

Newsletter of the Society for Scientific Exploration

Summer 2004 Vol. 20 No. 3

ASSOCIATE MEMBERS REPRESENTATIVE Report from the SSE Council Meeting

— L. David Leiter

SSE is a truly unique organization and if it is possible to love a society, then I love SSE. I have learned far more during my 13-year Associate Membership in SSE than I have from participation in any other organization. But, of course, any organization is simply a group of people with a mission, and in the case of SSE, some very special people with a very special mission! The primary source of my affection for SSE has been my direct, face-to-face interaction with many of those very special people, at its always excellent annual meetings.

Prior to SSE's 2003 Annual Meeting, President Charlie Tolbert appointed me to act as Ex-officio Representative of Associates (now Associate Members as of the May Council meeting) on SSE's Council, where I have now served for two years. I see this new council position as a significant step for SSE, especially now that the Associate Membership has grown to be fully two-thirds of the membership. It means that Council, which is mostly made up of Full Members, wants to hear more from the Associate Membership.

FULL MEMBERS VS. ASSOCIATE MEMBERS

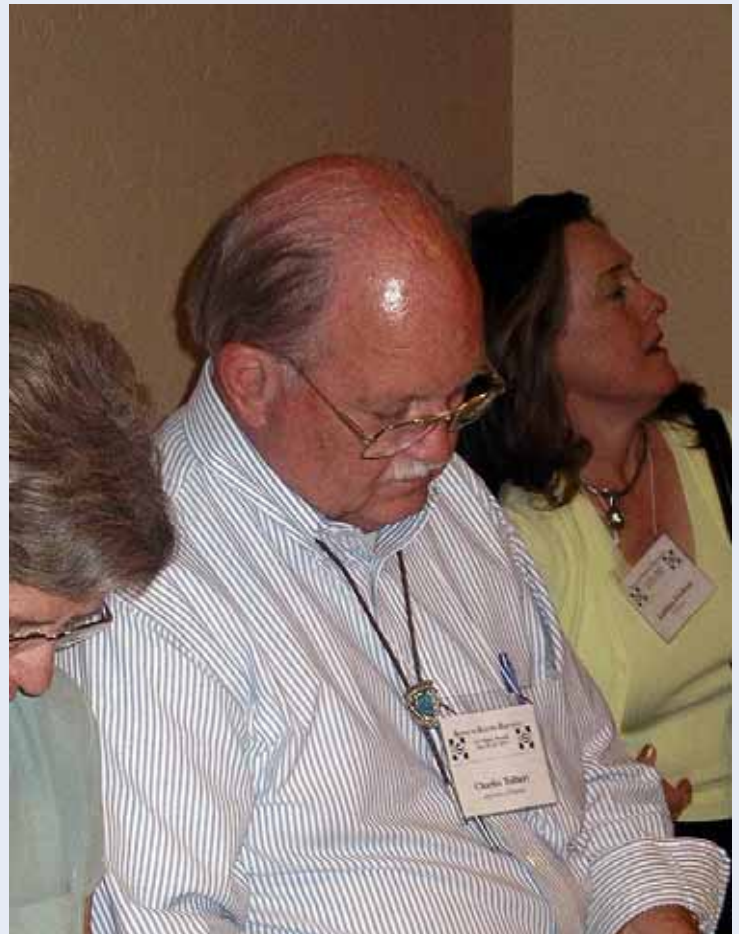
Historically, SSE's Council has struggled with the pros and cons of membership distinctions: Full Membership (requiring sponsorship by another Full Member, evidence of scholarship, advanced degrees, etc.), Associate Members (anyone supportive of the Society), Emeritus (retired members), and Students. While I believe that such stratification is undesirable for the cohesiveness of the Society, it has been important for the scientific credibility of the Society (the conventional scientific credentials of its Full Members are indispensable, especially considering the subject matter in the Society's purview), and financially (Full Members pay higher membership fees). For those reasons, I am firmly supportive of the distinction between Full and Associate Membership.

But it is time for Associate Members to be more represented in the decisionmaking processes of the Society. Associate Members attend meetings, support the health of the Society with annual donations, and some even contribute

content to the *JSE*. I have had the good fortune to do all three as an Associate.

MONEY ISSUES

After attending two annual Council meetings, I find that the Society has several not-so-minor problems that threaten its vitality. Happily, however, and quoting a wonderful snippet of practical wisdom that applies to all organizations: "You can patch a lot of cracks with money!"



Working the Registration Table: President Charles Tolbert flanked by Councilors Hal Puthoff and Kathleen Erickson

SOCIETY NEWS

2005 SSE Annual Meeting in Florida

The 24th Annual SSE Meeting will be held May 19–21, 2005, in Gainesville, Florida, at the Best Western Gateway Grand Hotel. SSE room rates are \$79. See ScientificExploration.org

Young Investigators Program

A Challenge Grant of \$500 has been made by SSE member Dave Leiter. Matching donations are needed. Please specify that your contribution is a matching donation and send to SSE Treasurer Bruce Greyson, P. O. Box 800152, Charlottesville, VA 22908-0152. cbg4d@virginia.edu.

Reports to the Annual Council Meeting

See Cover Story for the **Associate Members' Representative Report**. Other Council reports are in the e-mail sent to you with this newsletter: **JSE Editor's Report, Education Officer's Report & Young Investigators Program, Information Officer's Report, Secretary's Report, Treasurer's Report**.

Sudden Loss of SSE Member Eugene Mallove at Age 56

Eugene Mallove was murdered (beaten to death) during an apparent robbery on May 14, 2004, at his childhood home in Norwich, Connecticut, which he was tending to for his parents.

Gene held bachelor's and master's degree in aeronautical and astronautical engineering from the Massachusetts Institute of Technology and a doctorate from Harvard University in environmental health sciences. He taught science journalism at MIT and Boston University, and worked as Chief Science Writer at the MIT news office. He resigned in 1989 over the question of manipulation of test data to make a Pons-Fleischmann replication study appear to show a negative result.

Gene was a long-time member of SSE and a warm and welcome presence at annual meetings. A tireless researcher of cold fusion, he weathered many professional attacks. He fought the marginalization of cold fusion research for more than a decade, and authored several books including the Pulitzer Prize-nominated *Fire and Ice: Searching for the Truth Behind the Cold Fusion Furor*. In 1995, he founded the bimonthly magazine *Infinite Energy*, and had just completed Issue #56. Eugene often said that cold fusion is the "tip of the iceberg" of new energy science.

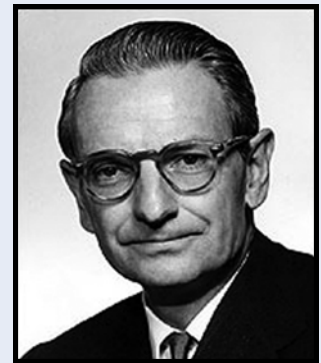


Eugene Mallove, hero of independent researchers—RIP.

Laurance Rockefeller, Friend of SSE

Laurance Spelman Rockefeller, a loyal supporter of SSE, died in July of pulmonary fibrosis at his home in New York City, at the age of 94. He was the son of John D. Rockefeller, Jr., and Abby Aldrich, and grandson to John D. Rockefeller, Sr., who founded Standard Oil and established the family tradition of generous public philanthropy.

Mr. Rockefeller graduated from Princeton University with a philosophy degree and attended Harvard University law school. He was largely known for conservation efforts, continuing in the vein of his father who had created major national parks. His work in the 1950s and 1960s led to pioneer federal and state conservation laws. He donated a large property in Jackson Hole, Wyoming, to the federal government. In 1956 he



Philanthropist and Ecologist Laurance Rockefeller—RIP

contributed property to create Virgin Islands National Park.

He also supported aviation and technology. He backed Eddie Rickenbacker, the World War I ace who became chief of Eastern Airlines, and with J. S. McDonnell created

McDonnell Aircraft Corp. He supported Reaction Motors, which built the Viking Rocket, and in the 1960s, he invested in Venrock Associates, which provided early funding for computer companies Intel and Apple.

He urged the U.S. government to acknowledge the phenomena of UFOs, and he supported an SSE panel of inquiry into the subject in 1997, which resulted in the Sturrock Panel Report. He was a faithful supporter of PEAR (Princeton Engineering Anomalies Research), most recently underwriting a major archiving effort to preserve its 25 years of accomplishments and insights for future generations of scholars.

He supported hundreds of other scientific, research, artistic, and educational activities, many of them experimental and leading edge. Mr. Rockefeller told *Forbes* magazine last year: "People who try to play it safe in the long run have very dull lives."

New Members

The Society welcomes its newest Full Members Gerald Eberlein and Claude V. Swanson, new Associate Members Mary Alley, Samuel James Butler, Mary Chapman, Joshua E. Cooper, Paul France, Kenneth Miller, Patrice Quintana, William Roberts, John Simonsen, John Taylor, and Fran Theis, and Students Belida Han Uckun and Nicholas Rose.

ASSOCIATE REPRESENTATIVE REPORT (continued from page 1)

— L. David Leiter

Although SSE is primarily a volunteer organization, with a fairly stable membership, it still has some pretty fearsome annual expenses. The largest of these expenses by far, nearly \$70,000 annually, is for the publication and distribution of *JSE*—an essential and indispensable element of the Society. Charlie “waved the warning flag” at the last Council meeting in late May ’04, announcing that SSE is beginning to “go into the hole” financially due to three key factors, namely (in order of importance): shrinking sustaining gifts from formerly generous wealthy patrons (and since then Laurance Rockefeller has died), shrinkage of the Society’s paying membership, and (especially) *JSE* subscribers, in the last several years, and cost increases from Allen Press for the *expanded* Journal and other services.

JSE costs a lot, because there’s a lot in it (to say nothing of a *whole lot of volunteer effort* required to bring it to each member or subscriber in its excellent, professional form). As Charlie stressed, either we solve our funding problems, or we may have to settle for maybe two issues a year instead of four. I don’t think any SSE member or *JSE* contributing author wants that!

One of the ways SSE is dealing with the immediate shortfall is to publish this particular issue of *The Explorer* as an e-newsletter. This is an experiment, and you can let us know how you like it. (Some advantages are that you receive it sooner, photos are in color and larger, and you can save Annual Meeting Abstracts and Euro-Meeting Abstracts electronically).

DONORS

The gift problem is multifaceted. Some of it is surely due to reversals in the securities markets in the last few years, and the resulting impact on donors’ investment portfolios. And while the membership has remained fairly stable, so has the donor list, and now some of those donors are retiring and passing on. We need to count on new donors. And as the economy has had a downturn, other nonprofits vie all the more for SSE members’ support.

Like all nonprofits, SSE needs a “Development Officer” to drum up contributions from interested philanthropists, philanthropic foundations, and other donors. As always, in any primarily volunteer organization, *ideas are cheap! It is the member who steps forward to accept the assignment, and who then effectively executes that assignment, who is precious!* I understand that Peter Sturrock, our Founding President and now President Emeritus, did invaluable work in this capacity, as has Vice-President Bob Jahn. Is there an SSE member, with “a promoter’s heart and guts” (a rare bird in a scientific society!), who is willing to take on such a job? Direct experience as a development officer would be an obvious plus. Also, efforts by *all* SSE members, who perhaps know (or *are*) wealthy, prospective donors, could be very productive, provided such efforts are coordinated with the development officer or with Charlie, our President. And, “lest we forget,” permit me to use this brief “bully pulpit” to encourage

members to remember SSE in their wills (*all* SSE members have wills, right?) as I have done—not bragging, just challenging!

MEMBERSHIP AND MEETINGS

Membership shrinkage is serious, especially when combined with overall *JSE* subscriber shrinkage—totaling about 40% in the last 5 years. We are hovering at critical mass. In spite of higher numbers of attendees in recent years (even with lower membership, which means that a higher percentage of members have been attending meetings), *I believe that many would-be loyal members, who initially fall in love with SSE and its mission, as I did, drop out after a few years largely because they can neither afford the cost nor the time to attend SSE’s annual meetings, typically \$1000–1500 and the better part of a week each year.* For me, it is those meetings, with their simultaneous social and personal contacts with leading society members, which revitalize and reinforce my “love affair” with the Society. In fact, for my first half-dozen-or-so meetings, it took me about a month to come back from “intellectual orbit” as a result of what I learned as an attendee. As a comfortable, recent retiree, I am fortunate to be in a position to attend every year, but it was not always that way!

As a younger man, with an active career, heavier family responsibilities, and limited paid vacation, my first SSE meeting was only for the *final* day of presentations, and then I missed the subsequent Santa Fe meeting altogether due to a tight engineering project-schedule. For similar reasons, many members can only rarely, or *never*, attend an SSE annual meeting, and as a result, meeting attendance is typically only 10–20% of membership. Unfortunately, the Society can’t solve that basic problem for most of its members, but perhaps there are other means of keeping such members closer to their Society, and thus, at lower risk of dropping out.

REACHING OUT

Regional Meetings—Another way to help members interact, in addition to the Annual Meeting, is to hold annual, *regional*, evening or weekend meetings, perhaps in the Fall—a less expensive, less time-consuming prospect for potential attendees and organizers—but that takes a *volunteer* local host/manager for *each* region, *each* year, and it’s tough enough for Council to get volunteers for the annual meetings! Peter Sturrock hosted such meetings in the uniquely member-rich California region in the past. I’ve been thinking of taking that plunge for a while now for the Delaware Valley region. Stay tuned!

Message Boards—I think the Society needs to have more two-way communication, and not just be a broadcast organization to its members. For years now, I’ve been fencing with a local skeptics group, PhACT (the Philadelphia Association for Critical Thinking), mainly via their message board, under the handle Dave, The Watcher (of skeptics, of course!), formerly just The Watcher, and before that, PhACT’s Honorary Gadfly, a self-conferred title. If you go to

PhACT.org and then to PhACT Board, you can get a flavor for the activity on that board, and PhACT is only about 1/7 the size of SSE. I have proposed a similar message board for SSE, but have been unsuccessful. SSE's past experience with bulletin boards has been unhappy and unproductive and again we lack the necessary staff to monitor it.

Contact Your Associate Members Representative—Until we are able to offer such a communication vehicle as a Message Board or Bulletin Board, Associate Members may contact me (**in confidence**) at LDAVIDL2002@yahoo.com.

Bring Old Members Back—And we all can encourage former SSE members to renew their memberships.

Challenge Grant—And here's a challenge: At this year's Annual Membership Meeting (at the Annual Meeting in Las Vegas in May), Charlie announced my Challenge Grant of \$500 to SSE to be used as he saw fit. It will go to the Young Investigators Program, headed up by Education Officer Brenda Dunne. I don't know if the Membership heard the Challenge part of his announcement at the Annual Meeting. Members need to match that pledge before SSE can receive the funds, so please dig deep for the young folks in our Society! Send donations to SSE Treasurer Bruce Greyson, P. O. Box 800152, Charlottesville, VA 22908-0152. cbg4d@virginia.edu.

— L. David (Dave) Leiter LDAVIDL2002@yahoo.com

MEMBERS FORUM

ARCHAEUS PROJECT LIBRARY TO BE SOLD

SSE member Dennis Stillings will soon be selling off books from the Archaeus Project library, which comprises several hundred volumes on a range of scientific anomalies: spiritualism, parapsychology, hypnosis, ufology, astrology, Loch Ness, Bigfoot, etc. To receive a listing of the books available, send your e-mail address to dstillings@archaeusproject.com.



MISAHA SPONSORS CONFERENCE ON PARADOXICAL EFFECTS IN BIOPHYSICS AND MEDICINE

The first international symposium **Paradoxical Effects in Biophysics and Medicine** will be held **December 12–17, 2004**, at **Asilomar Conference Center, Pacific Grove, California**. The Organizing Committee includes Professors John O'M. Bockris, William A. Tiller, Elena B. Burlakova, Yuri V. Guliaev, and Savelly L. Savva.



Asilomar Conference Center, California

For a list of the dozens of presenters and many of the abstracts, go to www.whps.com/misaha.

Topics of discussion will include:

- ~ **Paradoxical properties of water and low concentration water solutions of biologically active substances (their effects on living systems);**
- ~ **Hypothesis of the biofield as the general control system of the organism and its possible physical carrier(s), its role in biological communication, psychokinesis, and healing;**
- ~ **Alternative physical models, which could encompass**

life, mind, and associated phenomena, and methods of their experimental verification.

Conference registration fee is \$400, housing and meals for the 6 days at Asilomar is \$864.35 for singles and \$527.15 for doubles. To register, www.whps.com/misaha/, or contact Savelly Savva, Founder and Executive Director of the Monterey Institute for the Study of Alternative Healing Arts (MISAHA), 3855 Via Nona Marie, Ste. 102C, Carmel, CA 93923 USA, misaha@aol.com, (831) 622-7975; (831) 625-9617 Phone and Fax.

NEW BOOK FROM WAYNE JONAS

SSE Member Wayne Jonas, M.D., has written *Healing, Intention and Energy Medicine: Research Methods and Implications* with Cindy C. Crawford, published by Churchill, Livingstone, 2003. wjonas@siib.org.



INTERNATIONAL INSTITUTE OF BIOPHYSICS BIOPHOTONS CONFERENCE

The Third Alexander Gurwitsch Conference, **Biophotons and Coherent Systems in Biology, Biophysics, and Biotechnology**, will be held **September 26, to October 2, 2004**, at Simferopol (Tauric University) and Partenit Resort (on the Black Sea), Crimea, Ukraine. Contact csc@science-center.net. The Conference will be conducted in English.



Partenit Resort, Ukraine

ANNUAL MEETING ABSTRACTS

23rd Annual SSE Meeting in Las Vegas
May 19-22, 2004, at Tuscany Suites & CasinoABSTRACTS OF TALKS, Alphabetical by Author, Invited Talks in Capitals
*Photographs by Dennis Stillings***STEP BACK APPROACH TO PHENOMENOLOGY**
JOHN B. ALEXANDER, Ph.D.

Five decades of personal observation of various phenomena have provided tantalizing clues, but no resolution as to the nature of each. This presentation suggests it is time to reevaluate these diverse topics. This process should begin by divesting investigators of the delimiting parameters that each phenomenon has established. Experience has shown that definitions are frequently prematurely established, leading to the potential exclusion of data necessary for a comprehensive understanding of the phenomenon. The recommended approach would assemble a comprehensive list of as many observations of anomalous incidents as possible, albeit without attribution of values. This will be difficult as scientists have a tendency to begin all investigations by establishing the limits of their area of study so that the study may be adequately bounded. While bounding may work in most areas of science, I argue that this is exactly the reason why so little progress has been made in studying phenomenology. Once the observations have been

posted, commonalities should be identified regardless of origin. Macro-pattern analysis should then be applied to determine interdisciplinary and intradisciplinary common factors. The hypothesis is that previously undisclosed patterns will emerge and provide the underpinnings of an interdisciplinary study that may yield answers to many anomalous observations. It is further recommended that this process be initiated in an intensive, sequestered environment that facilitates comprehensive interaction between participants. Stepping back infers the ability of observers to disassociate themselves from preconceived notions about each phenomenon and explore for more fundamental themes that may be discovered.

The Biofield: Life as a Hyper-Dimensional Quantity
JAMES E. BEICHLER

Several unification theories have been proposed by physicists in the recent past that have not yet measured up to their initial



Meeting Hosts Victoria Alexander and John Alexander

promise. Each theory is based upon a quantum theoretical approach to physical reality. However, unification can also proceed from the field theoretical view whereby the continuous field is considered more fundamental to physical reality than discrete quanta. This approach has an added advantage in its ability to serve as a model of the biofield, an explanation of life that is preferred by some scientists. Starting from a basic Einstein-Kaluza geometrical structure of space-time and assuming the reality of the fifth dimension, the biofield emerges naturally from the physics of the unification theory. Life, Mind, and consciousness all can be explained as increasingly complex "entanglements" or patterns of varying field density within the single unified field. These density patterns equate to mathematical complexities emerging from the chaotic nature of electrochemical reactions to form life (the basic biofield), then mind, and finally consciousness. Each higher level of complexity functions to organize and control the lower level from which it emerged, enhancing the ability of the living organism to survive and ensuring evolution. This model of the biofield as an extradimensional field density pattern or "entanglement" is ideal for understanding many facets of health and healing of the human and other organisms.

Some Methodological Implications of "Resonance Theory" for Control Groups in Healing Research

WILLIAM F. BENGSTON

St. Joseph's College, Patchogue, New York 11772
(631) 447-3310, wbengston@sjcny.edu

Six separate experiments carried out at Queens College, St. Joseph's College, and the University of Connecticut involving "laying-on of hands" on experimental mice produced anomalous healing patterns in the control groups. In four experiments, mice were injected with lethal dosages of mammary adenocarcinoma (source: The Jackson Laboratories; code: H2712; host strain C3H/HeJ; strain of origin: C3H/HeHu) and randomly separated into experimental and control groups. In two experiments, mice were injected with lethal dosages of methylcholanthrene (source: The Jackson Laboratories; strain: Balb/C; background: H-2d) and randomly separated into experimental and control groups. The experimental mice in the mammary adenocarcinoma experiments treated by "laying-on of hands" exhibited an anomalous pattern of remission, passing through stages of a blackened area appearing on the tumor, then ulceration of the tumor, to closure and full-lifespan cure. The experimental mice in the methylcholanthrene sarcoma experiments exhibited a different pattern of remission, sometimes exhibiting tumor ulceration and sometimes simple shrinkage of the tumor.

In all six experiments, a significant percentage of control mice exhibited these anomalous remissions of their cancerous tumors, though they were not treated by the "laying-on of hands" technique. Normal (fatal) tumor growth only occurred when the control animals were either sent to another city, or were placed into a geographically separated "clean" laboratory.

A preliminary model suggests that these healing effects are not related to a "field effect" produced by the healer, but rather to a "resonant bond" which is established among all the animals in the experiment. A treatment given to any animal will be "shared" by all animals within the resonant bond. Resonance theory, then, has important implications for the normal methodological assumption of separation into treatment and control groups. Hypotheses to test the conditions under which resonant bonds are formed and broken are suggested.

Communications, Consciousness, and Healing From A Marketing Researcher's Perspective

K. C. BLAIR

Sponsored by SSE Member Bill Bengston

Using the marketplace as our laboratory, we conduct proprietary experiments for our clients with our intent and marketing symbols to influence information and energy, the physical and nonphysical, local and nonlocal, consumer health, and its correlated behaviors. Our research has led to new findings.

- The ability to validly measure a person's health with one subjective question and to measure the changes in health of consumer groups associated with marketing stimuli, using telephone interviews and an experimental design
- The discovery of dissonance between senders and receivers of communications, which acts as a barrier to the intent of the information
 - How to replace dissonance with resonance, enabling the senders' information to manifest in the receivers
 - New information inside us first influences our health, for better or worse, which then changes the correlated behaviors, positively or negatively
 - Explaining the negative information of fear and the old snakeoil salesman's adage, "First ya make 'em sick, then ya sell the cure."
 - Learning to use the positive information of compassion that we define as new love, locally and nonlocally, to first enhance health, which then changes the correlated behaviors for the better
 - A new model of communications, consciousness, and healing

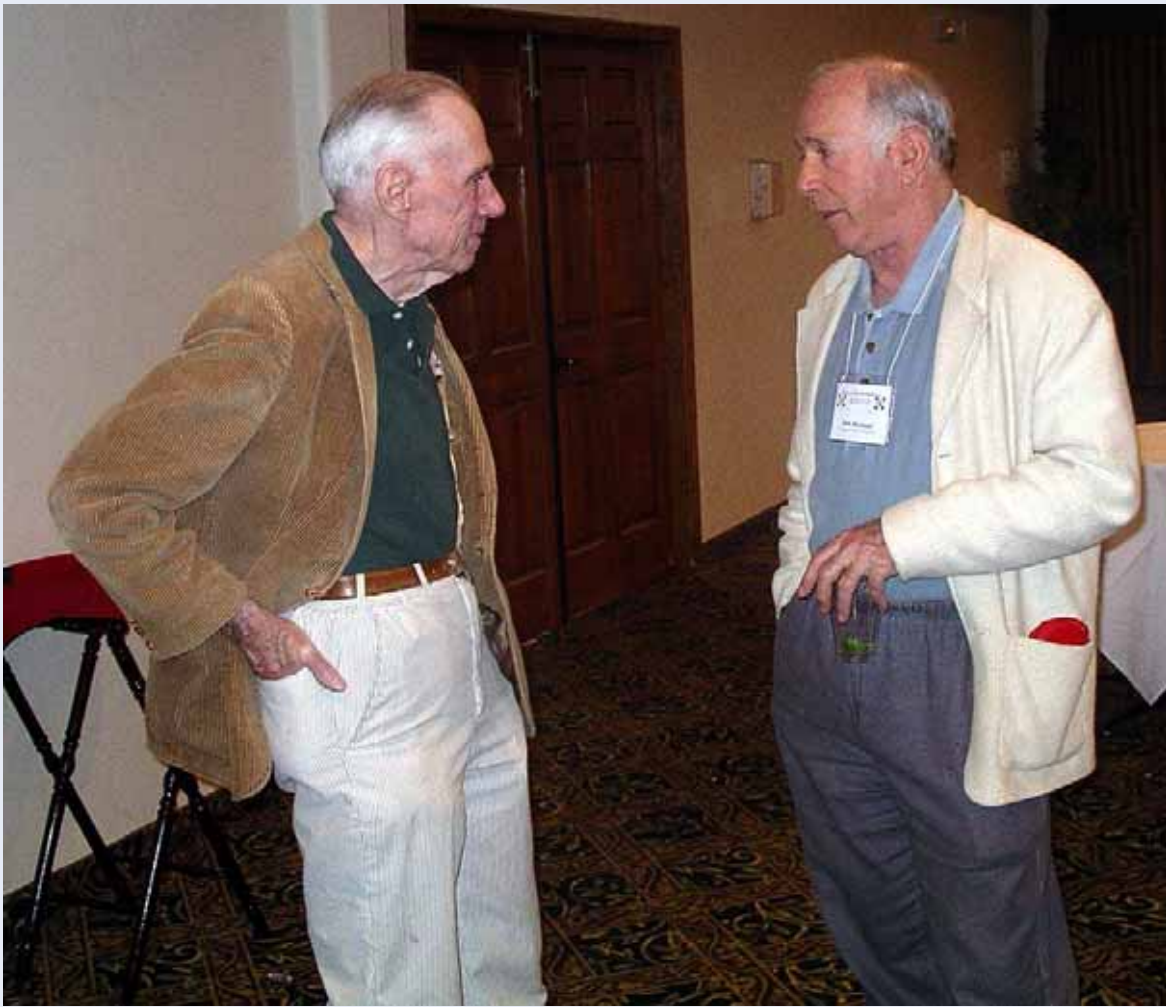
It would appear that consumers need more compassion to enhance their health and happiness, and they seem to take it from wherever they can find it. They are even willing to pay extra to get it, when offered as a benefit through brands. Some people believe marketers manipulate consumers for profit, but maybe consumers manipulate marketers, paying them incentives to get more of the compassion they need from the brands they want. Lucky for marketers and consumers, compassion's supply and demand is infinite.

Anisotropy in Psychic Healing

RICHARD A. BLASBAND, M.D.

At three months of age Isabelle was diagnosed with the most malignant form of brain tumor, Glioblastoma Multiforme, which *always* kills the victim within two years. Working with the healer Nicolai Levashov, locally and at a distance, the tumor was dissolved and damaged cortical tissue regenerated. Today, more than 11 years later, Isabelle remains free of cancer, and has made almost a complete recovery from her surgically induced hemiparesis (Koopman, 2002).

Sasha was born missing the cellular anlagen for testicles, invariably a genetic problem. Testing at 11.5 years revealed the absence of testicular tissue in the abdomen and extremely abnormally low levels of testosterone. If the tissue is not present by this age, it will never develop. Distance work with Levashov resulted in the development of functioning testicles with normal testosterone levels and motile sperm by the age of 16 (Koopman, 2002). On the basis of clairvoyant observations, and the use of the scientific method, Levashov, who has an advanced degree in theoretical physics, concludes that our universe is anisotropic, i.e. the qualities of space are constantly changing in every region and direction. Also, the architecture of space itself is quantized, imposing an obligatory pattern on all



Bob Jahn and Dick Blasband

matter existing within it. Qualities of space change the qualities of the matter within it, while simultaneously, matter changes the space it occupies. Using Levashov's method, the healer's conscious mental intention perturbs the microarchitecture of nonphysical "subtle matter," which is the "blueprint" of the cell on the physical cell's "intangible physical level" (Jahn, 2001). Through normal reproductive cycles, information at this level is transmitted to the physical level, thus changing the physical structure of the target organ (Levashov, 1994, 2000). These dynamics and variations of them permit ablation, change, and regeneration of tissue. Because functions on the intangible physical level take place independent of 4-dimensional time/space, this information/energy transfer can take place instantaneously or at most any programmed time.

Evidence for An Underground Magnetic Focusing System BRUCE CORNET, Ph.D.

Deputy Administrator, National Institute for Discovery Science

Dr. Ellen Crystall claimed in her 1991 book *Silent Invasion* that she detected evidence for an underground alien base near Pine Bush, NY. In 1992, Cornet began a three-year, 200-square-mile geologic mapping project in the Wallkill River Valley of New York State to test her hypothesis. Magnetic measurements were

made at 1,800 stations within the mapping area. Several maps were generated which show underground geologic features, and various types of magnetic anomalies. Some of these anomalies appeared to be unnatural and technologically based. On three separate occasions anomalous magnetic spikes were recorded at three closely spaced source locations just outside a small cemetery. The sources were very narrow and spaced to form an equilateral triangle about 1490 feet on a side. The spikes occurred every 5 to 10 seconds, and ranged from 3,000 to 10,000 gammas (56 to 185 mG) above or below background levels. When a gradiometer sensor was oriented in three different compass directions, it detected polarized signals coming from the sources. Such sophistication rules out both a natural source and an artificial human source, and the signals were focused and beamed (transmitted) out into space. Three notable anomalies have been observed over and around this triangular array: 1) A very large triangular craft was observed hovering over the transmitters (and cemetery) one evening. 2) The ground around the transmitters was sometimes unusually warm—enough so that it rapidly melted snowbanks along the road in front of the cemetery. 3) Witnesses observed a tracking beam of light arising from between the transmitters, which tracked a low-flying commercial airliner as it passed over the cemetery. If an active alien transmitter array exists underground, and is sending signals out into space, it represents a unique opportunity for scientific monitoring and study.

Coupled Map Lattices, Spontaneous Chaos, and Reproducibility

Y. DOBYNS (presenting) and H. ATMANSPACHER

Two-dimensional coupled map lattices (CMLs) display, in the appropriate parameter range, a stable phase quasiperiodic in both space and time where chaotic behavior quickly becomes restricted to linear defects which must eventually decay. With small changes to the model parameters, this stable phase becomes metastable and develops spontaneous eruptions of chaotic behavior. This permits the use of such simulations as a toy model for the investigation of intrinsically hard-to-reproduce phenomena, where the behavior of a system may undergo regime changes unpredictably and for no as yet empirically identifiable reason. Spontaneous chaos emergence was examined for a range in parameter space spanning the possible values of the emergence rate, from zero to a rate high enough to force continuous non-decaying spatiotemporal chaos throughout the simulation's history.

Several useful regularities were found, including the fact that the distribution of lifetimes for spontaneous chaotic states is nearly parameter-independent throughout the full range of spontaneous emergence rates. It was also found that, after a chaotic phase has been replaced by the metastable state, the likelihood of another spontaneous emergence at the same site is temporarily enhanced, decaying as $1/t$ until it reaches a constant value characterized by the mean emergence rate. The rate and lifetime of this enhanced decay period appears likewise to be parameter-independent. These parameter-independent properties may allow useful empirical generalizations to other phenomena displaying unpredictable long-lasting regime changes.

THE RETROACTIVE PRAYER STUDY: ANOMALOUS INFORMATION TRANSFER AND MEDICINE

LARRY DOSSEY, M.D.®

In December 2001 physician-researcher Leonard Leibovici published a startling, positive experiment in the *British Medical Journal* suggesting that prayer may act retroactively to alter the course of patients who had been hospitalized four to ten years prior bmj.bmjournals.com/cgi/reprint/323/7327/1450?. Although he concluded that retroactive intercessory prayer should be considered for use in clinical practice, the study was actually intended as a *reductio ad absurdum* designed to illustrate what he considered the irrational, meaningless, and ludicrous nature of experiments in remote healing and intercessory prayer. Leibovici's study ignited a firestorm of controversy because it suggested not only that consciousness may act remotely but also endorsed reversed causality, both of which are anathema to most scientists and physicians.

In December 2003 cardiologist Brian Olshansky, MD, of the University of Iowa, and internist Larry Dossey, MD, published a critique of Leibovici's study in the *British Medical Journal* bmj.bmjournals.com/cgi/reprint/327/7429/1465?. They suggested that Leibovici's findings, although suffering from methodological problems, may not be inherently implausible. Of particular relevance are hundreds of studies suggesting that humans can influence natural processes thought to be genuinely random. These studies thus raise the possibility that Leibovici's results may reflect an influence on the randomization process that lies at the heart of all controlled clinical trials. Olshansky



John Petersen, Roger Nelson, Larry Dossey

and Dossey also cited nineteen studies in which individuals attempted to mentally influence, retroactively, various living systems. Ten of these studies are positive, suggesting that retroactive mental influence may indeed have occurred in Leibovici's experiment.

Nonlocal mental phenomena have a long history in medicine, and include the ancient art of intuitive diagnosis and precognitive, health-relevant dreams. Because these abilities constitute survival value for the organism possessing them, they may be an engrained part of our biological heritage and therefore deserve our consideration.

The Electromagnetic Hypothesis of Olfaction in Insects: A Study of the Mechanisms and an Answer to the Enantiomer Debate

THOMAS M. DYKSTRA, Ph.D.

Robert Wright (1950s) was the first to hypothesize that insects use electromagnetic signals from molecules in order to "smell" them. He termed this the "vibrational theory of odor." Philip Callahan (1960s) was the first to put forward a model by which this could be accomplished. His proposed mechanism involved dielectric antennae scattered all over the insects' cuticle, but most especially the antennae. Insect morphologists call them sensillae and categorize them functionally into two different types, mechanosensors and chemosensors. This oversimplified filing system all but ignores the fact that there are more than 400 different sensillae shapes and sizes found on arthropods. Because Callahan was an antenna expert during WWII, he saw their striking similarity to dielectric waveguides used during that period of history. To date, only Callahan was able to offer an explanation for the different shapes and sizes, and he did this using antenna theory.

I was Callahan's last student. After his retirement, he downloaded all the information he could to me in the form of scientific articles, books, and Tuesday luncheons. I inherited one of the problems that beset both theories as well. This had to do with enantiomers. Enantiomers are virtually identical molecules that are mirror images of one another. The problem with enantiomers is that the observed effects could neither be explained well by the lock-and-key model nor by the electromagnetic model.

I will briefly review the history of this long debate, introduce dielectric waveguide theory using insect sensillae as models, and then focus in on the question of enantiomers. A description as to why the lock-and-key model cannot account for the observed biological activity of enantiomers, and why the dielectric waveguide model does will help to conclude my talk.

MYSTERIOUS CREATURES: CREATING A CRYPTOZOOLOGICAL ENCYCLOPEDIA

GEORGE EBERHART

American Library Association, Chicago, IL 60611

Reference books usually begin by defining the boundaries of a field of study, followed by consistent descriptions of specific topics. In a field as diffuse and interdisciplinary as cryptozoology, these tasks are not as simple as they might seem, even for someone who has been following the subject for more than 40 years. In preparing *Mysterious Creatures: A Guide to Cryptozoology* for publication in 2002, I began by asking such basic questions as: What is cryptozoology? What categories of unknown animals do cryptozoologists study? How do they go

about evaluating testimony and information resources? What are the defining characteristics of each alleged species? In answering these questions, I was able to decide on the content and arrangement of this comprehensive encyclopedia of cryptids.

Suggested Path of Planet X

DAMON ELKINS, sponsored by SSE
Member Larry Frederick

Presentation learning objectives:

At the conclusion of the presentation, participants will be able to:

1. Understand how ancient information described relatively stable and highly accurate celestial sphere in local area of the Milky Way Galaxy
2. Understand how modern knowledge matches that information
3. Understand the "disconnect" with conventional explanation of what the ancients knew and how they gained that information
4. Understand a plausible description of the Path of Planet X (corroborated by computer model of known perturbations of planets)

Basic premise—Many ancient "myths" about space travelers (from some of Man's earliest writings) could be based on fact rather than myth supported by growing body of evidence; highly advanced ancient understanding of Earth's complex movement from galactic to planetary scale; relative stability of galactic reference provides superior navigation method for space travelers whose orbit path is a highly elongated elliptical orbit around the Sun from between the orbits of Jupiter and Mars to far beyond Pluto's orbit; advanced knowledge of precise yet rare alignments revered by mankind with religious fervor suggesting possible origin from those who traveled in space with need and means of establishing such information (far exceeding need to know "when to plant"); two major alignments of objects of the celestial sphere (due to Earth precession) commemorated by megalithic structures on Earth, ancient art, and other long-term preservation for recall
Future plan—Construct virtual reality "flythrough" from Planet X to Earth by navigation method suggested in this presentation.



Erland Strand

DISPUTES WITH ALLEGED SKEPTICS: LESSONS FROM THE GAUQUELIN DRAMA 1962-2004

SUITBERT ETEL

Michel Gauquelin's claim (1955, 1960) of statistical relations between positions of planets as seen from Earth and births of eminent people must have been based on appreciably solid ground, otherwise it could hardly have kept up to five skeptical committees busy for more than four decades trying to refute it by all means. No other paranormal claim ever challenged so many disbelievers over such a long time period to seek support, even by their own research, for

making the unbelievable disappear. Gauquelin himself ran into disputes with Belgian, American, and French opponents to his neo-astrological statistical findings.

After Gauquelin's death in 1991, I continued the defense. The Dutch skeptics had entered the scene, supported temporarily by like-minded Germans. The Belgian, American, and French skeptics had collected four new samples of birth data, of which two supported Gauquelin's prediction, two others purportedly contradicted it. The Dutch tried data simulations to substantiate their suspicion that the original Gauquelin deviations from chance were due to spurious factors. But they failed and eventually resorted to an argument that had been flaring up repeatedly before: Gauquelin's data sample must be fudged.

Only four years later, an Australian skeptic joined in claiming: No, the Gauquelin data are clean, they have been fudged by fathers of the newborns who had to report birth times to registrars at local town halls. Biased by astrological belief, the fathers cleverly manipulated birth times so as to let the desired planet rise or culminate concurrently with the child's birth thus making their children's future look more auspicious.

My main strategy was to obtain the skeptics' data, to test, by objective means, whether their selection was biased or not, to scrutinize the way they had analysed the data and how they argued in detail. I also reanalyzed all their data on my own. The results are not only interesting regarding the question of whether the Mars, Jupiter, and Saturn effects really exist. Almost equally interesting are conclusions regarding effects on human intellectual functioning by the dynamics of compulsory disbelief.

Plato's Idealism Revisited

H. DAVID FRONING

5450 Country Club, Flagstaff, AZ 86004, USA
928-526-5916, froning@flagstaff.az.us

The idealistic worldview, generally attributed to Plato, and further developed by thinkers such as Aquinas, Berkeley, Kant, Hegel, and Eddy, declares that all there really is, is the immaterial mentality of Mind and the eternal and immutable *ideas* (Greek word for *ideal patterns*), which, with perfect beauty and absolute goodness, express it. Plato held that the temporal and ever-changing things of the physical world, with their mixtures of ugliness and beauty, and goodness and evil, are but the insubstantial shadows of imperishable *ideas* (now usually called *platonic forms*) that express only perfect beauty and absolute goodness. Plato's emphasis on *ideas* rather than *things*, and his Pollyanna-ish claim of an eternal world devoid of ugliness and evil seemed to contradict all experience and to refute the accredited evidence of the senses. His idealistic worldview therefore gradually lost popularity. Today, idealism is almost universally rejected or ignored.

This talk briefly revisits Plato's Idealism—not to assess its validity—but to attempt, with some metaphors borrowed from modern science, to place it in a more modern context to enable it to be better contrasted with the two other prevailing philosophical worldviews. Plato's platonic world is represented by a complex configuration space of infinite dimensionality—like the *Hilbert Space* of quantum mechanics, and the beauty and absolute goodness of Plato's platonic forms is viewed as an effulgence which, like the many rays (state vectors) of complex entangled quantum systems, shine throughout the timeless and distanceless *Hilbert-like Space* that they form. The immutability and immortality of platonic forms is symbolized by



Jean-Jacques Velasco and Michael Swords

Lorentz-invariant state vectors, and the worldliness and energy-momentum states of particles and radiation are the shadows they cast upon the massless mental terrain of consciousness. And although such mental terrain does not possess thickness, if it is sloping or irregular, shadows cast upon it by platonic forms will have both horizontal and vertical components. Horizontal ones provide objective "third person" data—the perceived states of physical things. Vertical ones record subjective "first person" *qualia* experience—feelings and emotions associated with the good, evil, ugliness, and beauty in individual lives.

The somewhat modernized version of Plato's idealistic worldview is compared and contrasted with the very popular "reductionist" worldview, which holds that everything (including consciousness and mind) can be reduced to the physicality of spacetime, matter, and radiation; and the less popular "dualistic" world view (held by some of us in the SSE) that accepts the reality of a physical world, but is skeptical that physical interactions occurring within material brains can ever fully describe consciousness or mind. The talk concludes by summarizing some suggested disciplines and actions for the falsification or verification of the precepts and predictions of idealism by empirical means.

The Unexplained Allais and Jeverdan Eclipse Effects, and Current Developments

J. GOODEY

In Paris in the 1950s, Maurice Allais performed several long-term series of observations upon the behavior of a short "paraconical" pendulum, and also optical sightings based upon the work of Esclangon (1926). He detected several periodicities in the precession of the plane of oscillation of the pendulum, unexplained in classical dynamics, and associated deviations in the optical sightings. Allais propounded a controversial unifying theory—that space is nonisotropic. This theory is supported by regularities in Miller's interferometric observations of 1926-27—the most elaborate physical experiment performed before WWII.

During one of Allais's marathon observational series, in 1954, quite fortuitously, a total solar eclipse passed not far from Paris. Extraordinarily, as the eclipse tracked toward Allais's laboratory, the oscillation plane of the paraconical pendulum executed an abrupt unprecedented counterclockwise shift of more than 13°. After a short hesitation, the oscillation plane then shifted back and pursued the original Foucault trend. Allais confirmed this effect on a more moderate scale during another total eclipse in 1959. This phenomenon has become known as the "Allais eclipse effect." At the time the details were only published in French, except for a summary article in *Aerospace Monthly*. However, English translations of Allais's original scientific reports are now appearing. Independently,



Doug Rogers

Brazil/St. Helena in October 2006, and Spitzbergen in 2008.

without knowledge of Allais's work, in 1961, Jeverdan, Rusu, and Antonescu observed a reduction of the period of a long Foucault-type pendulum during a solar eclipse—the "JRA effect." And at Harvard in 1970, Saxl and Allen reported variations in the period of a torsion pendulum during a solar eclipse. All these observations remain unexplained; they are the only gross anomaly remaining in "table-top physics."

We are planning to repeat and to extend the Allais and JRA pendulum experiments during solar and lunar eclipses and anti-eclipses. Our approach is to select the experimental locations with care so that the geometry will be ideal for observing pure, or canonical, cases. We plan to hone our technique in Borneo during the lunar anti-eclipse of October 28, 2004, in preparation for extensive observations in Colombia during the solar eclipse of April 8, 2005, using eight paraconical pendulums. Further ideal research opportunities will be available in Kenya/Hawaii in October 2005, Egypt/Hawaii in March 2006,

Do Prevailing Societal Conceptions Influence Reports of Near-Death Experiences? A Comparison of Accounts Reported Before and After 1975

BRUCE GREYSON, M.D., University of Virginia
GEENA ATHAPPILLY, Michigan State University

It has been hypothesized that near-death experiences are responses to the fear of impending death shaped by cultural constructs. The term "near-death experience" ("NDE") was coined by Moody in 1975, when he described 15 features characteristic of NDEs. The widespread popularity of Moody's book raises the possibility that subsequent NDE accounts were influenced by his description. The expectancy model would predict that NDE accounts reported after 1975 should show the influence of Moody's seminal description.

Long & Long (2003) attempted to answer this question by comparing NDE accounts occurring before and after 1975. Although that study found virtually no differences between NDEs that occurred before and after 1975, their NDE accounts were all collected after 1998, thus leaving open the question of the influence of Moody's model on the recent reports of NDEs occurring before 1975.

To study the influence of Moody's work on NDE reports, we compared the incidence of Moody's 15 characteristic NDE features among 23 NDE accounts that were *reported* before 1975 with 23 accounts reported *after* 1975, matched by age at time of NDE, sex, race, cause of near-death event, religion at time of NDE, medical severity of condition, religion of childhood, and cultural roots. Pearson chi-squared tests were used to determine whether a difference existed between the pre-1975 and post-1975 groups. Significant differences were found only for the tunnel experience, which was significantly more common in NDEs reported after 1975 (and which several



JSE Editor Henry Bauer

scholars have questioned as a core feature of NDEs); and for emotional state prior to returning to the body, which was significantly less fearful in NDEs reported after 1975.

These data provide little evidence of the influence of Moody's model on NDE accounts, and call into question the hypothesis that NDEs are imagined experiences derived from cultural constructs.

Astrology and Scientific Study: The Challenge

ROB HAND, robhand@starpower.net

Those who have studied astrology at all extensively almost invariably come to the conclusion that somehow "it works!" This is typically an impression gained in the course of working with astrological techniques as they have been intended to be applied. But such use does not actually constitute scientific testing in anything like the ways that the established sciences would recognize. The experiences of astrology's efficacy are anecdotal, and the measures of its success impressionistic. But when researchers have attempted to apply rigorous methods of analysis, usually statistical, the results have not been impressive, with a few exceptions. In part this can be explained by a kind of basic "fuzziness" in astrological reasoning, and in part by statements that it makes that are so broad as to have

little predictive value in the scientific sense of the term. These are problems that are inherent in astrology, but not the sole problems. Persons trained in scientific research bring a large array of presuppositions about the kind of phenomena that astrology ought to represent if it were truly a real phenomenon and not merely a technique of self-delusion. For example, one might want to look for a mechanism in the classical sense. One might want to find simple correlations between astrological and human variables. And above all one would want to find answers in terms that render vitalistic assumptions about the nature of the universe unnecessary. Despite the fact that quantum theory seems to have given a role to human consciousness in shaping phenomena, researchers in astrology have attempted to exclude it from research into astrology. But in reality it is very likely that astrology represents a kind of phenomenon that is not especially amenable to traditional scientific thinking, not because it is unreal, but because it requires ways of thinking and modes of analysis that the sciences have either not been able to deal with, or have chosen for good methodological reasons to place outside their ken. Astrology will be presented as 1) a mode of discourse that requires a re-analysis of the notion of magnitudes, and 2) a system much more linguistic than mechanical. It will be suggested that the sciences will have to re-examine their own basic assumptions about the nature of reality as much as they examine astrology.

Objectivity and Subjectivity in a Scientist's Personal Experiences of Telekinesis and Precognition

ROGER HART

695 N. Elkhorn Rd., Seal Rock, OR 97376
Roger_hart01@mac.com

Objectivity in science is limited in the disciplines of quantum physics, relativity, and consciousness research. An objective analysis of subjective experiences of telekinesis and precognition suggests a plausible explanation in quantum entanglement. The paradox of Wigner's friend points to the participation of human consciousness in the collapse of the wave function, the technical term for the conversion of information and energy into matter. Logic dictates that a nonmaterial aspect of mind must instigate the collapse procedure. The information-carrying capacity of this quantum channel may be less than 1% of the total capacity of human consciousness. A connection to a universal field of information through the mind's quantum channel is postulated to account for the phenomenon of telekinesis. Precognition requires that time is an artifact of consciousness suggesting that the mind precipitates space-time events by choosing particular aspects of universal information to experience.

The study of consciousness is central to further advances in physics as well as that of psi phenomenon. While many aspects of the problem of consciousness can be resolved through objective analysis, the hard problems of consciousness can only be studied introspectively. Thus, criteria for acceptable subjective reporting are essential for future advances in the understanding of consciousness. Many variations of reality are available to the human experience. The criteria for deciding which reality is most significant are ultimately a subjective process of consensus among individuals who report similarities in their experiences. Introspective anecdotal reports of anomalous realities are valuable tools for understanding the relationship between brain physiology and consciousness.

Psychomanteum Research on Healing, Creativity, and Imagery

ARTHUR HASTINGS

Institute of Transpersonal Psychology, Palo Alto, California

The psychomanteum provides an unconventional technique for accessing and researching subjective phenomena. This technique uses a darkened room, with a mirror at one end to focus attention. The person sits in a chair and gazes with eyes open at the mirror, which is tilted to reflect the darkness. Participants report a variety of visual, vocal, mental, and physical phenomena. The first line of our research has been on healing of bereavement and grief for a human death. A structured process of remembering the deceased, followed by sitting in the mirror room, resulted in statistically significant reductions in grief, guilt, need to communicate, and other feelings. About half of the 60 participants reported sensing the presence of the deceased person visually, imaginatively, or tactilely. (We take no position on this.) Another aspect is the facilitation of creativity, in which participants have received insights on questions and problems. In a third area of research we replaced the mirror with a polished copper wall and placed a magnet above the head, a partial replication of research done at the Menninger Foundation. The researchers found that large anomalous electrical potentials were measured on the participants' bodies in this condition. In our pilot studies on the subjective experience, several participants reported that intense and free flowing mental imagery was produced. The research has relevance for the study of apparitions and hallucinations, restricted environmental stimuli conditions (sensory deprivation), healing of grief, and ontological issues about the nature of the phenomena. Our research on bereavement has been published in *Omega: A Journal of Death and Dying*, Vol. 45, No. 3, 2002. The Menninger research has been published in *Subtle Energies*, Vol. 2, No. 3, 1991. The electrical phenomena have been discussed in the *Journal of Scientific Exploration*, Vol. 9, No. 3, 1995.

Dirac's Equation and a Possible Physical Basis for some of Astrology

DONALD HOTSON, sponsored by SSE Member Hal Puthoff

Astronomy holds that gravitation is the only interplanetary force, so the "influence" of planets and stars on the earth is so tiny as to preclude any possible effects. However, the complete Dirac equation requires a "sea" of negative-energy electron-positron pairs (epos) configured as a vast Bose-Einstein Condensate (BEC). A body of plasma (sun, gas giants, etc.) rotating in this BEC can be shown to set up standing waves of polarized epos. There is ample evidence for such waves, including the configuration of planets and satellites as well as major effects on our ionosphere when Jupiter or Venus are closest. Therefore, gravitation is not the only force to be considered, and the range of possible effects on Earth is greatly extended.

SENSORS, FILTERS, AND THE SOURCE OF REALITY

ROBERT G. JAHN and BRENDA J. DUNNE

Princeton Engineering Anomalies Research, Princeton University

The failure of contemporary scientific theory to correlate and explicate anomalous consciousness-related physical phenomena may trace to inadequate comprehension of the process of information exchange between the mind and its ultimate source. Elevation of the subjective capacities of consciousness to complementary status with the more objective physical senses, along with recognition of the bi-directional capabilities of both categories, allows establishment of resonant channels of communication between the mind and its source environment that can exceed conventional expectations. In this manner, order can be introduced into randomness, and self-consistent realities can be extracted from transcendent chaos. The key elements in tuning these channels to amplify such



Arthur Hastings and Stan Krippner



Field Trip to Valley of Fire State Park

information creation are the physiological and psychological filters imposed upon them, some of which can be enhanced or altered by conscious or unconscious attention. Specifically, such attitudinal tactics as openness to alternative perspectives, utilization of transdisciplinary metaphors, self-sacrificial resonance, tolerance of uncertainty, and replacement of dualistic rigor by mental complementarity can enable experiential realities that are responsive to intention, desire, or need, to an extent consistent with prevailing empirical evidence.

NIDS Investigations into the Enigmatic Large Triangular Craft Phenomenon COLMA. KELLEHER, Ph.D.

National Institute of Discovery Science

During the early morning of January 5, 2000, four police officers in different but adjacent precincts were witnesses to a large, silent, brightly lit, craft that flew at low altitude in a southwesterly direction in Western Illinois. Within hours, one of the police officers called NIDS to report the incident and thus began one of the most intensive and widely publicized UFO investigations in history. The huge object overflowed the perimeter of Scott Air Force Base. I will describe the investigation of the Illinois case as the starting point to recounting a large number (about 300) of subsequent cases involving reports of similar large craft that NIDS has received in the intervening four years. Using specific examples, some patterns associated with these reports will be analyzed. As a

test of the validity of the NIDS triangular database, NIDS also obtained two separate and independently acquired databases of reports of triangular objects from other sources, which also will be compared with that of the NIDS triangular object database.

The Story of Fratel Cosimo, A Visionary in Southern Italy

STANLEY KRIPPNER, Saybrook Graduate School
ASHWIN BUDDEN, University of California, San Diego

Cosimo Fragomeni (born in 1950) has gained an international reputation as a devout Catholic visionary. Although he has received little formal education and no advanced religious training, he is a member of a lay order of Franciscans and is currently the leader of a spiritual community in the Calabria area of Southern Italy. At the age of 18, Fratel Cosimo had a series of visions of the Virgin Mary whom he claims appeared to him, standing on a large rock. During one of these visions, the Madonna instructed him to build a shrine at the location to bring people to God. Since then, the shrine called *Madonna dello Scoglio* has been the site of multiple cases of anomalous healings and continues to attract a large spiritual following from the region and from other countries. There, Fratel Cosimo and a community of about 60 volunteers preside over biweekly prayer and devotional services throughout the year that attract anywhere from several hundred to 1,000 pilgrims, reportedly 50,000 for a special Mass in May, 2003. Also featured are private

meetings with Fratel Cosimo for healing and prayer, although he does not emphasize healing as the focus of his work. In September 2003, the two of us were part of a four-member team who attended two of these evening services to observe the activities and conduct interviews. We were invited to interview Fratel Cosimo after each service and one member of our group was able to meet him privately for a prayer session. We interviewed congregation members and several people who claimed to have experienced anomalous healing, and we also witnessed ecstatic behavior among several members of the congregation. Historically, there has not been sufficient documentation or empirical pre-testing and post-testing of reported cases of healing, except for the case of a boy who recovered from paralysis after a visit to the shrine. Nevertheless, a fervent belief in Fratel Cosimo's power and spiritual devotion is held within the community. Given the increasing popularity of the *Madonna dello Scoglio* shrine, we feel that further investigation of its ritual practices and purported cases of healing are warranted. Another topic worthy of further investigation is Fratel Cosimo's charismatic status among his followers and its influence on their recovery from various sicknesses. Data on this relationship could then be compared with those of other charismatic spiritual figures in Italy and other parts of the world.

An Empirical Study of the Transmission of Healing Energy via E-mail FRANCESCA MCCARTNEY, Ph.D.

This research studies the intentional encapsulation of healing energies into an e-mail text message and transmission of these energies via the Internet to an intended intuitive recipient. This study, framed within the field of energy medicine, researches the potential impact on the learning of distance students; and investigates a method for a stronger link-transference of information between distance educators and students. This study tests information discovery on non-linear, nonlocal communication; and studies an implied evolution of the sense of intuition.

Distance education and intuitive communication are both nonlinear, nonlocal systems of information exchange. Internet e-mail can hold intentional sensorial resonance; and this type of e-mail can be used as a provider of energy-information which can be utilized as part of an energy medicine distance education program. An intuitive person can open an Internet transmitted e-mail and receive the emotional/cognitive content of intentionally encapsulated energy/information; and this occurs both as a nonlocal and nonlinear experience.

The Internet is an evolving ecological system capturing and holding human thought in digital format that is transversing time and space in order to deliver content. The weaving of intuitive and Internet communication is spawning a World Wide Web, with small-world transformation through the shortening of energetic time-space distances between people.

Speculation is that the Internet is a viable "space-conditioning" holder of intentional energy as well as a test of "vital reality." Imaging the World Wide Web as an omnipresent information archival system may suggest that intuition is a type of communication linkage system which may be consciously utilized within the matrix of the digital reality of the Internet. This linkage information gives new significance to distance healing research within the medical, parapsychological, and noetic sciences. This research seeks to inspire and identify fertile areas for further cross-disciplinary exploration.

The research was seed funded by the Institute of Noetic Sciences (IONS) and a donation from ManaTracking, Inc. It was conducted in 2002-2003 in the IONS laboratory.

OBJECTIVITY AND SCIENCE: ANOMALOUS EXPERIENCE AND HUMAN EVOLUTION

JAMES MCCLENON, Ph.D.

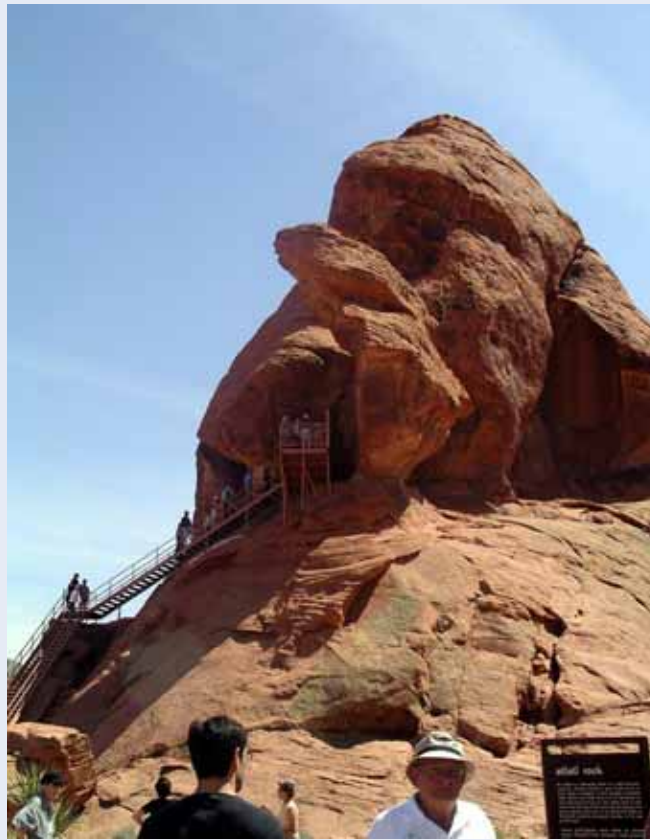
Department of Social Sciences,
Elizabeth City State University,
Elizabeth City, NC 27909

Parapsychology, UFOology, and cryptozoology have failed to achieve full scientific legitimacy. Many proponents believe that their field's progress toward legitimacy has not been commensurate with existing evidence. Parapsychology, for example, claims replicable experiments indicating paranormal processes. All three fields have generated huge bodies of evidence based on experiential accounts. Studies of the reaction of mainstream scientists to anomalous claims reveal that science has rhetorical and political characteristics. These characteristics establish the domains of border sciences, preventing their legitimacy. The *Ritual Healing Theory* provides a strategy bypassing this problem since it is grounded in the Darwinian paradigm. It hypothesizes that capacity for various types of anomalous perception evolved through evolutionary processes. The theory argues that early hominids developed dissociative capacities for coping with trauma. Later hominids devised hypnotic, therapeutic rituals benefiting those with dissociative ability. As a result, dissociative/hypnotic genotypes became more prevalent. Experiences linked to dissociation (apparitions, waking and sleeping ESP, out-of-



James McClenon

body experiences, and psychokinesis) led to belief in spirits, souls, life after death, and magical abilities, resulting in shamanism, humankind's first religion. Shamanic healing practices from 30,000 years ago continued selecting for dissociative and hypnotic genotypes, further shaping the physiological foundations of anomalous experience, religion, and ritual healing. Ritual healing hypotheses are testable within the domains of psychical research, anthropology, archaeology, social psychology of religion, folklore, history, physiology, and medicine. Although science involves political and rhetorical processes, its progress is influenced by innovations having practical applications. The ritual healing theory makes specific predictions regarding mental and physical health care: those with greater capacity for anomalous experience can benefit from ritual suggestion and should be offered appropriate, culturally specific treatments.



Larry Fredrick (in hat) at Valley of Fire State Park

state for each component of the system. In well-defined systems, this optimization can be modeled quantitatively by maximizing a joint probability distribution for the components. One can calculate the probability distribution as a function of deviation from the most probable unperturbed state for each component. The probability distribution of each component affects the distribution of the outcome, but not necessarily its magnitude. An intuitive graphical explanation of the joint probability distribution will be presented.

Systems that are constrained on one side, e.g., pseudorandom number generators, have a very constrained probability distribution and therefore nearly all the deviation occurs in the complementary system, or not at all.

Nature's Selection Principles in Subtle Interactions

GARRET MODDEL

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

Multiple subtle interactions (SI) combine in producing anomalous phenomena. Nature chooses differing magnitudes of each of these SI to determine the overall outcome. I propose a model for these choices and apply it to experimental data.

Every SI experiment involves at least two SI processes such as extrasensory perception and psychokinesis. This model makes no distinction between the two, so that the concept of action-reaction is replaced simply by interaction. Taking one experiment, for example, that tests the precognition by participants of randomly triggered events, there are multiple potential SI: the event's effects on the participants, the participants' effects on the trigger, the experimenter's effects on the trigger and operators, the participants' and overall experiment's effects on the experimenter, etc. How does nature distribute the shifts from the unperturbed outcome among the components of the experimental system?

Nature's choices can be modeled using a principle of maximization of joint probability. According to this model, nature takes into account the dominant goal, which is usually the intention of the experimenter or participant. She then chooses the outcome that provides the intended result with as little deviation as possible from the most probable unperturbed

Experimental Verification of Allais-Esclangon Periodic Light Deviations

VINCENT MORIN sponsored by SSE Member Bob Wood
vincent.morin@univ-brest.fr

In the 1920s, the French astronomer E. Esclangon made optical measurements, using an autocollimation setup. He said his measurements exhibited a periodic behavior with period close to 24 h. Later, in the late 1950s, M. Allais, economist and physicist (1988 Nobel prize in economics), made similar measurements in parallel with pendulum experiments. Once again he reported 24h, 24h50mn periodic deviations of optical measurements.

Those measurements (tedious at the time they were first made) have been made again over four months (October 2003 to February 2004) with a fully automated setup. A webcam chip is used to monitor at 7 fps a laser focus 85 cm away from the light source. The barycenter of a 4000 frame mean spot picture is filed every 10 mn. It has been found that deviations really exist which have periodic spectral components at 24h and 24.86h. Moreover, the amplitude found is nearly the same as found by M. Allais (about 1 μ rad). It has been verified that temperature variations, which are the main confusing factor, do not explain those results.

With the kind support of Mr. Thomas Goodey, another experimental setup with much higher thermal immunity will soon start monitoring several light beams. As M. Allais did, we will make those measurements in parallel with Mr. Goodey's pendulum experiments, for a tentative correlation. If those experimental facts are repeatedly confirmed, they will ask for an explanation which does not seem to be contained in the theory as presently taught.

Two Neglected Effects in the Dynamics of a Physical Pendulum

HÉCTOR A. MÚNERA

sponsored by SSE Member Larry Fredrick
Classical Foundations of Physics Group, Department of
Physics, National University, Bogotá, Colombia

Over the last 120 years several reports indicate the existence of various anomalies in the dynamics of pendulums during eclipses. As a preliminary step toward understanding such unexpected phenomena, we have undertaken an analysis of the dynamics of a physical pendulum during normal conditions. By "normal" we understand the behavior of a pendulum subject to the gravitational attraction of the earth, the sun, and the moon during nonalignment conditions.

A literature search indicates that only the Foucault effect and the Airy precession are usually taken into account. Except for the pioneering work of Allais, we could not find another paper analyzing the effect of cosmical objects over the dynamics of a pendulum.

So far, we have been able to identify two new effects that modify the rate of rotation of the plane of oscillation of the pendulum, namely:

- 1) Extension effect. The physical pendulum is an extended object subject to a torque produced by the Coriolis force acting at its center of mass. The small vertical component of this torque produces a rotation of the plane of oscillation of the pendulum. And,
- 2) Cosmic effect. The second order Airy precession is always calculated for a null initial tangential velocity of the pendulum. At any arbitrary instant of time, the sun and the moon have components of force perpendicular to the plane of oscillation of the pendulum. Such accelerations produce a small but finite tangential velocity of the pendulum that leads to a rotation of the plane of oscillation.

The two new effects, together with the standard Foucault effect, reproduce extremely well the empirical observations made by Allais during the 1950s. It is worthwhile to note that—contrary to our conventional, although novel, interpretation—Allais interpreted his data as incompatible with current physical theory. The next step in our research is the analysis of the behavior of the pendulum during alignment conditions, in particular solar eclipses. This is part of the preparation for an experiment during the April 8, 2005, solar eclipse in Colombia.

Preliminary Results Obtained with a Stationary Michelson-Morley Interferometer Operated in a Continuous Manner Near the Equator

HÉCTOR A. MÚNERA, DANIEL D. HERNÁNDEZ, J. EDGAR ALFONSO, GERMÁN ARENAS

sponsored by SSE Member Larry Fredrick
Classical Foundations of Physics Group, Dept. of Physics
Universidad Nacional de Colombia, Bogotá (Colombia)

In the 1920s, Dayton C. Miller reported that he observed fringe shifts during his elaborate experiments carried out with a rotating interferometer operated in a continuous manner during a long observation period. These extraordinary findings were dismissed by the vast majority of the physics community, and have now been almost forgotten. To check for the existence of such shifts, we have set up a stationary interferometer at the Centro Internacional de Física (CIF) in Bogotá (Colombia). The arms are 2 meters long (with no reflections), and the light source may be either a YAG green laser or a red He-Ne laser. The interference pattern is registered once per minute during at least 24 hours. Measurements started in September 2002 and are repeated every other week. We have observed periodic fringe shifts, similar to those claimed by Miller, which appear to be incompatible with current physical theory. Curves obtained



Roger Nelson, Hal Puthoff, and John Alexander

using different light sources show similar behavior. This paper summarizes the preliminary findings of our experiment.

Factors Affecting the GCP/EGG Network: What Matters, What Doesn't, What Questions Can Be Asked?

ROGER NELSON, Princeton, NJ

Since August, 1998, a network of random event generators placed around the world has been generating a continuous array of random trials in a large and growing database. The original intent was to examine the data to see whether there might be any nonrandom patterns associated with major events in the world. The primary means of addressing this question is statistical analysis of the data acquired during natural and human-caused disasters, terrible accidents, grand celebrations, world-class sports events, major religious observances, and widely publicized demonstrations and ceremonies. Over the five years the project has been running, we have accumulated substantial evidence that the data do differ from random expectation during a majority of formally defined events, which are identified and specified prior to examination of the data. With some 170 cases available, it becomes feasible to ask more detailed questions: What kinds of events have stronger and weaker effects? How are the results influenced by the number of people who are affected and engaged? Are negative events or positive events more potent? What about geographic distance or psychological relevance? We are at this point just beginning the task of formulating questions that can give unambiguous answers. There are serious difficulties arising from a natural confounding of the factors we want to explore, and difficulties with very basic issues of definition and meaning. This paper is an introduction to our explorations to date. We invite commentary and suggestions, and welcome any independent assessments of the GCP database.

METEOR-LIKE GEOPHYSICAL PHENOMENA

ANDREI YU. OL'KHOVATOV

Moscow, olkhov@mail.ru

This report is on a phenomenon which can be called "geophysical meteors" or "geometeors." They are meteor-like luminous formations, but of non-meteoroidal (i.e. terrestrial/geophysical) origin. Sometimes they fall on the ground producing damage. In many such events the damage was a keystone showing that a bolide or a fireball seen had nothing to do with a meteoroidal meteor. We collect data on these unusual events, and try to summarize them, revealing their properties. Two properties of geometeors are more or less established:

1) there is a connection of geometeors with endogenic processes: geometeors are often reported in association with earthquakes. Often geometeors occur not far from areas of increased seismicity, but not right in the areas.

2) There is a strong connection of geometeors with atmospheric processes. Observational data shows that most often geometeors are reported in lacuna between cloudiness upsurges. Observational data hints that both atmospheric and tectonic processes have an input in geometeor appearance. In some cases "classic" atmospheric factors are clearly seen (dominate?), so we could call the phenomenon a "classic" ball-lightning. In others tectonic factors are clearly seen, and we call the phenomenon "earthquake lights." And both factors can be seen in many cases.

An intriguing aspect of geometeors is that there are hints that at least sometimes they can transport some substance

("geometeorites"). If confirmed, this would be one of most puzzling properties of geometeors.

More info about the phenomena is posted at: www.geocities.com/olkhov/gr1997.htm. The work is private research of the author.

ESTIMATING GIANT AQUATIC ANIMAL DIVERSITY USING CUMULATIVE SPECIES DESCRIPTION CURVES

CHARLES PAXTON

Research Unit for Wildlife Population Assessment; Centre for Research into Ecological and Environmental Modelling
University of St. Andrews, The Observatory, Buchanan Gardens,
St. Andrews, Fife KY16 9LZ, Scotland, United Kingdom

Cumulative species description curves were used to estimate total species diversity (including as yet undiscovered animals) of giant (= 2 m long) marine and freshwater mobile animals. This analysis included both benthic and pelagic species described up to 2003. The best fit curves by a number of methods gave means of between 0 and 173 for the number of marine species likely to be discovered, with between 0 and 20 likely to be discovered in freshwaters. The empirical per annum description rate for giant marine animals over the last ten years is 0.3, the mean current (2004) estimated rate from three different methods is 0.01-0.306. In freshwaters the empirical per annum description rate over the last ten years is 0 with a current mean estimated rate of between 0 and 0.08. Curves were also estimated by zoogeographic region and taxa. This methodological approach requires a number of assumptions which were not wholly met in this analysis. The possibility of meeting these assumptions in the future were assessed.

Anomalous Information Transfer: From Laboratory Anomaly to Fledgling Communications Application

DEAN RADIN, Ph.D.

For about a century, researchers have investigated reports of anomalous information transfer associated with human experience. A dozen classes of experiments have been developed over the years to study these "psi" phenomena. About a thousand published experiments have established the existence of these effects beyond a reasonable doubt to many scientists who have paid close attention to the cumulative evidence. Unfortunately, adequate theoretical models have lagged the empirical data, so many orthodox scientists assume that the evidence is solely attributable to flaws or fraud, and can therefore be ignored.

Because accumulation of evidence has not been sufficient to attract mainstream attention, I am conducting a series of experiments to see if practical applications might be able to finesse the scientific controversy. The idea is to explore whether meaningful signals can be transmitted from one person to another under conditions that exclude all known sensory and energetic interactions. This applied research project uses a modification of a class of experiments based on evoking physiological responses in a "sender" and looking for concomitant unconscious responses in a distant, isolated "receiver." The experiment encodes a word into series of bits, which are then used to arrange the means by which a sender is exposed to stimuli. The physiological responses of the distant receiver's EEG, heart rate, and electrodermal activity are

examined at the same time as the stimuli are presented to the sender to see if the encoded word can be decoded.

In the first pilot test, the transmitted message consisted of 12 bits; 11 were successfully decoded in the receiver. With additional error-correcting algorithms and more refined bit-discrimination techniques, it is conceivable that longer messages may be transmitted between people with complete accuracy. Additional details about the method and results of followup tests will be described in this task, along with speculations about theoretical explanations.

The Tim Dinsdale Memorial Award Lecture 2004

RECENT DISCOVERIES OF POSSIBLY NEW MICROBIAL LIFE FORMS IN LOCH NESS AND OF APPARENTLY ANIMAL REMAINS LINKING WITH THE MID-1970 DINSDALE ERA AT THE LOCH—AND A CALL FOR IDEAS FOR ASSISTANCE IN THEIR CRYPTOZOOLOGICAL ANALYSIS

ROBERT H. RINES, Academy of Applied Science
30-31 Union Wharf, Boston, MA 02109, rines@mit.edu

As my introduction to this lecture, and as probably one of the few who was both a longtime friend and also a close exploration partner of Tim Dinsdale over almost a decade at Loch Ness and Loch Morar in Scotland, and even in the Bigfoot quest with Peter Byrne in Oregon, I shall present a brief pictorial review of our joint exploration collaborations.

Proceeding then to the past two summers of 2002 and 2003 of our Academy of Applied Science continued researches at Loch Ness, this lecture will announce the discovery, and will show underwater video tracking of apparently new mushroom-shaped microbial life forms and structures in the deepest pitch-black waters of Loch Ness off the steep underwater cliffs of Horse-shoe Scree (Craig) near the southern end of the loch. This will touch upon our struggles, ultimately successful, in recovering at least fragments of specimens (as they would consistently explode into snow blizzard-like nothingness and melt away into the water during the pressure changes of our ROV surfacing from the 600-foot depths).

Presently, these mushroom-shaped structures have stubbornly resisted authoritative identification at leading institutions, which have so far only been able to tell us what they definitely are *not*. They currently appear, indeed, to be physical structures previously and presently unknown to underwater science—marine or freshwater.

Our lecture shall also provide a possible linking of the remarkable 1975 Academy's underwater elapsed-time photographs of unknown animals first published by Dinsdale and then by us in *Nature* magazine, with our 2001 underwater videography of possible "animal" remains that we stumbled upon with our ROV, lying on the 350-foot bottom outside the mouth of Urquhart Bay, centrally in the loch. Despite our state-of-the-art GPS and underwater acoustic transponder navigation equipment, we were unable in 2003 to return to the spot for the recovery of the find.



Dean Radin and Marsha Adams

We herewith issue a call, accordingly, for help and ideas from the cryptozoological community to assist the Academy in:

- (1) the positive identification of these unknown mushroom-shaped structures and better ways to secure their complete recovery intact, and
- (2) how more fruitfully to conduct our needle-in-the-haystack underwater search for possible bone or carcass remains in this mysterious long, deep, and dark fjord.

Poltergeist Patterns: A Comparison of the Tina Resch Incidents with Previous Cases WILLIAM ROLL

The author compares recurrent spontaneous psychokinesis (RSPK or poltergeist) that he and others had witnessed in 1984 near Tina Resch with a survey of 116 previous cases. Tina had been abandoned by her mother when she was ten months old and was adopted by Joan and John Resch. A grown son and four foster children were also in the home. The Resches were harsh disciplinarians, and Tina was regularly beaten for minor infractions. This may have resulted in RSPK when she was 14 and made her choose partners in life who perpetuated the abuse. The last of them killed her 3-year-old daughter. Tina's RSPK is discussed in several papers in the *Proceedings of the Parapsychological Association*. *Unleashed*, a Paraview Pocket Book by Roll and Valerie Storey about her life, is coming out in May 2004.

Several of the RSPK characteristics shown by the survey were repeated in the Tina Resch case. They include the age of the agents, anger at parents, and low tolerance of frustration, and evidence of epileptic-type discharges in the brain. The incidents tended to begin during increased geomagnetic disturbances and after family crises. They usually lasted about two months. There were few if any incidents when the agent was asleep. The occurrences often involved the same object,

type of object, or area. The movements showed peculiar trajectories, such as going around corners, or moving rapidly or slowly. There was a gradual reduction in the number of incidents with increased distance from the agent. The agents sometimes threw things normally. Observation of the agent by witnesses rarely inhibited the events, but a direct gaze on an object often retarded movement by the object. Exorcism had no effect. The author brings these and other observations together in a theory for RSPK.

Hypothesis of the Biofield

SAVELY SAVVA, MS

Monterey Institute for the Study of Alternative Healing Arts
(MISAHA)

The hypothesis is based on viewing the organism as a self-controlled cybernetic, thermodynamically open system. It is suggested that the biofield is the general control system of the organism, carrying four fundamental programs of life: development, maintenance, reproduction, and death. It is based on the genetic material of the organism, develops as a hierarchy in ontogeny, and operates the organism through control subsystems, including nervous, humoral, and electromagnetic. The behavioral aspect of the biofield includes the mind as a set of basic encoded instincts, memory, and mechanisms of extracting meanings out of perceived information.

Based on the reviewed scientific observations, it is suggested that the biofield is carried by at least one yet-unknown fundamental physical interaction, designated as X-Interaction, that is capable of interacting with the currently known fundamental physical fields and physical objects as well as with biofields of other organisms. Discussed are some properties of the X-Interaction, possible experimental approaches, and some methodological specificity of experimentation with exceptionally psi-gifted individuals.

The concept of the biofield is essential for understanding all kinds of mind-body interactions including placebo effect, so-called "energy therapies," acupuncture, and application of stem cells for therapeutic purposes, as well as for scientific comprehension of the operation of the genome and possible directed mutogenesis in biological evolution.

Some Critical Concepts at the Foundations of Science and Mathematics

RICHARD SHOUP

Boundary Institute, Los Altos, California

It is often said that the most important part of scientific progress is not the answering of a difficult question, but the proper framing of the question in the first place. This paper argues that yet more important is having the proper space of concepts and assumptions within which such questions can even be framed. We give examples from two general classes of current barriers to scientific progress: misunderstood or inadequate concepts, and unacknowledged or wrong assumptions. Such fundamental problems crucial to 21st century progress in physics and mathematics include causality and the nature of time, randomness at the core of physics, and paradox in self-referring logical equations. Some new insights on these will be explored whereby their deep and surprising interrelation becomes apparent.

Needed: A Rethinking of Atmospheric Electricity

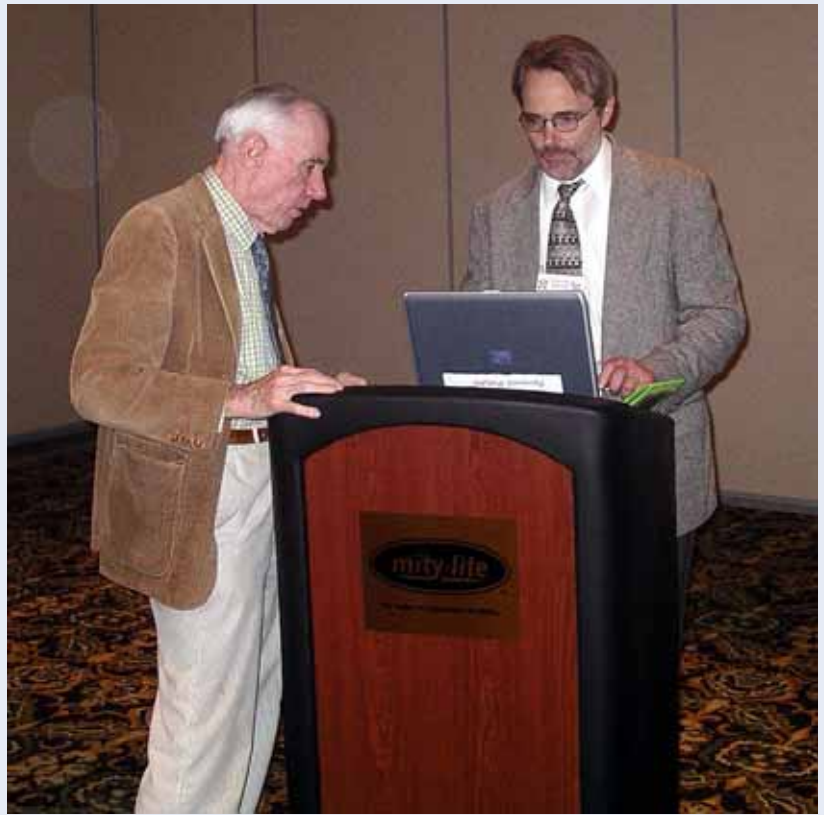
DICK SPALDING

Unexplained atmospheric phenomena, particularly luminous ones, continue to be routinely observed and reported by children on up to experienced pilots and ship captains. Many reports are of such detail and description as to be all but irrefutable that something inexplicable has been seen. To anyone studying these reports with an open mind, it should quickly become apparent that events are indeed occurring that are beyond the possibility of being explained as illusions or misperceptions of ordinary objects. Despite such eyewitness evidence, scientists almost universally refuse to believe that the sightings



William Roll and Rosemarie Pilkington

represent anything inexplicable. They maintain this stance even while admitting that some lightning-related phenomena acknowledged to exist continue to remain beyond their current understanding. This essay contends that, like the unexplained lightning-related phenomena, the majority of other unexplained atmospheric phenomena are electrical manifestations, too. Unless one invokes alien or paranormal hypotheses, that is the only logical conclusion. A further contention is that proper understanding of these phenomena will not happen unless science begins to question some of its long-held precepts for atmospheric electrical interactions. Although not presented as "the answer," a proposed mechanism is offered to illustrate the type of thinking deemed necessary to break out of the box of rules the current paradigm dictates. In the proposed mechanism, a conductive "channel" populated primarily with ions is able to form in air, and in the process, to keep surrounding air molecules at bay. Such a channel would represent a medium for rapidly transporting electrical charge and energy (and even mass) through the atmosphere, invisibly, without the need for air breakdown, and without incurring the limitations of ion diffusion through air. Existence of such a mechanism, or something similar, would allow many currently unexplained phenomena, such as ball lightning, lights in the sky, and even geophysical meteors, to at last find explanation.



Vice-President Bob Jahn and Program Chair Mark Urban-Lurain

The Synchronized Universe—Possible Approach to the "New Physics" of the Paranormal

CLAUDE SWANSON, sponsored by SSE Member Marsha Adams

Paranormal phenomena often violate current physics. The range of paranormal "forces" does not weaken with distance, passes through shielding, and even acts across time in ways that appear to violate causality. The ability of paranormal effects to affect random event generators, seemingly affecting quantum noise, is a further challenge to conventional science. A model is proposed for modifying current physics to account for some of these effects, proposing a level of detail of physical processes beneath that of quantum mechanics. In this model, the "vacuum energy" is due to the interaction between local particles and the rest of the matter in the universe. It is a "non-local hidden variables" theory, and therefore does not contradict the EPR experiment. It is an extension of the model proposed by John Wheeler and Richard Feynman, and extended by Cramer, who note that, by allowing radiation to travel backward in time (advanced waves), all local forces become coupled to distant matter with no contradictions. In the model, this results in a phase transition to a synchronized system of motion at the smallest (Planck) scale. Particles that are synchronized or phase-locked interact and exert forces on one another. Particles which are not synchronized are essentially invisible, and constitute other parallel dimensions. Their interaction with the local synchronized frame, being out of phase and uncorrelated, appears as quantum noise. "Subtle energies," such as prana, are explained as the partial coupling of adjacent synchronized systems. The holographic aspects of consciousness emerge naturally in this view. Paranormal phenomena alter this coupling, resulting in reductions of observed quantum noise (REG correlation) consistent with observation. The model

accounts for many puzzling aspects of paranormal phenomena, including its independence on space and time, its ability to penetrate barriers, and its ability to affect quantum randomness.

METHODOLOGICAL ISSUES IN ASTROLOGICAL RESEARCH

MARK URBAN-LURAIN, Ph.D.

Michigan State University, urban@msu.edu
www.msu.edu/~urban

Astrology is an anomaly that has been scientifically studied since the 1950s with conflicting outcomes (the Gauquelins, skeptic groups; Westrum, 1998). Criticisms of research on astrology fall into two broad categories. First, methodological challenges of the studies based on sampling biases, inappropriate control procedures, or inappropriate statistical analyses. Second, for studies, such as those of the Gauquelins, that withstand methodological challenge, the claim is often made that the results are so small as to be meaningless (Phillipson, 2000). I will present the following methodological challenges and discuss ways to address them:

- The variables of interest
- Sources of measurement error
- Methods for computing expected frequencies
- Appropriate measurements of the variables
- Appropriate statistical techniques

I will then present some suggestions for increasing the resolution and power of the instrumentation that might be better able to detect an astrological effect and produce statistical outcomes that have larger effect sizes.

Phillipson, G. (2000). *Astrology in the Year Zero*. London: Flare Publications.

Westrum, R. (1998). *Book Review: The Mars Effect: A French Test of Over 1000 Sports Champions; The Tenacious Mars Effect*. *Journal of Scientific Exploration*, 12(4), 624-627.

Incommensurability, Orthodoxy, and the Physics of High Strangeness: A Six-level Model for Unidentified Aerospace Phenomena

JACQUES F. VALLEE and ERIC W. DAVIS

National Institute for Discovery Science, Las Vegas, Nevada

The main argument presented in this paper is that the continuing study of unidentified aerial phenomena ("UAP") may offer an existence theorem for new models of physical reality. The current SETI paradigm and its "assumption of mediocrity" place restrictions on forms of nonhuman intelligence that may be researched. A similar bias exists in the ufologists' often-stated hypothesis that UAP, if real, must represent space visitors. Observing that both models are biased by anthropomorphism, the authors attempt to clarify the issues surrounding "high strangeness" observations by distinguishing six levels of information that can be derived from UAP events, namely (1) physical manifestations, (2) anti-physical effects, (3) psychological factors, (4) physiological factors, (5) psychic effects, and (6) cultural effects. In a further step they propose a framework for scientific analysis of unidentified aerial phenomena that takes into account the incommensurability problem.

Global Consciousness Project: Exploring Block Correlations of Random Data with Human Events

BRYAN J. WILLIAMS, sponsored by SSE Member Roger Nelson

Department of Psychology, University of New Mexico
Albuquerque, NM 87131, asnjoe@unm.edu

The Global Consciousness Project (GCP) is an international research effort initiated in August 1998 by Dr. Roger Nelson that explores the possibility of consciousness-related anomalies on globally distributed random physical systems which correlate with the occurrence of notable events in the world that tend to evoke a wide degree of human attention and emotional response. To date, the GCP has formally analyzed more than 160 events, with an overall result that has odds of well over a million to one against chance expectation. The individual results for each event indicate that the effect often fluctuates and is very subtle in nature, suggesting that it is composed of a weak and possibly time-varying signal buried within a mass reservoir of random noise.

The exploratory method of compressing the random data into temporal segments of equal length ("blocking") was applied early on in the GCP to see what effect this had on the resulting quality of the signal, and to possibly define an optimal segment size at which to observe it. Here, an independent study is described that further explores the possible effect of blocking on the overall formal GCP database, using a block period of 15 minutes as initially defined and applied by the GCP.

A preliminary meta-analysis of the formal event data in 15-min resolution is presented, and several interesting *post hoc* examples are shown to supplement the findings and possibly provide further insight.

Spelling Errors—A Tool for Authenticating Questioned UFO Documents

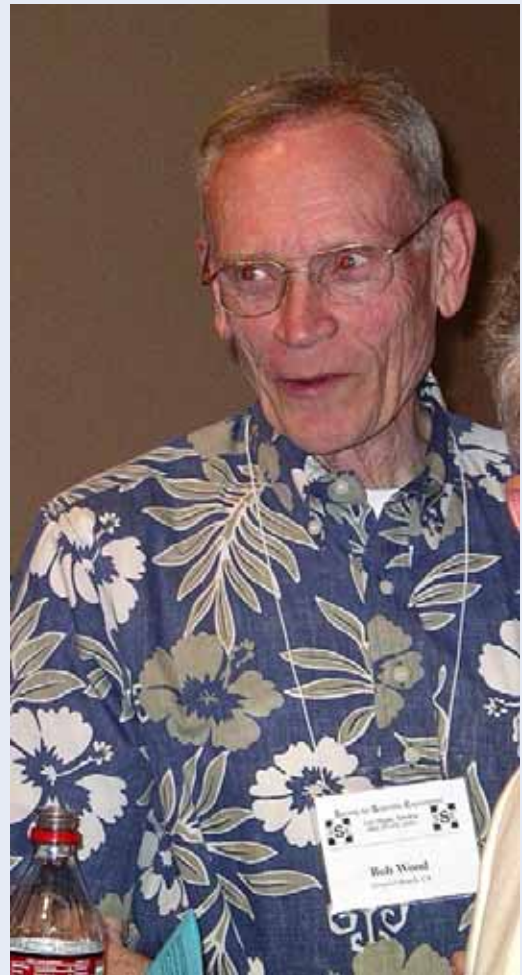
ROBERT M. WOOD

Newport Beach, California

At SSE 2001, the author presented the methodology used to authenticate 4000 pages of questioned UFO documents obtained from 12 sources. For those received by mail, most of the original envelopes have been obtained. The authentication techniques used included typewriter identification, signature comparison, print font matching, thin-layer chromatography for ink age, paper aging, usage of language anachronisms or phrases, erroneous information, and the appropriateness of security caveats. All argue in favor of authenticity. However, eight of these sources were via Timothy S. Cooper, who stated that he received them both by mail and in person. It has been claimed that some spelling errors in these questioned documents are the same as spelling errors made in a 235-page report unarguably prepared by Mr. Cooper, and therefore he may have faked some or all of the questioned documents (QDs). This presentation shows that a careful analysis of the spelling errors in fact makes it clear that he was not the author or typist of the QDs. Dr. Wood keystroked and electronically saved each of the QDs,

ensuring that every word was entered exactly as on the original sources, amounting to about 19,000 words. This was accomplished by careful proofreading and verifying the number of characters in each of the several thousand lines of text. He had also keystroked a Cooper document of 104,000 words. The spelling errors in both master documents were compared and

evaluated for consistency, and a majority were not common to both. A detailed evaluation of the spelling errors shows excellent evidence that Mr. Cooper was not the typist or author of the QDs.



Bob Wood

PROFILE

SSE Treasurer Bruce Greyson

Dr. Bruce Greyson is the Carlson Professor of Psychiatry at the University of Virginia and Director of the Division of Personality Studies. He is the Editor of the Journal of Near-Death Studies.

How Did You Get Interested in Science?

I grew up in a scientific household. My father was a chemist, and we always had a lab in our basement, where he spent his evenings experimenting. Although we nominally had a religious affiliation, that was more of a social and cultural identification than a belief in anything divine or transcendental. My father's approach to life, which he passed on to his children, was that if you had a question that couldn't be answered by a standard reference book, you put it into operational terms and carried out an experiment. In that way, we discovered, for example, that although grapes make a fine wine, there are a whole lot of other fruits that don't.

Who Were Your Mentors and Influences?

My first mentor was my father, who instilled in me a scientific perspective on life, and a belief that useful answers came not from revelation but from structured observation. I eventually found the limits of his materialist reductionism frustrating, and we came to disagree on the interpretation of some observations, but I never outgrew his passion for the scientific method. The second powerful influence on my career was Ian Stevenson, the psychiatrist at the University of Virginia who pioneered the study of children who claim to remember previous lives. Whereas my father thought that many of the hypotheses I worked with daily as a psychiatrist were untestable (for example, the hypothesis that some mental activity is unconscious), Dr. Stevenson showed me how a rigorous scientific approach can be applied to more complex phenomena.

What Was the Spur to Anomalies?

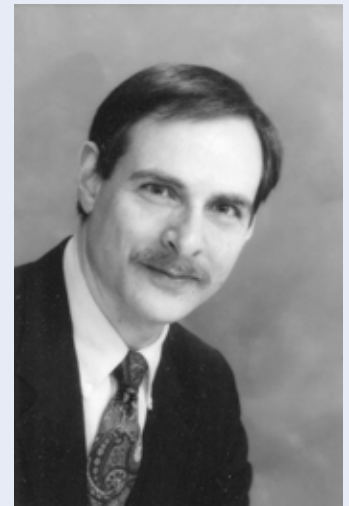
As an undergraduate psychology major, I came across experimental evidence for paranormal processes. Although the studies documenting these phenomena seemed to be as rigorous as those in mainstream psychology, they were generally ignored by my professors, who assumed without studying the phenomena themselves that those studies must be either methodologically flawed or fraudulent. That cavalier and willful refusal to consider anomalous data struck me as dishonest. When I later studied medicine and psychiatry, I encountered anomalous experiences that could not be explained by the materialistic models of the mind that we were being taught, from psychic healings to veridical apparitions. I didn't see how I could dismiss such experiences as misperceptions or delusions without studying them and still think of myself as an objective scientist.

What Are You Working on Now?

Most of my research now is focused on near-death experiences, the transformational experiences that some people have when they come close to death that appear to have mystical or transcendental features. I am looking at the incidence and characteristics of NDEs occurring in hospitalized patients who have cardiac arrest intentionally induced under controlled circumstances. Some of these patients claim to leave their bodies and watch their resuscitations while floating near the ceiling. Because we know when their cardiac arrests will be induced, we can interview them and assess their attitudes, beliefs, and values *before* their cardiac arrests, as well as after the experience. And because we know exactly when the cardiac arrest and possible NDE will occur, we can place unusual

visual targets in the room that can only be seen from the ceiling. This research may enable us to determine whether people who have NDE differ from other people *before* they have their NDEs, or whether those differences are the *result* of the NDE; and it will allow us to document any accurate

out-of-body perceptions of the patients during the cardiac arrest. I am also studying the range of aftereffects—physical, psychological, and paranormal—that some people report following near-death experiences. I am also comparing descriptions of NDEs and their aftereffects as reported now with descriptions of the same experiences and aftereffects reported by the same experiencers 20 years before. These data will show us whether accounts of such



*More relevant to me personally
than the fact that it's reliable
is that science is exciting.*

experiences are elaborated or fade over decades, and whether the aftereffects of such experiences increase or decrease over long periods of time. I hope to extend my earlier work on NDEs in people who attempt suicide, and the effects of NDEs on subsequent suicidal thoughts.

How Do You See Science?

I believe that the scientific method is the most reliable path to answers. It is not the only source of truth, but it is the one that is least likely to be influenced by an individual's personal beliefs and preferences. Of course, scientists are human and do misperceive and misinterpret, but a key feature of scientific methods are their univesality: Any scientist should get the same results from a given experiment, regardless of his or her personal beliefs. More relevant to me personally than the fact that it's reliable is that science is exciting. I am not temperamentally suited to be a philosopher or theoretician or a theologian; finding answers by experimentation is more fun.

What is the Function and Future of SSE?

I see the SSE as a venue to exchange ideas with other colleagues curious enough to explore the edges of the known world. Although the multidisciplinary nature of the organization means that I often cannot understand the subtleties of some of the papers presented, it also promotes a healthy cross-fertilization of ideas and scientific techniques that is hard to find elsewhere. Perhaps the most valuable function of the SSE is to encourage open-mindedness in students who are just beginning to explore the limits of science. I wish there had been an SSE when I was at that point.



CONTENTS

© 2004 Society for Scientific Exploration

The SSE Explorer, Summer 2004

- 1 COVER STORY: Report from the SSE Associates Representative Dave Leiter
- 2 SOCIETY NEWS: Next Annual Meeting in Florida; Challenge Grant for Young Investigators; Annual Reports to Council; Remembering Eugene Mallove and Laurance Rockefeller; New Members
- 4 MEMBERS FORUM: Two Biophysics Conferences: *Biophysics and Medicine*; *Biophotons and Coherent Systems*. New Book by Wayne Jonas. Archaeus Project Library for Sale
- 5 ANNUAL MEETING ABSTRACTS: From the May 2004 Las Vegas Meeting, *Photographs by Dennis Stillings*
- 23 PROFILE: SSE Treasurer Bruce Greyson

Society for Scientific Exploration

SSE COUNCIL

<i>President</i>	CHARLES R. TOLBERT
<i>President Emeritus</i>	PETER A. STURROCK
<i>Vice-President</i>	ROBERT G. JAHN
<i>Secretary</i>	LAURENCE FREDRICK
<i>Treasurer</i>	BRUCE GREYSON
<i>Education Officer</i>	BRENDA J. DUNNE
<i>European Rep.</i>	EZIO M. INSINNA
<i>Information Officer</i>	MARTY CAWTHON
<i>Associate Members Rep.</i>	L. DAVID LEITER
<i>Councilors</i>	JOHN ALEXANDER
	STEPHAN BAUMANN
	DAVID DEMING
	H. DAVID FRONING, JR.
	JOHN P. MACLEAN
	GARRET MODDEL
	JOHN H. REED
	MARK URBAN-LURAIN
	RON WESTRUM
<i>Journal Editor</i>	HENRY H. BAUER
<i>JSE Book Review Editor</i>	P. D. MONCRIEF
<i>Newsletter Editor</i>	KATHLEEN E. ERICKSON
<i>Web Master</i>	MARCEL KUIJSTEN

SSE Founded: 1982

The Explorer: 1983

Journal of Scientific Exploration: 1987

JOURNAL OF SCIENTIFIC EXPLORATION

Editors: Henry H. Bauer, Editor

P. D. Moncrief, Book Review Editor

Mail: JSE, 810 East 10th St., Lawrence KS 66044

Phone: 1/800/627-0629 Ext.217

E-mail: www.ScientificExploration.org

THE EXPLORER

Editor: Kathleen E. Erickson

Mail: P. O. Box 1190, Tiburon, CA 94920

Contact: EricksonEditorial@att.net

www.SCIENTIFICEXPLORATION.ORG

Webmaster: Marcel Kuijsten, MKuijsten@hotmail.com