exist in space, has nothing in common with physical things, and works independently of the brain. This is even more radical than Descartes' proposals, and ignores many of his specific points. If both body and mind fit the definition of substance, then they must share some properties in order to belong to that category. Descartes was in no position to offer a solution to this problem, but modern physics (relativity and string theory) offers a resolution. Relativity provides a relationship between matter and energy: the energy (E) in a given amount of matter is the mass (m) multiplied by the speed of light (c) squared. This defines matter energetically. One can thus view matter as a form of condensed energy, with a certain energy density. One can imagine a series of substances (any form of condensed energy), differing in their energy densities. For example, matter could be a particular case of a general substance-energy relationship, where energy (E) is the amount of substance i (Si) multiplied by the speed of light to the power i (ci). For matter, i = 2 (substance S2). The mental substance could be represented by substance S1. Thus the mental substance would be much less energydense than matter. S1 would display basic differences from matter in the way it is constructed from energy, with important property differences. For example, substances S1 and S2, being very different in energy density, could simultaneously occupy the same three-dimensional space. String theory shows how two different substances could be constructed. Strings are tiny strands of energy, the basic building blocks of everything, comprising two types: open-ended (OE) and closed-loop (CL). OE strings are attached on each end to our spacetime (universe), while CL strings are free-floating and capable of leaving this spacetime. In addition, CL strings are much less energy-dense than OE strings. Thus, OE and CL strings can be construed as different substances, with some shared and some differing properties, promising candidates for Descartes' substance dualism.

About J. Kenneth Arnette:

Department of Psychology, Southern Oregon University, Ashland OR 97520, USA

Protein Semiconductors in Relation to Insect Olfaction Thomas M. Dykstra, Ph.D.

Abstract:

It has long been known that insects smell odors through the use of their antennae. It is also well established that detection occurs via tiny sensillae on these antennae. Beyond this, our understanding of insect olfaction is limited and research results are conflicting. The current paradigm is that odorants pass through tiny holes in the insect sensillae and diffuse through the sensillar lymph to eventually bind with a protein receptor on the dendrite. The current paradigm touts diffusion as the proposed mechanism. Although seemingly plausible, scientific investigation reveals that this is not possible. Diffusion alone is not fast enough since insect electrophysiologists report that odorant detection can occur in less than one millisecond. Further to this, no receptor-ligand binding has ever been shown and so the putative protein receptor remains elusive.

An alternative theory is that the insect sensillae act as dielectric waveguides picking up the energy or vibrational energies of the odorants. This theory bypasses the problem with diffusion, but does not have a clear mechanism. Energy coupling via the antennae is easy enough to understand using antenna theory, but the message is somehow eventually detected by the dendrites thus initiating a standard nervous impulse. This can be partially understood utilizing our current knowledge of protein semiconductors and rhodopsin.

Bacteriorhodopsin has been well-studied as a phototransducing protein with an extremely fast response time. The protein responds to electromagnetic energy in 1.61 picoseconds and possesses a recovery time of 10 milliseconds. In fact, 98% of the bacteriorhodopsin molecules reset within 20 milliseconds. In relation to insect olfaction, this recovery period is well within the recovery times reported in the scientific literature (several hundred milliseconds). Therefore, based on the temporal evidence, it is plausible that a similar mechanism might be at work in regards to insects.

The proteins most likely involved in insect olfaction include odorant receptor proteins and sensory neuron membrane proteins. The odorant receptor proteins are seven transmembrane proteins, similar to bacteriorhodopsin. However, sensory neuron membrane proteins are reported to be in higher concentrations than odorant receptors on the dendrite. Either of these proteins, or alternatively both proteins acting in concert, can be implicated as *in vivo* protein semiconductors. This new theory would help to explain how insects can detect odorants on the established temporal scale.

About the author: Tom Dykstra is Secretary of the SSE and is President of Dykstra Laboratories, Inc (www.dykstralabs.com) which is a laboratory devoted to electromagnetics and life. Tom's background is in entomology with an emphasis on neurobiology. He is married to Karen, a Chicago native, and they have 3 children. **Lab address:** 3499 NW 97th Blvd., Suite 6, Gainesville, FL 32606 **Phone:** (352) 331-7008; **FAX:** (352)331-7008; **Email:** dykstralabs@yahoo.com

Phenomenological and Objective Methods in Consciousness Research: The Case of Spirit Mediumship

Charles F. Emmons

Abstract:

Research by parapsychologists and others into consciousness and survival has involved a variety of scientific methods, most of which have tested claims of alleged phenomena such as ESP, NDEs, reincarnation and spirit mediumship by a process of elimination through mundane explanations. In the case of spirit mediumship, spontaneous and semicontrolled readings have been examined for fraud and information leakage through a kind of detective work. Also, Gary Schwartz, a psychologist, has managed to test spirit mediums in the laboratory using a series of protocols continually refined to prevent communication by normal means. Important evidential cases survive the tests, but possible mechanisms for the phenomenon remain largely unexplained except by various theories of hidden order that are consistent with the evidence.

By contrast, sociologists may use methods of studying spirit mediumship that focus on the perspectives of the participants. Participant observation and ethnographic interviews help reveal the social context and the personal meaning of mediumship for mediums and their clients. Listening to the mediums' own explanations of how they do what they do represents a phenomenological approach. In addition, the researcher can take on the role of spirit medium, thus engaging in "participatory science," in order to bridge the gap between an objective and a subjective understanding of the phenomenon.

In terms of the sociology of knowledge, such methods present a dilemma for those engaged in investigations at the edge of normal science. Examples of how objective and subjective methods can be combined to yield potentially greater insight are presented in this paper.

About the author:

Charles F. Emmons is a sociologist at Gettysburg College, author of *Guided by Spirit: A Journey into the Mind of the Medium* (with Penelope Emmons), *Chinese Ghosts and ESP*, and *At the Threshold: UFOs, Science and the New Age.* Current research: "The Scientific Search for Spirit."

Self-Organization, Quantum Computation, and Conscious Choice Larry Goldberg

Abstract:

The butterfly effect that makes our weather and climate so difficult to predict also operates in our brains and cells. They, too, are open systems "far from equilibrium," which are characterized by alternative steady-states and chaotic sensitivity to initial conditions. In living systems, that sensitivity may go down to the quantum level, amplifying, for example, changes in the conformation of proteins or microtubule states that are best described in terms of the indeterministic collapse or decoherence of wave functions. Is it possible that in certain living systems, alternative biological states are somehow represented in wave functions and conscious choice is reflected in the collapse of those wave functions, iteratively favoring the preferred biological state? Evolution would then have selected for those electromagnetic configurations that could exploit the contributions of conscious decision-making to biological self-organization. This paper explores this possibility seriously, as an hypothesis that could be further developed and potentially tested in collaborative research that integrates areas of neuroscience, complexity theory, evolutionary biology, subtle energies research, and quantum theory. We consider, specifically, how electromagnetic oscillations associated with alternative biological states may have an organizing effect on vacuum fluctuations, setting up wave functions that represent these alternatives as options for conscious consideration; and how conscious choice among these options may have "entangled" consequences at disparate physiological locations that iteratively favor the chosen state. If such "bioquantum computing" does occur, the difference between life and other electromagnetic systems, such as atoms and molecules, may be a difference of degree rather than a difference of kind, implying the pre-adaptation of the universe for conscious life, as well as the possible consciousness of the universe itself.

About the author:

Larry Goldberg, Ph.D. Director, Institute for the Study of Conscious Systems Boulder, Colorado goldberg@isocosm.org



Larry Goldberg is a philosopher of science, environment, and mind who has applied his interdisciplinary methodology to program development at the San Diego Supercomputer Center and the University of California, San Diego; Texas A & M University; the National Center for Atmospheric Research; and the Boulder, Colorado Springs, and Health Sciences campuses of the University of Colorado. He has designed undergraduate, graduate, postgraduate, and public participation programs in global change, computational science and engineering, bioethics, and air pollution control. He has been program chair in recent years of conferences on the convergence of science and spirituality and is writing a book on quantum theory, the brain, and consciousness.

The Constants, Reductionism, and the Origins of Space and Time

Richard Shoup

Abstract:

At least six apparently independent physical constants seem to be finely tuned to allow evolution of complex and intelligent life in our universe. In this talk, we discuss possible origins and implications of this seemingly unlikely situation, but challenge the usual assumptions of materialism, reductionism, and randomness. From this new vantage point, several hypotheses are offered for the ultimate origins of the physical and mathematical universe, and for the non-uniform properties we observe in it. As an example, we give extremely simple and abstract definitions of time, space, and velocity, and show that these lead naturally to the addition of velocities as given by Special Relativity.

About the author:

Richard Shoup received his BSEE and PhD in Computer Science from Carnegie Mellon University. He has worked at the Xerox Palo Alto Research Center, Interval Research, and is currently President of the Boundary Institute. His research interests have focused on the foundations of physics, mathematics, and computer science.



Some Patterns of the Acceptance of Anomalous Phenomena: A Survey of SSE Members

William F. Bengston

Abstract:

The history of science is riddled with fabled stories of challenging new data and theory that was initially rejected by the scientific establishment, only to be later accepted as conventional wisdom. Scientists who work doing "anomalies research" often cite such examples, and additionally bemoan the lack of status and acceptability accorded their work. But little work has been done inquiring into the opinions of those scientists, nor on the factors that predict their own acceptance or rejection of particular anomalies. The present study seeks to preliminarily explore such issues through a survey given to all the membership of the Society for Scientific Exploration. Questions about the acceptance of various types of anomalous phenomena were asked, along with background questions about conventional training and research. This presentation will summarize those data.

About the author:

William F. Bengston: St. Joseph's College, Patchogue, NY 11772 631-447-3310 wbengston@sjcny.edu



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