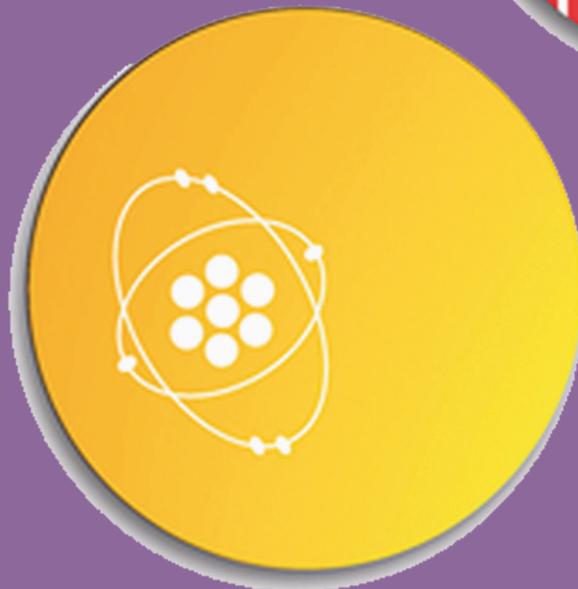


Abstracts of Presented Papers

57th Annual Parapsychological
Association Convention

Hilton Hotel Concord, California, August 14-17th, 2014



57th Annual Convention of the Parapsychological Association

August 14-17, 2014

Dean Radin, Ph.D.
Program Chair

Convention Committee

James Carpenter, Ph.D.: *PA President*
Annalisa Ventola, B.A.: *PA Executive Director*
Loyd Auerbach, M.A.: *Convention Arrangements Chair*
Dean Radin, Ph.D.: *Convention Program Chair*
Alan Pierce, B.A.: *Convention Program Assistant*
Sheila Smith: *Convention Arrangements Assistant*
Rafael Quintero Jr: *Convention Student Assistant*

Program Committee

Loyd Auerbach, M.A.	Julia Mossbridge, Ph.D.
Dick Bierman, Ph.D.	Roger Nelson, Ph.D.
Stephen Braude, Ph.D.	Chris Roe, Ph.D.
Mark Boccuzzi, B.S.	Serena Roney-Dougal, Ph.D.
James Carpenter, Ph.D.	Stephan A. Schwartz
Arnaud Delorme, Ph.D.	Rupert Sheldrake, Ph.D.
John Kruth, M.S.	Richard Shoup, Ph.D.
David Luke, Ph.D.	Christine Simmonds-Moore, Ph.D.
Jeffrey Mishlove, Ph.D.	Patrizio Tressoldi, Ph.D.

Welcome to Concord, California, USA, and to the 57th annual convention of the Parapsychological Association. This year we have 17 paper presentations, 8 posters, 3 panel discussions, 2 invited talks, the Presidential Address, and the J. B. Rhine Banquet address, for a total of 32 events scheduled over two and a half days.

My goal in designing this year's schedule was to avoid one of those intense conferences where endless talks are presented for 18 hours a day. Instead I was aiming to provide ample time for presentations, discussions, and pleasant conversations with friends and colleagues.

I thank the members of the Convention Committee for their assistance in arranging the many organizational details of the convention, the 18 referees of the Program Committee for reviewing the submitted papers, Alan Pierce for helping to create this Program and Proceedings Booklet, and the session chairs (in advance) for keeping the program running smoothly.

- Dean Radin, 2014 Program Chair

Contents

Program Schedule.....	6
Abstracts of Presentations.....	11
Pre & Post Effects in Bio-PK Experiments.....	11
<i>Hideyuki Kokubo and Takeshi Shimizu</i>	
A Self-Study of the Role of Mood on Ostensible PK.....	12
<i>Cherylee M. Black, & James C. Carpenter</i>	
Taming the Ghost Within: A Case of Electronic Poltergeist Activity.....	13
<i>John G. Kruth</i>	
Visual Categorization of Images of Live and Deceased Individuals.....	14
<i>Arnaud Delorme, Alan Pierce, Leena Michel, Dean Radin</i>	
Anomalous and Replicated High Amplitude Photon Bursts Associated with Specific Hypothesized Spirits.....	15
<i>Gary E. Schwartz</i>	
Do Synesthetes Perform Better at a Precognition Task Than a Group of Matched Controls?.....	16
<i>Christine A. Simmonds-Moore</i>	
Investigation of Temporal Loops and Retrocausal Conditioning Via Usage of Prestimulus Electrocortical Signals.....	17
<i>Stephen Leslie Baumgart</i>	
Explorations into Remote Viewing Microscopic Organisms (“The Phage”) and the Effects of Biological Scientists’ Exposure to Non Local Perception within a Multidisciplinary Approach.....	18
<i>Debra Lynne Katz & Lance William Beem</i>	
Five Qualitative Research Methods and Their Applications in Parapsychology.....	20
<i>John G. Kruth</i>	
Ignorance is Bliss? Exploring Paranormal Beliefs, Coping and Happiness in a UK and Singaporean Sample.....	20
<i>Nicola Lasikiewicz</i>	
The Current State of Psi Studies and the Public Concept of Parapsychology in the Ukraine.....	22
<i>Sergii Vakal & Igor Bombushkar</i>	
The Creative Pattern, Nonlocal Consciousness, and Social Change.....	24
<i>Stephan A. Schwartz</i>	
Evidence for Telepathic Communication in a Nonverbal Autistic Child.....	25

Program and Proceedings

<i>Diane Hennacy Powell</i>	
Machine-Mediated Remote Viewing: An Initial Study and Replication	26
<i>Erik Maddocks and Garret Moddel</i>	
Six Protocols, Neuroscience, and Near Death: An Emerging Paradigm Incorporating Nonlocal Consciousness	27
<i>Stephan A. Schwartz</i>	
Beyond the Coin Toss: Examining Wiseman's Criticisms of Parapsychology	28
<i>Johann Baptista, & Max Derakhshani</i>	
The “Weak” vs. “Strong” Interpretations of Rhine’s ESP Research	29
<i>Jerry Solfvín</i>	
Abstracts of Panels.....	32
Panel 1 – Remote Viewing’s Greatest Hits, and Lessons Learned	32
<i>Chair: Russell Targ</i>	
<i>Panelists: Stephan Schwartz & Russell Targ</i>	
A Remarkable Decade: Remote Viewing at SRI	32
<i>Russell Targ</i>	
Mind Rover: The Mobius Laboratory – 1977 to 1993.....	33
<i>Stephan Schwartz</i>	
Panel 2 – Education in Parapsychology.....	34
<i>Chair: Loyd Auerbach</i>	
<i>Organizers: Loyd Auerbach (HCH Institute, Atlantic University & JFK University) and Neil McNeill (Paranormal Studies Institute)</i>	
<i>Additional Panelists (tentative): William Everist (Pima College), John Kruth (Rhine Research Center), John Palmer (Rhine Research Center), Christine Simmonds-Moore (University of West Georgia).</i>	
Panel 3 – From Materialism to Pluralism: Restoring a Sense of Mystery to Science.....	35
<i>Chair: Jerry Solfvín</i>	
<i>Panelists: Jerry Solfvín, Diane Hennacy Powell, Robert S. Gebelein, David Scharf, Beverly Rubik, Jon Klimó</i>	
The “Closeminding” of the American Mind	36
<i>Diane Hennacy Powell</i>	
The Politics of Physicalism.....	37

Robert S. Gebelein
Two Dogmas of Materialism: Toward a Quantum Field Theory of the Psychic Field..... 39

David Scharf
Toward an Integral Science of Life 39

Beverly Rubik
A Proposed Spectrum for Parapsychology: From Materialism to Idealism..... 40

Jon Klimo
Abstracts of Posters 42

A Study of DMILS on Small Animals and Possible Synchronous Environmental Effects 42
Jeannette E. Briggs

A Mixed Methods Exploratory Study of Alleged Telepathic Interspecies Communication with Domestic Dogs (*Canis Lupus Familiaris*) 43
Deborah L. Erickson

Journal of Exceptional Experiences and Psychology 44
Erika A. Pratte

Resoluteness of Aura Life Colour Across Different Generations..... 45
N. Ramkumar & V. Vaidehi Priyal

Children and Their Parents' Experience with After-Death Communication..... 45
Kimberly N. Jeska

The Volume Field Model About the Strong Interaction and the Weak Interaction..... 47
Rongwu Liu

Thoughtographs from the Future and from the Past..... 48
Lester Franklin Lomax III

Decomposition of Field RNG Outputs During Massive Tweets During the film, "Laputa: Castle in the Sky" in Japan..... 50
Shimizu, T., & Ishikawa, M.

Abstracts of Invited Addresses 52

A Multiphasic Model of Precognition 52
Sonali Bhatt Marwaha, Edwin C. May

Authors of the Impossible: What the Humanities Have to Offer Parapsychology 52
Jeffrey Kripal

Program Schedule

The registration table on Thursday (and the rest of the days) will be set up in the foyer outside Golden Gate C -- which is also where our breaks will be.

THURSDAY, AUGUST 14, 2014

<i>Time</i>	<i>Activity</i>
4:00 - 7:00pm	Registration – Foyer of Golden Gate C
7:00 - 9:00pm	Opening Reception - Firepit Courtyard

FRIDAY, AUGUST 15, 2014

All Convention Sessions Held in Golden Gate C Room

Registration:	8:00 am to 9:00 am and during breaks
9:00 am	Welcome & Opening Announcements
	Paper Session 1: Psychokinesis Session chair: Hoyt Edge
9:15am	Hideyuki Kokubo & Takeshi Shimizu – Pre & post effects in bio-PK experiment
9:45 am	Cherylee M. Black & James C. Carpenter – A self-study of the role of mood on ostensible PK
10:15am	John G. Kruth – Taming the ghost within: A case of electronic poltergeist activity
10:35 am	Coffee break (Foyer of Golden Gate C,D&E)
	Paper Session 2: Survival Session chair: Christine Simmonds-Moore
11:00 am	Arnaud Delorme, Alan Pierce, Leena Michel, Dean Radin – Visual categorization of images of live and deceased individuals.
11:20 am	Gary E. Schwartz – Anomalous and replicated high amplitude photon bursts associated with specific hypothesized spirits
	Paper Session 3: Precognition Session chair: John Kruth

Program and Proceedings

- 11:40 am Christine A. Simmonds-Moore – Do synesthetes perform better at a precognition task than a group of matched controls?
- 12:10 pm Stephen Leslie Baumgart – Investigation of temporal loops and retrocausal conditioning via usage of prestimulus electrocortical signals
- 12:30pm **Lunch break** (on your own)
- 2:00 pm **Panel 1-** Remote viewing's greatest hits and lessons learned
Russell Targ – A remarkable decade: Remote viewing at SRI
Stephan Schwartz – Mind Rover: The Mobius Laboratory – 1977 to 1993
- 3:00 pm Debra Lynne Katz, Lance William Beem - Explorations into remote viewing microscopic organisms and the effects of biological scientists' exposure to non local perception within a multidisciplinary approach
- 3:20 pm **Coffee break** (Foyer of Golden Gate C, D&E)
- 4:00 pm **Poster Session 1** (Seminar II Room)
Jeannette E. Briggs – A study of DMILS on small animals and possible synchronous environmental effects
Deborah L. Erickson – A mixed methods exploratory study of alleged telepathic interspecies communication with domestic dogs (*Canis Lupus Familiaris*)
Erika A. Pratte – Journal of Exceptional Experiences and Psychology
N. Ramkumar, V. Vaidehi Priyal – Resoluteness of aura life colour across different generations
- 5:00pm **Dinner** (on your own)
- 7:00pm **Presidential Address**
Introduction, *Dean Radin*
Presidential Address, *James Carpenter*
- 7:55pm Closing remarks and announcements for Saturday session
- 8:00pm **Presidential Reception** (Foyer of C, D&E and the Courtyard)

SATURDAY, AUGUST 16, 2014

Registration: 8:30am to 9:00am and during breaks

Paper Session 4: Sociological and Qualitative Methods

Session chair: John Palmer

9:00 am John G. Kruth. – Five qualitative research methods and their applications in parapsychology

9:30 am Nicola Lasikiewicz – Ignorance is bliss? Exploring paranormal beliefs, coping and happiness in a Western and a South East Asian sample

9:50 am Sergii Vakal, Igor Bombushkar– The current state of psi studies and the public concept of parapsychology in the Ukraine

10:10 am Stephan A. Schwartz – The creative pattern, nonlocal consciousness, and social change

10:30 am **Coffee break** (Foyer of Golden Gate C, D&E)

11:00 am **Panel 2** – Education in Parapsychology

Organizers: Loyd Auerbach (HCH Institute, Atlantic University & JFK University) and Neil McNeill (Paranormal Studies Institute)

12:30 pm **Lunch** (on your own)

2:00 pm **Invited talk**

Edwin May – A multiphasic model of precognition

2:45 pm **Group Photo** (location to be announced)

2:55 pm **Coffee Break** (Foyer of Golden Gate C,D&E)

Paper Session 5: Telepathy and Remote Viewing

Session chair: Jerry Solfvn

3:15 pm Diane Hennacy Powell, MD – Evidence for telepathic communication in a nonverbal autistic child

3:45 pm Erik Maddocks, Garret Moddel – Machine-mediated remote viewing: An initial study and replication

4:05 pm **Poster Session 2** (Seminar II Room)

Kimberly N. Jeska –Children and their parents experience with after-death communication

Rongwu Liu – The Volume field model about the strong interaction and the weak interaction

Lester Franklin Lomax III – Thoughtographs from the future and from the past

T. Shimizu & M. Ishikawa – Decomposition of field RNG outputs during massive tweets during Laputa: Castle in the Sky in Japan

6:00pm **Banquet in the Golden Gate A Room**

7:30pm **2014 Parapsychological Association Awards**

Session chair, *James Carpenter*

Schmeidler Outstanding Student Award: Callum E. Cooper

Outstanding Career Award: Deborah L. Delaney

Charles Honorton Integrative Contributions Award: Julia Mossbridge

Outstanding Contribution Award: Chris A. Roe

8:00pm **J.B. Rhine Address**

Introduction of Speaker, by *James Carpenter*

J.B. Rhine Address: Jeffrey Kripal, Authors of the Impossible: Or why parapsychology and the humanities need one another

9:00 pm Closing & announcements for Sunday

SUNDAY AUGUST 17, 2014

Registration: 8:30am to 9:00am and during breaks

9:00 am **Panel 3** – From Materialism to pluralism: Restoring a sense of mystery to science

Jerry Solfvin - Pluralism and the loss of sense of mystery in science

Diane Hennacy Powell - The “Closeminding” of the American mind

Robert S. Gebelein -The politics of physicalism

David Scharf - Two dogmas of materialism: Towards a quantum field view of the psychic Field

Beverly Rubik - Toward an integral science of life

Jon Klimo -A proposed spectrum for parapsychology: From materialism to idealism

10:30 am **Coffee break** (Foyer of Golden Gate C, D&E)

Paper Session 6: Potpourri

Session chair: Jessica Utts

Program and Proceedings

- 10:45 am Stephan A. Schwartz – Six protocols, neuroscience, and near death: An emerging paradigm incorporating nonlocal consciousness
- 11:15 am Johann Baptista & Max Derakhshani– Beyond the coin toss: Examining Wiseman's criticisms of parapsychology
- 11:45 am Jerry Solvin – The weak vs. strong interpretations of Rhine's ESP research
- 12:05 noon **Lunch break** (on your own)
- 1:30 pm Charles Honorton Integrative Contributions Award Address,
James Carpenter
- 2:00 pm **Break** (Foyer of Golden Gate C, D&E)
- 2:15 pm **PA Business Meeting**
Open to all PA members and convention attendees
- 3:00 pm **Closing Announcements and Acknowledgements**

Abstracts of Presentations

PRE & POST EFFECTS IN BIO-PK EXPERIMENTS

Hideyuki Kokubo^{1,2} and *Takeshi Shimizu*²

¹Institute of Living Body Measurements, International Research Institute
Chiba, Japan

²Institute for Informatics of Consciousness, Meiji University
Tokyo, Japan

Background. Since 2006, the present authors and other collaborators have been studying bio-PK using pieces of fruits of *Cucumis sativus* ‘white spine type’ cucumber as a bio-sensor, and developed three methods to measure the magnitude of bio-PK quantitatively. Through their biophoton measurement method, they have reported that: biophoton intensities of experimental samples of cucumber pieces were larger than controls if healers did non-contact healing (bio-PK) for 30 min to increase biophotons emitted from samples; the difference of intensities between experiments and controls arose about 5 h after healing and the difference could be approximated by a 2-step reaction; effects of non-contact healing differed from those of magnetic stimuli; and one of the production mechanisms of biophotons was biosynthesis of green odor. Their gas measurement method originated from their study of biosynthesis of green odor. Cucumber gases consist of C9/C6 aldehyde and alcohol such as violet leaf aldehyde and cucumber alcohol. 2-hexanol, one of components of cucumber gases, which has a color reaction in short-term gas-measuring detector tube (141L, Gastec, Japan), was used for detection of healing effects in the gas method. They also have reported that there was a negative correlation between biophoton intensity and gas amount. And they were able to make the world’s first quantitative measurements of spatial distributions of healing power around a human body using bio-sensors arranged at equal intervals. In their most recent experiments (cucumber series Nos. 18 & 20), the effect of non-contact healing was measured using the gas and fluorescence measurement methods. They also discussed three kinds of healing ways in energy medicine. In addition, the cucumber series Nos. 18 & 20 consisted of 2 healing trials and a pair of pre- & post- dummy trials, and the authors also obtained results that dummy trials detected anomalous effects with a *J* value of about 0.1.

Method. They executed cucumber series No. 21 under the same conditions as Nos. 18 & 20. Experiments were done at the Institute for Living Body Measurements of the International Research Institute (IRI) from February 20 to April 7, 2013. Participants were 5 healers (2 males, 3 females; age range of 31-72 y, with an average age of 46.6 y) who were energy medicine type healers recruited through a list of known participants, SNS and the internet. Each of the healers

did a 30-min healing trial twice a day, but they tried to change their healing ways for the 2nd trial. In this series, a RNG was set under the top of the table where target samples were placed.

Results. The average J value of the dummy trials was obtained as $J = 0.106 \pm 0.084$ (95% confidence interval, $n = 20$). The authors reconfirmed detection of anomalous effects. The average J value of healing trials was -0.061 ± 0.094 (95% confidence interval, $n = 19$). Moreover, the average J value of blank tests was nearly equal to zero ($J = 0.002 \pm 0.061$, 95% confidence interval, $n = 22$); blank tests were done on other days than the days of healing & dummy trials.

Conclusion. The authors concluded that dummy trials cannot be considered as blank tests if the dummy trials are done 1-2 hours before or after healing trials. Anomalous effects seen in the dummy trials were speculated to be a kind of distance effect caused by such behavior as healers' attentions being directed towards the experiments. However, further studies are needed to identify the reasons for these anomalous effects.

A SELF-STUDY OF THE ROLE OF MOOD ON OSTENSIBLE PK

Cherylee M. Black, & James C. Carpenter¹

¹Rhine Research Center
Durham, NC, USA

Positive mental states have traditionally been linked to more positive results in tests of PK. Unfortunately, spontaneous PK occurrences do not always engender positive mental states. This long term self-study was used to chart the emotional journey as poltergeist phenomenon gave way to controlled attempts to elicit ostensible PK.

Data from PANAS mood scores and documented attempts to produce ostensible PK in the form of a pinwheel spinning inside a sealed jar (referred to as "canned PK" or CPK) were used to demonstrate the relationship between measures of emotion and successfully generating CPK. The first successful attempt to produce CPK did not occur until the fourth month of the study period. After that initial success, CPK became robust enough within a few weeks' time to allow for more formalized measurements of increased skill levels attained over time. Positive affect, joviality, self-assurance, and surprise were all associated with positive results in achieving CPK in both in the entire study period, as well as during the period limited to only after the initial CPK event took place. A negative correlation to accomplishing CPK was shown with regards to negative affect, fear and guilt, but only when the entire study period is taken into account.

When simply considering the period after CPK was first demonstrated, no significant correlations between negative emotions and CPK were in evidence. Such negative emotions may

play a role in preventing controlled displays of ostensible PK, but once CPK has been previously generated, negative emotions may not be enough of a barrier to prevent subsequent occurrences.

There were substantial differences in mean PANAS scores taken prior to and after the first occurrence of CPK. Negative affect, fear, guilt and sadness all demonstrated significant decreases after the initial CPK event. Positive affect, self-assurance, attentiveness and surprise all revealed significant increases after CPK was first observed. It seems likely that constructively dealing with emotional issues and going through the process of personal development may have helped to advance the skill of producing CPK on cue, but that doesn't preclude the possibility that the practice of quietly sitting down each evening to mindfully attempt CPK may have also had a positive effect on such personal development issues.

In contrast to the process of eliciting the phenomenon of CPK, emotional state does not appear to play a role in regards to facilitating an increase of CPK skill level as demonstrated by the ability to generate it in a more timely fashion. It seems likely that continued practice of CPK over time can help to overcome the limitations of emotional barriers once the initial resistance to performing ostensible PK has been surmounted. The findings of this work suggest that if the resistance to eliciting ostensible PK on demand can be overcome, with continued practice it may be possible to maintain the production of positive results.

TAMING THE GHOST WITHIN: A CASE OF ELECTRONIC POLTERGEIST ACTIVITY

John G. Kruth
Rhine Research Center
Durham, NC, USA

From the earliest reports of poltergeists, the experiences of the agents and those close to the activity have been uncomfortable at best and terrorizing in the most extreme cases. Early case reports were centered on religious activities and demonic possession, and the treatment for the affected person or location was typically an exorcism or another religious rite. Since the late 19th century, parapsychologists have focused on examining the phenomena first to demonstrate that it exists, and second to understand the mechanisms that may enable the poltergeist activities. These are both important and essential approaches to contribute to the advancement of the science, but these approaches do little to address the needs of the people who are most involved with the poltergeist experience.

With the proliferation of electronic technologies, a new type of poltergeist is arising in the 21st century. RSPK is appearing as electronic disturbances in everyday devices and the disruptions in wireless signals. This paper presents a case investigation of an *Electronic Poltergeist Disturbance* (EPD) along with the evidence that was observed during a field investigation using

a controlled methodology. The investigation provided strong evidence of an RSPK agent, and numerous electronic disruptions were observed by the researchers. Despite this clear evidence of the poltergeist activities, the focus of this investigation was less on proof oriented research work and more on addressing the needs of the poltergeist agent and his family.

As more electronic devices permeate our world, it is probable that more poltergeist activities will take the form of EPDs, and it is also possible that the phenomena will be recognized more often in the general population as electronic devices are more closely integrated with the human body. A growth in EPDs will put a strain on the agents and the people around them as electronic devices that are used in daily life begin to malfunction or even completely break. The investigation described in this paper put a significant strain on the agent and his family, and an intervention was necessary to assist the agent in alleviating the stress caused by the events.

This paper describes a process that helped the agent to successfully reduce the number of RSPK events and eventually to nearly eliminate the activity. An approach which emphasizes stress reduction using relaxation and visualization techniques, mindfulness, and a redirection of attention to a focus object is presented and it resulted in a reduction of electronic disturbances near the agent within a few weeks. The 10 step technique is outlined as a starting point for future research into methods that will address the needs of the poltergeist experiencers and to help to address an issue that may grow in importance as society integrates more electronics into the daily human experience.

VISUAL CATEGORIZATION OF IMAGES OF LIVE AND DECEASED INDIVIDUALS

Arnaud Delorme, Alan Pierce, Leena Michel, Dean Radin
Institute of Noetic Sciences
Petaluma, CA, USA

After over a century of personal reports and research, the process and interpretation of evidence from mediumship studies remains unclear. This research project seeks to further our understanding of behavioral and electrocortical correlates associated with mediumistic abilities. In the experiment, participants view and classify photographs of people according to whether they think the depicted person is currently alive or dead. The first part of the experiment is performed online and the second part is performed in our laboratory with 12 individuals while EEG measures are taken.

We have set up a database of photographs of 200 individuals, half of which were deceased. We balanced sets of features for the two groups of alive and dead individuals (including gender, age, gaze direction, glasses, head position, smile, hair color, and picture resolution). The same images were used for both the online and the laboratory experiment.

For both the online and the laboratory experiment, the participants' task is to indicate if they think/feel that a given individual is alive or dead. Participants see pictures of individuals one by one on a computer screen and indicate if they think/feel they are alive or not by clicking on the corresponding buttons below the photograph. We have obtained preliminary results for the online experiment on 100 individuals (recruited from a private mailing list of individuals interested in mediumship). The average image classification rate was 50.9% with a 95% confidence interval of 50.6% to 51.3%. We also had robots (i.e. computers) performing the task. The robot's performance was 49.7% with 95% confidence interval of 49.4% to 50%. The odds of obtaining such a result are 1 out of 150 in the direction of the hypothesis.

These results suggest that people might be able to sense whether the person depicted in a given image is alive or dead.

ANOMALOUS AND REPLICATED HIGH AMPLITUDE PHOTON BURSTS ASSOCIATED WITH SPECIFIC HYPOTHESIZED SPIRITS

Gary E. Schwartz

Laboratory for Advances in Consciousness and Health
The University of Arizona
Tucson, AZ, USA

Previous research in the Laboratory for Advances in Consciousness and Health at the University of Arizona has observed replicated effects of hypothesized spirit presence on measures of photon activity using a silicon photomultiplier (2010) system and Princeton low light cooled CCD camera system (2011). In addition to obtaining significant main effects of hypothesized spirit presence versus matched baseline control trials, we have observed replicated individual difference effects between hypothesized spirits (for ease of communication, from herein hypothesized spirits will simply be called spirits). In Schwartz (2010) using a silicon photomultiplier, two spirits (called S2 and S5) produced reliably larger magnitude effects on photon bursts compared to matched baseline control trials than two other spirits (called S1 and S3). In a follow up series of experiments using the silicon photomultiplier focusing on S5 (Schwartz, submitted for publication), replicable large magnitude effects on photon bursts were again observed.

In Schwartz (2011), using a low light CCD camera, two spirits were re-tested using a completely computer-automated system (i.e. no experimenters were present when the data were collected). In two separate experiments, spirit 2 produced significantly and substantially larger magnitude photon effects than spirit 1. In the present experiment, eight different spirits were given the opportunity to be individually tested using a Hamamatsu photomultiplier tube with a Fluke

frequency counter and Timeview 2.1 software running on a PC. The photomultiplier tube was housed in a completely dark Faraday-shielded subject room; the frequency counter and PC were in a separate room. The experiment was conducted at the California Institute of Human Sciences; the data were collected by Dr. Gaetan Chevalier and witnessed by Schwartz. Included in the sample were four spirits, labeled S2, S5, S1 and S3; baseline control trials were collected as well. S2 and S5 produced larger magnitude photon bursts than S1 and S3 ($p < .002$). Also S2 showed a particularly high anomalous value (larger than any that Chevalier had seen in more than two years using the equipment).

Based on certain characteristics observed in S2, we predicted that a spirit labeled S4 might produce similar high values; this prediction was confirmed. In a final set of observations involving the measurement of high frequency photon activity at the University of Arizona using a Vernier radiation detector, S2 and S4 again produced particularly high anomalous values. The importance of carefully considering individual differences in hypothesized spirit presence research is discussed.

DO SYNESTHETES PERFORM BETTER AT A PRECOGNITION TASK THAN A GROUP OF MATCHED CONTROLS?

Christine A. Simmonds-Moore
University of West Georgia
Carrollton, GA, USA

Previous studies suggest that synesthetes might do well at ESP. In this study, a group of strong synesthetes and a group of matched controls were compared on their performance at a psi task (Bem's Precognitive Memory), scores on a Time Style™ questionnaire and performance at a task designed to tap Mental Time Travel (MTT; *autonoetic consciousness*). Correlations between scoring on a Synesthesia Experiences Questionnaire (SEQ) orientations to time (as tapped by the Time Styles™ inventory), mental time travel ability (MTT) and performance on a psi task were explored. Twenty seven synesthetes were matched to 27 controls by age and gender and scoring on the SEQ. Participants completed the Time Styles™ inventory and the synesthesia subscale to the Tellegen Absorption questionnaire (TAS) then took part in Bem's precognitive memory task, a MTT task and an interview about their experiences. Synesthetes completed two versions of a Synesthetic Characteristics Questionnaire (SCQ). Scoring on the SEQ and TAS subscale were significantly different between synesthetes and matched controls, lending construct validity to the SEQ. Scoring on the SEQ correlated positively and significantly with scoring on the TAS, lending concurrent validity to the SEQ.

There was no evidence for ESP in the group as a whole, or among the controls or synesthetes; the overall effect size was $d = .05$, the effect size for the controls was $d = -.014$ and that for the

synesthetes was $d = -.00$. The difference in scoring between the synesthetes and controls was not significant. The correlation between scoring on the SEQ and psi was not significant. A post hoc test found that synesthetic associators did better at the psi task than those who were projectors ($z = -2.00, p = .047$). There was no difference between time-related and non-time related synesthetes on their psi scores. Synesthetes and controls did not differ in their overall recall ability, and recall had no relationship with psi scoring. Scoring on future time style correlated positively and significantly with scoring on the SEQ, $\rho = .35, p = .011$. There were no differences between the synesthete and control groups in terms of scoring on any of the Time Styles. Past thinking correlated negatively and significantly with psi scoring, but this was not confirmed with a non-parametric correlation. There were significant correlations between a number of variables tapping MTT and scoring on the SEQ.

When synesthetes were compared with matched controls, this was only significantly different for smell related imagery, although the difference approached significance for the extent to which one felt as though they were re- or pre- experiencing life events. None of the variables relating to MTT correlated significantly with scoring on the psi task. Findings are discussed and suggestions for future studies are made.

INVESTIGATION OF TEMPORAL LOOPS AND RETROCAUSAL CONDITIONING VIA USAGE OF PRESTIMULUS ELECTROCORTICAL SIGNALS

Stephen Leslie Baumgart

Theoretical and Applied Neurocausality Laboratory
Santa Barbara, CA, USA

It is possible to derive scenarios of retrocausal signaling using standard quantum mechanics. Though a technological realization has not yet been developed, there is extensive evidence of retrocausal communication from experiments utilizing human subjects. Retrocausal signaling brings with it the question of temporal loops, whose physical nature as well their influence on human behavior and perception of the world remains unclear. If, as experiments suggest, unconscious precognition, or presentiment, is a ubiquitous element of human experience, then the question arises as to whether presentiment can be learned. I hypothesize that a presentiment response can be conditioned in human subjects.

I propose that an EEG brain-computer interface (BCI) provides opportunities to test retrocausal signaling and temporal loops. In an experiment reported in D. Radin et al. (2011), the prestimulus electrocortical activity of experienced meditators was found to differ significantly in response to light flashes and auditory tones. By mapping the light flash and auditory tone to a binary target and by evaluating recorded prestimulus EEG potentials in real-time, one should be

able to predict the state of a future random target, allowing above-chance retrocausal communication.

Moreover, one can trigger the target stimulus based on this prediction, either by triggering the stimulus appropriate to the potential (based on the post-stimulus potential) or its opposite. In my experimental setup, there are three possible operation modes, “prediction”, in which a random binary target is predicted, “feedback”, in which the stimulus with a post-stimulus potential symmetric to the prestimulus potential is triggered, and “bilk”, in which the stimulus with a post-stimulus potential anti-symmetric to the prestimulus potential is triggered.

A human subject can use the feedback of a BCI to train brain activity to exhibit certain patterns. I am now undertaking an experiment to test whether a retrocausal BCI in which a stimulus is triggered by the appropriate symmetric prestimulus response (the “feedback” condition) can condition or affect the response patterns in anticipation to random stimuli (the “prediction” condition). The hit rates for predicting binary targets over runs of prediction mode trials are reported as the primary result. Runs of only prediction mode trials are used as the control. Runs which alternate feedback and prediction mode trials are used for the experimental condition to test whether exposure to feedback trials affects prediction mode trials.

A pilot experiment showed a statistically significant enhancement of the prediction mode hit rate relative to the null hypothesis when prediction mode trials were alternated with feedback mode trials whereas the control runs were consistent with the null hypothesis. It is not yet clear whether this is a learned effect or a kind of resonance-like effect and whether the effect will be robust in future formal experimentation on multiple participants. During exploratory testing an intriguing possible effect was observed on running bilk mode trials on post-decline hit rates; again, more research is needed.

EXPLORATIONS INTO REMOTE VIEWING MICROSCOPIC ORGANISMS (“THE PHAGE”) AND THE EFFECTS OF BIOLOGICAL SCIENTISTS’ EXPOSURE TO NON LOCAL PERCEPTION WITHIN A MULTIDISCIPLINARY APPROACH

Debra Lynne Katz & Lance William Beem

In a double-blind, free-response experiment, 39 remote viewers (“viewers”) were given the task of describing a bacteriophage, or “phage,” a virus that attacks bacteria. Ten of the viewers were re-tasked on elements described in their first session; 35 viewers were then given a second target containing the task, “describe the trigger for replication.” This time, they were provided with information that the target was of a microscopic nature.

This remote viewing project was unique not only in its subject matter, but in its purpose, which was to evaluate remote viewing sessions not only for evidence of psychic functioning but to make use of the information in order to advance the work of scientists outside the field of parapsychology. Viewers submitted a total of 83 sessions, producing a total of 3,263 descriptors to be analyzed. They also provided dozens of detailed sketches, some of which are presented here.

Author Lance Beem is a biologist specializing in plant pathology, physiology, entomology and nematology for 30 years; he was also trained as a remote viewer. He recruited expert virologists over a period of two years and reported his interactions with them. Five of 16 virologists that were approached agreed to participate as raters. Two offered to assist by providing a student to rate the remote viewing sessions. Eight refused, one calling the project “pseudoscience” before examining the data or expressing any interest in understanding what it entailed.

In all, four methods of analysis were employed, including what herein will be referred to as a “Big Data Corroborative Approach.” This method has not been used previously for evaluation of remote viewing data, although similar approaches are being used in other fields to evaluate large data sets for the purpose of making predictions and assessments.

Our primary phage expert, Dr. Julian Roberts, a molecular biologist, conducted a qualitative analysis of the remote viewing reports. He wrote: “At first appearances these data appear to show nothing more than some musings. On further inspection, however, I am convinced that they describe bacteriophage, and the uses of bacteriophage. This is my professional opinion as a scientist and a professional and impartial observer.” Off the record, he stated, “This blows my mind. How is this possible? It’s scary.”

All 39 viewers also participated in an extensive biographic survey evaluating their past remote viewing experience, methodologies, preparation techniques, number of words used in a session, time spent on sessions, etc. This survey data was compared with those sessions that received the highest and lowest accuracy ratings to help draw conclusions about what led to the most useful sessions when tasked with topics that are not typically explored with remote viewing. The survey suggested that experience with remote viewing, spending more than 30 minutes on a session, and using a training approach known as “controlled remote viewing” seemed to produce the highest-rated sessions, but none of those factors guaranteed success.

This project’s proposal was the first recipient of the International Remote Viewing Association (IRVA) Warcollier Award (2011). It took over three years to complete in addition to two years of preliminary experiments involving thousands of trials in which remote viewers attempted to blindly identify the presence of the Tomato Mosaic Virus in plants. The entire project required the help of 10 volunteers, and in all, 57 people were involved.

FIVE QUALITATIVE RESEARCH METHODS AND THEIR APPLICATIONS IN PARAPSYCHOLOGY

John G. Kruth
Rhine Research Center
Durham, NC USA

Despite over 75 years of laboratory work, parapsychology continues to struggle with the basic questions about the nature of the psi experience and the development of a comprehensive theory that encompasses all psi phenomena. Laboratory techniques are limited due to the deductive nature of the studies and the strict barriers that are constructed between the researcher and the phenomena being investigated. The dispassionate nature of an experimental researcher is a benefit in laboratory work, but it does not allow the experience of the study participants to be included in the research process.

Parapsychology would benefit from the inclusion of various qualitative research techniques in the quest to understand the nature of consciousness and to help to develop a theory of psi and survival.

Five qualitative research methods are presented including information about data collection methods, data analysis techniques, sampling, reporting and validation. Each of these techniques is described separately along with discussions about why a researcher might choose to utilize a qualitative research method rather than follow a strict experimental or quantitative protocol. The qualitative methods outlined are Narratives, Case Studies, Phenomenology, Grounded Theory, and Ethnographies.

Finally, multiple examples are provided from the field of parapsychology which discuss how each method could be applied to help to advance the understanding of the psi experience and to contribute to future quantitative studies. Parapsychological researchers are encouraged to develop a better understanding of the value of qualitative research techniques and to utilize the results of qualitative studies to structure and develop better experimental methodologies in the laboratory setting.

IGNORANCE IS BLISS? EXPLORING PARANORMAL BELIEFS, COPING AND HAPPINESS IN A UK AND SINGAPOREAN SAMPLE

Nicola Lasikiewicz
James Cook University

Previous research has indicated that belief in unusual phenomena and superstitious thinking may increase in times of stress (Keinan 1994; 2002). Further, believers in the paranormal often display avoidant coping strategies with little to no problem solving. These findings may, therefore, reflect a specific coping mechanism for stressful situations. However, little research has explored the possible interaction between the perception of stress and coping style on belief and further, an assessment of perceived happiness. Consequently, the current study aimed to explore possible associations between perceived stress and happiness, coping and paranormal belief. Further, these relationships were explored and compared in a sample of Western (UK) and South East Asian (Singapore) participants.

Ninety-two male and female participants aged between 19 and 61 years (mean age=36.56 ± 11.74 years) from the UK and 145 male and female participants aged between 18 and 57 years (mean age=23.03 ± 5.51 years) from Singapore completed an online battery of psychological measures assessing paranormal belief (Revised Paranormal Belief Scale; Tobacyk, 1988), superstitious thinking (Superstitions Questionnaire; Zebb & Moore, 2003), perceived stress (Perceived Stress Scale, Cohen, 1994), coping (Ways of Coping Revised, Lazarus & Folkman, 1985) and happiness (Oxford Happiness Questionnaire; Hills & Argyle, 2002). Participants were predominantly students recruited using convenience sampling. Data were analysed using a series of backwards enter multiple regression analyses to determine the predictors of paranormal belief.

For all participants, level of education (a higher score being indicative of a lower educational qualification), happiness and coping were significant predictors of global paranormal belief ($R^2=.22$, $F(6, 225)=10.787$; $p<.01$). Specifically, a lower level of education ($\beta=.20$; $p<.00$) greater happiness ($\beta=.16$; $p<.05$) and coping in the form of low problem solving ($\beta=-.16$; $p<.05$) and greater positive reappraisal ($\beta=.24$; $p<.00$) were associated with greater belief. Further, a lower level of education ($\beta=.13$; $p<.05$) and coping (low problem solving ($\beta=-.18$; $p<.05$) and high distancing ($\beta=.31$; $p<.00$) were associated with significantly greater superstitious thinking ($R^2=.21$, $F(7, 224)=8.239$; $p<.01$).

In terms of crosscultural differences, paranormal belief was significantly greater in Singaporeans but no significant differences in happiness and perceived stress between the two nations were noted. In terms of predicting belief, level of education was a significant predictor of both global paranormal belief ($\beta=.36$; $p<.00$) and superstitious thinking ($\beta=.25$; $p<.05$) for participants in the UK ($R^2=.16$, $F(3, 85)=5.345$; $p<.01$ and $R^2=.12$, $F(2, 86)=5.776$; $p<.01$ respectively). For Singaporeans, greater happiness ($\beta=.23$; $p<.00$) significantly predicted greater paranormal belief in addition to low problem solving ($\beta=-.19$; $p<.05$), high avoidance ($\beta=.21$; $p<.05$) and greater distancing ($\beta=.34$; $p<.00$) coping strategies ($R^2=.22$, $F(5, 137)=7.832$; $p<.01$). Further, the combination of high perceived stress and low problem solving was also a significant predictor of superstitious thinking in Singaporeans ($R^2=.27$, $F(5, 137)=9.919$; $p<.00$; $\beta=-.19$; $p<.00$).

The findings support the suggestion that belief in the paranormal may reflect a specific pattern of coping characterised by greater propensity for distancing and avoidance with low problem solving. Further, the combination of high stress and low problem solving may increase the propensity for belief and superstitious thinking, particularly in a South East Asian population.

Further research is required to determine whether this apparent coping mechanism is protective or maladaptive in the long run and whether cultural differences may mediate this effect.

THE CURRENT STATE OF PSI STUDIES AND THE PUBLIC CONCEPT OF PARAPSYCHOLOGY IN THE UKRAINE

Sergii Vakal^{1,2} & Igor Bombushkar¹

¹Ukrainian Center for Parapsychological Research

Kyiv, Ukraine

²ESC “Institute of Biology”, Taras Shevchenko National University of Kyiv

Kyiv, Ukraine

Background. For more than a half of a century Ukraine was an integral part of the USSR – a country with a big traditions of parapsychological research and even governmental grant programs for psi studies (Kernbach, 201). Moreover, there is a relatively high level of paranormal beliefs among the Ukrainian population (according to Haraldsson’s 1999-2002 years survey). The extremely high popularity of TV show “Psychic Challenge” with thirteen seasons (a higher number can be found only in Russia) and the existence of such “paranormal” professions as “fortune-teller” and “astrologist” in the National Occupational Classification of Ukraine (edition of year 2010) are two striking examples of the high belief in authenticity of psi phenomena in Ukraine. At the same time, there are no publicly available data on current research projects, educational programs, and professional establishments in the field of parapsychology in the Ukraine. Moreover, no data on the concept of parapsychology among the modern Ukrainian population is available at the moment.

Purpose. 1) To perform a comprehensive assessment of the current state of parapsychological research and education options in the Ukraine; 2) to analyze the dominant public concepts of parapsychology in modern Ukraine.

Methods. A list of establishments and societies claiming their relation to parapsychology was formed through iterative search with “Google” and “Yandex” search engines. Available educational programs, financial support and periodicals were searched both with search engines and manually on the sites of establishments found on the step 1 and official higher institutions. Publications of Ukrainian authors on parapsychological subjects in peer-reviewed journals were searched in Lexscien and Scopus databases. Analysis of all found data was performed manually. The public concept of parapsychology was formed on the basis of two mini-studies: 1) street interviews in Kiev, Lviv and Odessa (more than 1500 responders in total); 2) Advanced searches in Google by key-words and word combinations in the Ukrainian, Russian and English languages with/without territorial consideration. The integration of results and drawing of conclusions were carried out manually.

Results. Totally 22 establishments claiming a relation to parapsychology were found; 2 of them were entitled as “Institutes”, while others – as “Centers” or “Schools”. 96% of them (22 from 23) were found to be related with non-parapsychological bizarre activity, such as fortune-telling, white or black magic, and etc. Psi research was conducted at only in 2 of the above mentioned establishments; and only one of these two wasn’t related with occult or profanatory activity – the Ukrainian Center for Parapsychological Research. A current direction of Center’s research activity is the development of new methods for the evaluation of reincarnation hypotheses and the development of new software for computer-aided evaluations of ESP abilities. No periodicals on non-conventional psi studies of Ukrainian origin were found. Only one funding program (mini-grant) from a private person was revealed. Twenty-five courses on parapsychology of different length and form (distant / on-site) were found. Twenty-four of them (96%) were related with esotericism and occultism, so only one was really related to parapsychology (introductory level distant course). No courses based in universities were found. No publications of Ukrainian origin on any aspect of parapsychology were revealed in peer-reviewed journals. Only one adequate introductory textbook on parapsychology is currently available in Ukraine (written in Russian) and there is only one (supporting) member from Ukraine in the Parapsychological Association.

A street survey revealed that 90% of responders (average from 3 cities) define parapsychology as something related with mysticism, occultism, psychic practices or mediation (people were asked to give definition to term “parapsychology”). Only 7% gave an adequate definition to the term (and 2% gave no definition). An analysis of the Ukrainian part of the internet revealed only 1190 hits for the query “allintitle: parapsychology” in Ukrainian (in comparison: 27,9K – in Russian, and 40,2K – in English). Thus, there are very low amounts of information on parapsychology in the Ukrainian language. At the same time, according to Google scoring and manual semantic analysis, 28% of 100 best hits correspond to pages on scientific parapsychology (in Ukrainian), 19% in Russian and 74% in English. Nonrelevant hits contained links to sites providing occult-mystic services for money, esoteric forums, and etc. So, it’s not a simple task for an average person to find adequate information on parapsychology through the internet in a heap of bizarre sites. After the subtraction of occultism-related key-words, the most dramatic decrease in number of hits was established for the Russian language (-43%). In our opinion, improving search engines results (the creation of more adequate hits at the top) is an actual task for Ukrainian parapsychologists in the near future.

Conclusions. 1) Thus, currently there is only one organization performing research and introductory education in the field of parapsychology in Ukraine. 2) Overwhelming parts of the Ukrainian population treat parapsychology as synonymous with such bizarre topics as occultism, esotericism, magic etc. 3) The terms “parapsychology” and “parapsychologist” are often used by charlatans, thus worsening its reputation on Ukrainian territory.

THE CREATIVE PATTERN, NONLOCAL CONSCIOUSNESS, AND SOCIAL CHANGE

Stephan A. Schwartz

[Excerpted from text] For almost 200 years, the nature of consciousness has been largely explored from the assumption that it was an as yet not understood neurophysiological process entirely resident in the organism. Its inherent physicality became a canon. From this materialist perspective moments of genius are genetics and conditioning, spiritual epiphany is delusional, and psychic functioning – or nonlocal consciousness as it should more properly be called -- impossible. And yet these three mysterious human experiences have played, and will continue to play, a major role in social change. The experiences of individuals and our reactions to them, create the social trends that transform our world. An individual has an insight, it impresses others and, in response their small quotidian acts, individual choices, made in the same time frame create social trends. Think how quickly “gay” was supplanted by LGBT, representing a change in the social gestalt. Consider the change in attitude towards marriage equality, or shift in consensus concerning Marijuana Prohibition in the United States.

The process is most easily seen in religion, where it can be particularly powerful, even though it may be intellectually irrational which emphasizes the emotional quality of these insights at the social level. An individual has a nonlocal consciousness experience which they share. If it finds social acceptance, the interpretation of that nonlocal experience(s) becomes the dogma of a new religion. Joseph Smith and the rise of Mormonism in the 19th century, or L. Ron Hubbard and the growth of Scientology in the 20th are two clear examples of this process.

It may be less charismatic but it is no less powerful in science. Consider the German chemist Paul Ehrlich. His name has been forgotten by the public, even as history and the lives of millions have been profoundly affected by his creativity. He, and the teams he led, were responsible for a long list of pharmaceuticals, including the first synthesis of a quinine substitute, a cure for sleeping sickness, and the most effective pre-antibiotic cure for syphilis. Although he died in 1917, so great was the creative momentum produced by this man that, as historian Henry Hobhouse notes, “In explosives, fertilizers, pharmaceuticals and synthetic substitutes of all kinds the German chemical industry was able to survive defeat in World War I, poor government and inflation in the 1920s, even the slump [i.e., the “Depression”, editor], largely because of the technological lead derived from Ehrlich and his pupils.”

History tells us that creativity is a broad river flowing through any culture. From our collective mass, with an egalitarian democracy that confounds elites, and breaks through privilege, mothers and fathers seen as the most ordinary folk, bring in souls whose lives blaze like comets through our history. These individuals speak to us from some deep place in our collective psyche and these singular people compel us to transform our world. Illumined moments, whether religious,

psychic, creative, or scientific, come to individuals, but their power arises from their social acceptance.

The challenge for science is not to dismiss what the individuals say is happening to them as a delusion or fantasy, but to seek to understand the processes by which they occur, and the domain into which they lead us. It is important I think to learn what we can about invoking this state of consciousness, and nurturing it in our culture. We're going to need a 21st century equivalent of the two bicycle mechanics from Ohio who taught humanity to fly, two young men in a garage creating the personal computer, a lone woman geneticist living above a garage who showed us how part of evolution worked and, three decades later everybody understood what she had seen, and Barbara McClintock was awarded the Nobel Prize.

EVIDENCE FOR TELEPATHIC COMMUNICATION IN A NONVERBAL AUTISTIC CHILD

Diane Hennacy Powell
Medford, Oregon, USA

Autistic savants have not undergone rigorous scientific investigation for psi, although many of their skills are very psi-like. For example, some give cube roots of six digit numbers without knowing how to perform simple mathematical functions, such as addition or multiplication, and with no conscious derivation of the answers. These remarkable skills are accepted by science because they are reliably replicated.

By contrast, brief reports by physicians that are suggestive of psi in autistic savants have been ignored or criticized. The psi ability most frequently reported by parents to the author in her research has been telepathy, especially in nonverbal children. In 2013, the author received three homemade videos of a nonverbal, nine year-old, severely autistic girl that were claimed to demonstrate telepathy. The videos were intriguing, but scientifically insufficient. Two therapists reported telepathic experiences with the girl, creating the opportunity to test both. The author conducted two controlled, two-hour research sessions with "Therapist A", and one two-hour controlled research session with "Therapist B". Randomized numbers, sentences, fake words, and visual images were presented to the therapists out of view of the girl, who was asked to "read the therapist's mind." The therapists were asked to write their own verbal descriptions of the images for comparison to the girl's answers. Random numbers were generated for mathematical equations.

The girl was asked to give all the numbers involved in the equations and duplicate the answers generated by the author with a calculator. The therapist and child could not be tested in separate rooms, because even subtle changes to the environment are very distracting and disturbing for a child with severe autism. The experimental set-up required the therapists and child to work with a divider between them. The child typed her answers after choosing them from a stencil. To

assess for any possible visual and/or auditory cueing, five high definition point-of-view (POV) cameras and three microphones were strategically placed in the experimental space to capture coverage of the entire room, the therapist and child, and their separate workspaces. All cameras were synchronized and time-stamped.

Data from the first session with Therapist A includes 100% accuracy on three out of twenty image descriptions containing up to nine letters each, 60 to 100% accuracy on all three of the five-letter nonsense words, and 100% accuracy on two random numbers: one eight digits and the other nine. Data from the second session with Therapist A includes 100% accuracy on six out of twelve equations with 15 to 19 digits each, 100% accuracy on seven out of 20 image descriptions containing up to six letters, and between 81 to 100% accuracy on sentences of between 18 and 35 letters. Data from the session with Therapist B showed 100% accuracy with five out of twenty random numbers up to six digits in length, and 100% accuracy with five out of twelve image descriptions containing up to six letters. There was no evidence of cueing or fraud. The data is highly suggestive of an alternative, latent and/or default communication mechanism that can be accessed by people born with severely impaired language abilities.

MACHINE-MEDIATED REMOTE VIEWING: AN INITIAL STUDY AND REPLICATION

Erik Maddocks and Garret Moddel

University of Colorado, Boulder, CO 80309-0425

Remote viewing (RV) is well established using human subjects drawing or describing perceived information about a location or object, without ever having directly observed it. Psychokinesis (PK) is well established using humans to affect a random number generator (RNG) output. If these concepts could be combined, RV could be carried out using human subjects unconsciously producing images via a local RNG.

An experimental setup was developed that allowed for the combining of RV and PK influence of RNG outputs. The experiment consisted of two collections of data. In one case, the “RV Sessions,” subjects were instructed to RV targets in sealed envelopes that were randomly selected by the subjects themselves while data were collected from a local RNG device. The other, the “PK Sessions,” consisted of PK data where the subjects were instructed to focus or concentrate on visible targets randomly selected by the subjects themselves while data were collected from a local RNG. In both cases the data streams from the RNGs were used to construct raster scanned images. These images were later judged, along with the more conventionally produced RV drawings, against five possible targets.

The experiment employed a forced-choice protocol to simplify the judging of the experimentally produced data. In the judging procedure, the experimenters were given a set of possible targets,

and ranked the targets from most like the machine-created image to least like it. There were always four decoys along with the target, giving a 20% hit rate by chance, over all trials.

This experiment was run in two separate groups. The first group, from a class experiment, had a total of 60 trials, producing a t-score of 2.33 for a p-value of 0.01 (1 tailed), and 0.02 (2 tailed). The second group, from an expanded follow-up experiment, had a total of 128 trials producing a t-score of 1.68 for a p-value of 0.05 (1 tailed), and 0.09 (2 tailed). The first group of 60 trials showed statistically significant results while the second group of 128 trials produced a less significant result.

The results provide evidence that remote viewing information can be captured with an inanimate system that samples noise. Exploitation of the capability to influence an automated RNG output to produce an RV image might mitigate the psi “experimenter effect”, so long as the experiment is designed in such a way as to minimize the experimenter contact with the subject and the subject’s experimental data.

SIX PROTOCOLS, NEUROSCIENCE, AND NEAR DEATH: AN EMERGING PARADIGM INCORPORATING NONLOCAL CONSCIOUSNESS

Stephan A. Schwartz

[Excerpted from text] It has been more than six decades since Gilbert Ryle, Waynflete Professor of Metaphysical Philosophy at Oxford, coined “The Ghost in the Machine,” in his book *The Concept of the Mind*, as a way of criticizing what he saw as Descartes’ absurd mind-body dualism. Since then the nature of consciousness has been largely explored only from the assumption that it was an as yet not understood neurophysiological process entirely resident in the organism. Its inherent physicality became an ironbound axiom. However, a growing body of experimental research now challenges this and a fundamental transition is underway in science. Still a minority position, it is nonetheless the trend direction in a wide range of disciplines, from medicine to biology to physics. Whole new sub-disciplines have emerged driven by the results of this research since Ryle’s dismissive words.

This work is pushing toward a new paradigm, one that is neither dualist nor monist, but rather one that postulates consciousness as the fundamental basis of reality. Max Planck, the father of Quantum Mechanics, framed it very clearly in an interview with the respected British newspaper, *The Observer* in its January 25, 1931 edition. Context is always important, and Planck understood very well that he was taking a public position, speaking as one of the leading physicists of his generation, through one of Britain’s most important papers. He did not mince words: “I regard consciousness as fundamental. I regard matter as derivative from consciousness.

We cannot get behind consciousness. Everything that we talk about, everything that we regard as existing, postulates consciousness.”

Two corollaries flow from Planck’s assertion: First, is the existence of Nonlocal Consciousness. An aspect of consciousness independent of space time and not resident in an organism’s physiology. Second, that all consciousnesses are interdependent, and interconnected.

One sign of the power of this trend is that most scientists doing research concerning consciousness tend to cite in their papers only work within their own discipline, or a closely related one. Physicists rarely cite physicians, and physicians rarely cite physicists. As a result separate literatures dealing with consciousness, both local and nonlocal, are developing independent of one another. It is only when seen collectively, however, that the emerging paradigm this research is producing becomes clear.

BEYOND THE COIN TOSS: EXAMINING WISEMAN'S CRITICISMS OF PARAPSYCHOLOGY

Johann Baptista¹, & Max Derakhshani²

¹Willamette University

Salem, OR, USA

²University of Nebraska

Townsend, NA, USA

We examine the critique of parapsychology offered by Professor Richard Wiseman in his 2010 paper, “Heads I Win, Tails You Lose; How Parapsychologists Nullify Null Results,” published in the *Skeptical Inquirer*; offer detailed analyses of his main contentions; and propose ways that parapsychologists can sidestep concerns like his in the future—with a general focus on ganzfeld studies.

Some of what we cover is as follows: we report estimates of the reproducibility and statistical power of ganzfeld studies, comparing them with the same measures across related mainstream disciplines such as social psychology, general psychology, and neuroscience, finding that they are equitable. We explore ways that parapsychology can use power estimates to surpass the average reproducibility of these fields by employing selected subjects, economizing its time and recourses in the process. We peer into the file-drawer using both theoretical and empirical approaches, and demonstrate that it cannot explain the results of ganzfeld experiments. We collect several quality vs. effect size comparisons from the literature, and conduct some ourselves, investigating the relationship between these important variables across parapsychology. Little evidence for a systematic relationship is found.

We investigate cases of alleged experimenter nullification of null results suggested by Wiseman, including Kanthamani and Broughton (1994) and Willin (1996), and propose alternative explanations for them, consistent with their reports and papers. We challenge the conclusions of the Milton and Wiseman (1999) meta-analysis—with special emphasis on its claim to not have replicated the findings of Bem and Honorton (1994)—based both on the standardness correlation found by Bem, Palmer, and Broughton (2001) and also our own analysis using selected subjects. We demonstrate that Milton & Wiseman tested a different population from Bem and Honorton, and that this alone is potentially enough to explain their discrepant findings. The effect of selected subjects is also shown to be a suggestive confounder for the standardness ratings found by Bem et al (2001). We examine ostensible decline effects in the recent ganzfeld and forced-choice literature, testing and rejecting them, and explore causes for previous declines. Finally, we present strategies and arguments for further methodological refinement, examining means by which parapsychologists might conduct experiments with upwards of 70-80% power, significantly boosting success levels across the field, while taking advantage of suggestions proposed by Kennedy (2014) and Utts & Tressoldi (2013) that would augment the strength of future replications.

We argue that larger effect sizes, higher reproducibility rates, multiple experimenter protocols, data transparency, pre-registered analyses, and other improvements are both essential and "just around the corner" for psi research—glimmering possibilities grounded in solid data. We hope our proposals for parapsychology are constructive, and that the results of our independent analysis serve an illustrative purpose: a case examination of criticism in parapsychology with Wiseman's critique as the main example, demonstrating the degree to which the literature is capable of resisting skeptical claims, as well as how it seems to support psi as its most plausible explanation.

THE “WEAK” VS. “STRONG” INTERPRETATIONS OF RHINE’S ESP RESEARCH

Jerry Solfvín

University of Massachusetts Dartmouth
North Dartmouth, MA, USA

Methodological debates and discussions are an important part of any field of science. In psychology, from which parapsychology has traditionally drawn much sustenance, debates and discussions about significance testing and interpretation of research results provides fertile fields to remind us that data need be carefully collected but also thoughtfully converted into meaning, and that meaning communicated effectively to others. The small and often controversial field of parapsychology has done a rather good job with the technical details of methodology and statistical soundness but may experience the most problems with the end-process, the articulation and communication of the meaning of its results more broadly.

This paper explores how the historical development of methodology by J.B. Rhine and others may be affecting today's progress. Science is one method for seeking answers to questions. But science is not primarily about knowing. Not-knowing, and maintaining one's sense of mystery may be the key to great, breakthroughs in science. The paradox is that finding an answer – or thinking you've found an answer – may turn the open-minded seeker into a not-so-open-minded marketer. As Andre Gide put it, "...Believe those who are seeking the truth. Doubt those who find it." The early development of Rhinean parapsychology may have followed such a path and handed down a sort of methodological "poison pill" to our field.

There are three issues I'd like to discuss with regard to this: 1) defining ESP negatively, that is, as something that occurs "without" or "in the absence" of, a normal (physical, sense-based) explanation; 2) the lack of control groups in testing ESP; and, 3) the conceptual leap Rhine took from the "weak" interpretation of his ESP results to the "strong" interpretation. The first issue, makes it difficult to provide good examples of what "it" is that we study and left parapsychology open to all the tricksters who produce faux ESP – consciously and unconsciously - for their own reasons.

The second issue, lack of control groups, meant using statistical controls, thus putting much too much weight upon statistics, and further encouraging researchers to equate ESP with any deviation from chance. Early researchers began discovering a wide variety of different ways that their results were statistically significant, and this was welcomed as new evidence of ESP.

But the real poison pill was planted by the third issue, when Rhine favored the "strong" interpretation of his results over the "weak" (more conservative) interpretation. The weak interpretation is itself a rather powerful and important one – it is that Rhine had falsified the materialism assumption that western science clings to. That wasn't enough for Rhine, so he went the next step, to the strong interpretation - that he had found the specific actions of the mind that caused the statistical deviations from chance. He even named it – ESP. Further, he said that he and his researchers knew how it worked. It was a universal ability, could be tested by a simple (though laborious) Zener card test. Women had more of it than men, believers had more than skeptics, children more than adults. It was independent of time and space and came in several varieties. It was mind-stuff, non-material, and can be studied by studying individuals, especially their brains, and by finding correlations with other traits and abilities of individuals. I suggest that this view, or something like it, still dominates our field to this day. While the weak interpretation is clearly supported by Rhine's work and by many studies since then, it is not at all clear how much of our "knowledge" about psi – the strong interpretation - is supported by data.

The concern today is that this tradition starting with Rhine is a tradition of "knowing", and may cause us to lose our sense of mystery. This may actually blind us to other, potentially more productive avenues of research. For myself, I believe that this discussion suggests that there may be good reasons to take a step backwards before attempting to move parapsychology forward. This may be the time to return to our roots, to re-examine the foundations, the basic concepts, the definitions, the methods, and results. This may also be the time to look for similar methodological and interpretational issues in our sister sciences. (NOTE: *I know of two such areas - experimenter expectancy effects, and placebo studies - which I will briefly discuss if*

there's sufficient time). Finally, and most importantly, I want to leave you with an appreciation for the power of not-knowing, to start a return to the sense of mystery, to encourage the individual and collective cultivation of pluralism in science and in our lives, and to embrace Andre Gide's comments about seekers.

Abstracts of Panels

PANEL 1 – REMOTE VIEWING’S GREATEST HITS, AND LESSONS LEARNED

Chair: Russell Targ

Panelists: Stephan Schwartz & Russell Targ

A REMARKABLE DECADE: REMOTE VIEWING AT SRI

Russell Targ

In the decade 1972 to 1982, I was involved in a number of experimental series at Stanford Research Institute, in which Hal Puthoff and I were investigating a new parapsychological protocol called remote viewing. This free-response clairvoyant approach using a viewer and interview pair was proposed to us by the great American psychic artist Ingo Swann. The interviewer, who was blind to the target pool, would work with the viewer, who was to psychically describe the location where a traveling beacon person would be located. I was the interviewer for most of the trials comprising the following unusually successful experimental series:

1974: Pat Price, policeman, thought to have psychic abilities, 9 outdoor targets. 7 of 9 targets were matched first place. Prob. = 3 in a 100,000. Effect size 1.3. In the same year, Price located the car that kidnapped Patricia Hearst, and read classified code words inside a secret NSA facility in Virginia.

1975: Hella Hammid, photographer, formal control subject, with no previous ESP experience. 9 outdoor target locations. Prob. = 2 in a million. Effect size 1.5.

1995: Hella Hammid, Formal IEEE precognition experiment: 4 outdoor targets chosen from a pool of sixty. Each trial was matched first place against the pool of four. $P = 0.04$ (1/4!), Effect size 0.87. The three above, were published in *Proc. IEEE*, 1976.

1978: 6 Army Intelligence officers, including Joe McMoneagle and Mel Riley. 36 outdoor targets. 19 first place matches, 6 expected. Probability = 3 in 100,000, effect size = 0.67. Four of

the viewers were independently significant. SRI Final Report: *Special Orientation Techniques*, June 1980. Russell Targ, et al.

December Silver: 1982: Keith Harary, physiologist forecasting change in Commodity futures. 9 hits out of 9 trials: Gain = \$120,000. Probability = 4 in a million. Effect size = 1.4. *Wall Street Journal* 1984,

My conclusion is that the set and setting for the remote viewing session is very important. The interview should follow the plan described by Carl Rogers for Non-Directive interaction with the viewer. He taught Unconditional Positive Regard, featuring compassion and interest in the viewer as a person. Since the interviewer is blind as to the target, he can be active and helpful to the viewer in many ways. He can always expect a miracle, and actively lead the viewer to look for surprising images, and away from naming, guessing and analysis.

MIND ROVER: THE MOBIUS LABORATORY – 1977 TO 1993

Stephan Schwartz

These are the research areas and achievements of the Mobius laboratory from 1977-1993 that will be discussed in this presentation:

1. Establishing that nonlocal consciousness is not electromagnetic, concluding a line of research begun by Soviet Academician Leonid Vasiliev.
2. Creating the Associational Remote Viewing (ARV) Protocol in which a target is associated with a particular outcome, or for communicating a message. Often done precognitively, frequently before the target exists as a target.
3. The development of a protocol for applied parapsychology that used nonlocal consciousness as the primary information source to guide a series of successful archeological projects including both location and complex reconstructions of:
 - Santa Catalina Island off the coast of California (1977), location of a previously unknown coaster cargo vessel.
 - Alexandria, Egypt, Project Leader and Research Director (1979-80), resulted in the first modern mapping of the Eastern Harbor of Alexandria, and the location of numerous shipwrecks covering many centuries, as well as the Emporium and the Timonium, Mark Antony's palace in Alexandria, the Ptolemaic Palace Complex of Cleopatra, the remains of the Lighthouse of Pharos, one of the seven wonders of the Ancient world, and a major civic building in the nearby buried city of Marea;
 - The location of the cargo vessel Dean Richmond in Lake Erie.

- The location and reconstruction of the wreck site of the Brig Leander as well as 18 other wreck sites, and compilation for the Bahamian government is the first survey of all significant wrecks on the Grand Bahamas Banks;
 - The location of remnants of a caravel from the fourth voyage of Christopher Columbus, and reconstruction of events leading up to the loss the caravel.
4. Two international mass tests which were correlated with a wide spectrum of personality measures, and which made it clear that while introverts and extroverts may open to nonlocal consciousness using different psychophysical strategies both could do so.
 5. Demonstrating a reliable objective measure of therapeutic intention in changes in the structure of water, as measured by infrared spectrophotometry.

PANEL 2 – EDUCATION IN PARAPSYCHOLOGY

Chair: Loyd Auerbach

*Organizers: Loyd Auerbach (HCH Institute, Atlantic University & JFK University)
and Neil McNeill (Paranormal Studies Institute)*

Additional Panelists (tentative): William Everist (Pima College), John Kruth (Rhine Research Center), John Palmer (Rhine Research Center), Christine Simmonds-Moore (University of West Georgia).

Traditionally, educational opportunities in parapsychology for both academic and general audiences have been few and far between. Parapsychology education at the university and college level is typically couched within a framework of transpersonal or anomalistic psychology. In the United States, such coursework or course content is quite rare, even within those frameworks as opposed to the United Kingdom, where it is more common though still far from widely dispersed.

At the same time, a resurgence of public interest in anomalistic phenomena and spontaneous case studies leaves the amateur researcher and layperson occasionally seeking high quality education outside the context of a degree program and has led to non-academic and academically oriented courses offered by a small number of people and organizations within the field. The question of the quality of any educational program or coursework in parapsychology for either group demands reconsideration.

A parapsychological curriculum that actively (and accurately) promotes anomalistic research is only as current as the theoretical models on which it is based. It is therefore necessary to periodically re-examine not just what is being taught, but how that information is made available to both the budding academic parapsychologist and the layperson.

This panel's participants collectively represent decades of experience with education in parapsychology, with expertise covering a wide variety of teaching methodologies in both public and private forums at varying levels of academic rigor. Using a question and answer style round-table discussion, panelists will comment on the state of parapsychology education today, areas for potential improvement, and highlight the successes and learning opportunities from parapsychology programs internationally.

The panel will allow time for questions from and discussion with the convention attendees. Topics to be addressed include:

- Historical research approaches and how they relate to contemporary parapsychological education
- Strategies for integrating the needs and goals of academic parapsychological education with the needs of the layperson or independent scholar
- Addressing the need for a standardized, "universal" core curriculum of information and terminology for educational purposes
- Practical educational approaches, including online courses, distance learning programs, formal and informal lectures, participatory workshops, blog forums, etc.
- A summary of the state of undergraduate, graduate and post-graduate education in the United Kingdom and other nations
- An examination of past and current educational program models, with a retrospective highlighting the successful JFK University parapsychology degree program and its long-term effects in the community
- Developing outreach methods for promoting legitimate parapsychological education to the public
- Promoting educational opportunities in current scientific research studies, for both academics and the general public

PANEL 3 – FROM MATERIALISM TO PLURALISM: RESTORING A SENSE OF MYSTERY TO SCIENCE

Chair: Jerry Solfvín

Panelists: Jerry Solfvín, Diane Hennacy Powell, Robert S. Gebelein, David Scharf, Beverly Rubik, Jon Klimo

There is good reason to be concerned about scientists who so easily disregard potentially valuable data and concepts that come out of other fields. We here, of course, are especially concerned when others ignore parapsychological evidence. Scientists are human beings, subject to the same foibles as other human beings, and it takes real effort to overcome tendencies towards bias, prejudice, and inattentional blindness. It is precisely because we are human beings

that we get so caught up in our own ego-centric worlds, theories, philosophies, beliefs, and current fixations, and that we ignore anything contradictory, unsettling, or even just peripheral to our current focus. This manifests in many ways. The materialism or physicalism assumption of western science may blind scientists to viewpoints which are peripheral to that assumption. We must be grateful for the field of philosophy of science, whose primary goal, according to Cambridge philosopher Hosak Chang, is to inform scientists about the perils of MONISM and to guide us towards scientific PLURALISM. When one assumption, theory, or philosophic position dominates a science to the exclusion of alternatives, scientific progress suffers. On the other hand, the PLURALISM which welcomes alternative theories and methods – especially strange or unusual ones – can facilitate science. In individuals, a symptom of monism is scoring low on the yet-to-be-studied trait or state I call *sense of mystery*. Among scientists, *knowing* is over-valued, and not-knowing and expressing a *sense of mystery* are undervalued. In fact, many of us were taught that the opposite of *knowing* is *being stupid*. The opposite of knowing could be described as preserving a sense of mystery. That is, there is power in not-knowing, in holding onto one's sense of mystery. Scoring high on the *sense of mystery* trait is the basic stuff of pluralism.

So, where do we parapsychologists stand on the issue of pluralism? While we correctly scold other scientists for ignoring our data, do we welcome pluralism within our own field? What happens when someone tells you a personal, unexplained, potentially parapsychological experience? Do you think or say, “that’s telepathy,” or “presentiment”, or “remote sensing”? If so, you may be losing your sense of mystery. You may be becoming one of the very people you’ve been complaining about, the ones who, “...disregard potentially valuable data and concepts...” in favor of your own favored explanation. Pluralism means openness to another viewpoint, maintaining the sense of mystery about someone else’s experience or beliefs. It’s a rare joy to stumble upon a person, scientist or not, who maintains a sense of mystery about the world, who remains open to new data, and it’s a special joy in a scientist. This panel is a discussion of loss of sense of mystery in science, but more importantly, inside of parapsychology where it may impede us. Pluralistic thinking may revivify science, beginning with us!

THE “CLOSEMINDING” OF THE AMERICAN MIND¹

Diane Hennacy Powell

Arthur Koestler published *The Roots of Coincidence: an Excursion into Parapsychology* in 1972, a very optimistic time for parapsychology. He listed *dozens* of eminent scientists and clinicians from the 20th century who became convinced of the merits of studying psi. Among them were Sigmund Freud and Professor Eysenck, the Psychology Chair at the University of London and Director of Psychology at the Maudsley and Bethlehem Royal Hospitals, where I studied child psychiatry. Eysenck boldly wrote:

“Unless there is a gigantic conspiracy involving some 30 University departments all over the world and several hundred highly respected scientists in various fields, many of them originally hostile to the claims of the psychical researchers, the only conclusion the

unbiased observer can come to must be that there does exist a small number of people who obtain knowledge existing either in other people's minds, or in the outer world, by means as yet unknown to science."

Psychic phenomena are still labeled "supernatural", even though they share many parallels with what modern physics tells us. In fact, the field of physics is actually much stranger than parapsychology. And physicists now have proof for many of their previously unfathomable concepts, such as entanglement and, most recently, gravitational waves and the Higgs boson. Meanwhile parapsychological research was declared a pseudoscience and thrown under the proverbial bus. Programs at Duke, Princeton, Stanford and elsewhere were dismantled despite intriguing data. What happened?

And on the clinical side, psychiatry became increasingly biological. Psychiatrists increasingly prescribe medications, while other mental health professionals do the psychotherapy. Now most psychiatrists rarely get to know their patients to the depth possible in Freud's time, or even mine. This means they miss out on stories that could challenge their view of human consciousness, like happened when a patient at Cambridge Hospital rocked the theoretical boat for me. Within minutes of first meeting, she told me detailed information... about me... from my past, present, and on into the future. According to my training, this was not possible.

My intellectual curiosity was piqued, leading to my book, *The ESP Enigma: A Scientific Case for Understanding Psychic Phenomena* (2008). But less than two years after its publication, just having "ESP" in the title, along with "scientific understanding", was enough for the state medical board to question my sanity.

As Professor Eysenck had astutely noted, "Scientists, especially when they leave the particular field in which they have specialized, are just as ordinary, pig-headed and unreasonable as anybody else, and their unusually high intelligence only makes their prejudices all the more dangerous." Dangerous? Yes, indeed. But there is one thing we know for certain about pendulums, including that of scientific opinion. They swing.

¹In *The Closing of the American Mind* (1987), Allan Bloom proposed that "higher education has failed democracy and impoverished the souls of today's students." According to Bloom, deconstructionism, and the "openness" of relativism, had paradoxically led to the end of critical and rational thinking...and the closing of the American mind.

THE POLITICS OF PHYSICALISM

Robert S. Gebelein

Physicalism, the assertion that there is no reality beyond the physical or what can be explained by known physical laws, dominates scientific thinking, in the face of all evidence to the contrary, even though this view was not determined by scientific methods. In order to verify, logically, a proposition of the form "There are no such things," one must have a complete knowledge of

everything. And conversely, in order to refute it, only one instance of the given phenomenon is necessary. In 1958 I dreamed of my grandmother's death an hour before I received the telegram. That was all the evidence I ever needed to know that there was a reality beyond what I had learned in my physics courses at Harvard.

Physicalism is supported by illegitimate arguments like ridicule, authoritarian pronouncements, or simply ignoring the data. These arguments are widely accepted by people who should know better. Ultimately, physicalism is enforced by denying publication, funding, and employment to those who would go beyond its boundaries. These are not the arguments of science, but of power politics.

The problem of physicalism has no simple solution. It is woven into the tapestry of what a human being is. If you belong to a social group, you must conform to its opinions, attitudes, and beliefs, which are determined by the most dominant members of the group. This is the pecking order, which human beings, even scientists, have in common with animals. Ideally, those scientists who practice the scientific method most faithfully and accurately would be most dominant, but as science has attained success, it has gained status and therefore power in the larger community, and more general rules of dominance (like character-assassination) apply. Scientists are believed simply because they are scientists, whether their arguments are legitimate or not.

We can't just say, "I don't know." We have to have some explanation of the unknown. People seek out "authorities" to explain what is beyond their own sphere of knowledge. They believe there are such "authorities" because as small children their parents were as gods to them, all-knowing and all-powerful, and so psychologically they are primed for this kind of belief. Because people seek "authorities," other people become "authorities" to accommodate them.

And so we have religion, which is primarily fiction, to explain and deal with the unknown. Religion is a rigid authoritarian belief system, claiming to be the absolute and ultimate truth. The existence of the spiritual need not be associated with any religion, as younger generations starting with the Hippies have come to recognize.

Science is more plausible than the old religious beliefs, so scientists have taken over the authoritarian role of the priesthood in explaining the unknown. In order to do this, they simply assert that nothing exists beyond the physical, and then of course science has explored the physical thoroughly, from ultra-distant galaxies to ultra-small sub-atomic entities.

By making discoveries which are not explained by their physical laws. we are upsetting their role as priesthood and disturbing the security of their followers, who are the ones, ultimately, who provide the money for scientific research.

TWO DOGMAS OF MATERIALISM: TOWARD A QUANTUM FIELD THEORY OF THE PSYCHIC FIELD

David Scharf

Materialism, as a philosophy of mind, is the thesis that consciousness and mind are entirely dependent on the brain, they could not exist without the brain and, in its strongest form, consciousness and mind are held to be reducible to the brain and its electro-chemical processes. But even its most steadfast proponents acknowledge that materialism cannot account for the fact of consciousness and that it involves extremely unpalatable consequences for our sense of autonomy and moral responsibility. Moreover close analysis shows that the cognitive dissonance inherent in materialism makes it virtually untenable as a coherent theory of mind. How then should we account for its resilience as the default mainstream theory in contemporary neuroscience, cognitive psychology and the philosophy of mind?

This resilience stems from the seeming plausibility of two central dogmas. First, that impairment to critical brain regions causes a degradation of corresponding cognitive function and that this proves that mind is dependent on the brain. And second, the physical domain is presumed to be causally closed, which is taken to imply that mind is either reducible to the brain or else epiphenomenal and irrelevant. I propose to show that neither of these dogmas stands up to critical scrutiny. And that the result of this scrutiny can help delineate the outlines of a transmission model of the mind/brain interaction, in terms of quantum field theory.

TOWARD AN INTEGRAL SCIENCE OF LIFE

Beverly Rubik

The dominant paradigm in biology and medicine with its reductionist methodology and epistemology led to a materialistic view of the organism comprised of biomolecules as well as life without context or meaning. This worldview has led to a plethora of biotechnology products and a level of control and manipulation of nature, with genes and genetically modified lifeforms as patentable commodities. Yet we cannot marvel that a human has even less genes than a grain of rice! Clearly this paradigm is sorely lacking. The most extraordinary aspects of life including consciousness, creativity, intent and will, the full potential for health, healing, and spiritual growth; evolution; and the extraordinary interconnectedness and interdependence of all life in the biosphere which includes the wonders of psi phenomena, are all excluded from mainstream science. However, contemporary discoveries emerging from frontier areas of inquiry such as the mind-body interrelationship, the biofield, and evidence from integrative medicine, point to the need for a new science that would encompass more of the heart and soul of life. This

presentation will point the way toward a life science that is integrated with spirit: one that inspires awe, wonder, respect, and care for life on earth.

A PROPOSED SPECTRUM FOR PARAPSYCHOLOGY: FROM MATERIALISM TO IDEALISM

Jon Klimo

In the early nineties, I began presenting what I call a "Hegel Metric," which, over the ensuing years, I have come to see as a kind of spectrum that works particularly well for me in depicting the relationship between a physical reductionist material monism on one end and a monist idealism, with all being ultimately consciousness, on the other end. In between, fall a variety of dualistic perspectives, including the phenomena and experiences studied by parapsychology.

I call this a Hegel Metric because it is informed for me by the German idealist George Hegel's philosophical system where all that exists is ultimately what he calls Absolute Spirit. Nonetheless, we individual human minds and spirits as aspects of this one underlying Spirit mostly experience the reality we are embedded within as being much more materialistic or dualistic in nature than as possessing the monistic nature of an idealism that is ultimately spirit aware of itself as spirit in a self-same universe of Spirit.

Although I have elsewhere written in more detail about this Hegel Metric, consider for now this very condensed version: On one end of the metric is what I'm calling "Hegel Three". This is where the individual human experiencer is essentially Hegel's Absolute Spirit, or what I see as the all-creating, all-comprising, all-sustaining Universal Consciousness field manifest in us in human form and being, but where we are currently in Hegel's "antithesis" state where we are out of phase with and unaware of ourselves as being, and being embedded in, an underlying field of Consciousness or Spirit. Using Charles Tart's notion of "state specific" or "state dependent" consciousness, we are only able to experience a kind and level of reality as a function of the delimiting state of consciousness we are in at the time. Being at Hegel Three, and in what Hegel calls the antithesis state, is what I have elsewhere called a level of "cosmological dissociation" where we are, to borrow from the psychological concept of dissociation, very dissociated from the true nature of our own beings and potential and dissociated from the true nature of the one underlying Reality. For me, to overcome the presenting problem of our current condition of cosmological dissociation is to become aware that we are localizations and individuations of Absolute Spirit or Universal Consciousness embedded within and interacting with fellow Consciousness/Spirit. But so long as we are experientially constrained state-specifically to our present cosmologically dissociated condition, we can only know through the lens of a Hegel Three perspective where all is materialistically experienced as different than, and distanced and separate from, our consciousness experiencing it. Hegel Three is the home of materialism and physical reductionism.

As we as individuals and as a planetary species continue to overcome our kinds and degrees of antithesis and dissociation, we move on the Hegel Metric to the domain of what I call Hegel Two. If we go all the way over to Hegel One, we reach what Hegel called the Thesis state, where all individual perspectives are now able to experience themselves and all else surrounding them as being Absolute Spirit, Universal Consciousness, aware of itself as such. But for the foreseeable future, we remain far from this. Rather, as a species we remain constrained to the experiential perspective of Hegel Three, but now with the beginnings for more and more of us with a growing ability to be able to experience state specifically from the perspective of Hegel Two. Hegel Two contains an increasing interpenetration, confluence, and superimposition of earlier Hegel Three's self-estranging materialism and separatism and eventual Hegel One's experience that all is consciousness and spirit aware of itself as such.

Hegel Two will be confusing and confounding for many. What was once construed as being associated with the inner, subjective, and imaginable realm will take on more of the objective nature of what we have been long used to associating with an objective reality external to and separate from the consciousness experiencing it, and what was once thought external to and separate from us experiencing it will become ever less objective and invariant. With Hegel Two, inner becomes more outer-like and outer becomes more inner-like until eventually, more and more is realized as being the objects and contents, the localizations and individuations, of the one Universal Consciousness field, the one being of Absolute Spirit. But until Hegel One is reached, we will have magical-seeming goings-on; we will have ever more of non-local mind and its objects and contents hard to place and predict; we will have magical thinking and magical causation, all manner of remote viewing, manifestation and materialization, and eventual increasing evidence of our omniscience and causal capacity as our cosmological dissociation continues to be overcome. Needless, to say, parapsychology will come fully into its prime as we continue to move from current Hegel Three into Hegel Two.

Abstracts of Posters

A STUDY OF DMILS ON SMALL ANIMALS AND POSSIBLE SYNCHRONOUS ENVIRONMENTAL EFFECTS

Jeannette E. Briggs

Rhine Research Center, Durham

In this research project a single volunteer who made himself known to the Rhine Research Center (RRC) in 2013 will use direct interaction on a living system (DMILS) to put small animals to sleep or into a sleep-like state. When he contacted the RRC, the volunteer claimed he could use a self-taught method of collecting energy in his lower abdomen that he then would direct to the immediate proximity of animals as a treatment of DMILS. The animals to which he directed the energy were either near him or viewed from live stream video feeds, photos, or video recordings. Once the directed energy built up near the animals he claimed it formed a vortex and manipulated the chi surrounding the animals in such a way as to put them to sleep or into a sleep-like state. He claimed to have performed these actions with 100% success on an almost weekly basis for one year prior to contacting the RRC.

When the volunteer performed this type of DMILS on animals, certain possibly synchronous environmental changes were noted near him and were observed when the video recordings of these sessions were viewed. For example, the friends and family of the volunteer, as well as the volunteer himself, noticed an increase in heat during the DMILS sessions. When an experienced bird handler viewed video recordings supplied by the volunteer as proof of his ability, many of the animals, especially birds, seemed to exhibit behaviors signifying an increase in temperature in their surroundings. Another example of potential synchronous environmental changes concerns the presence of ultraviolet (UV) light. Increased UV light emissions of chi masters have been documented and since the volunteer claims to be manipulating chi he might also be emitting UV light. When the video recordings of DMILS sessions facilitated by webcams were evaluated, it was noted that many animals, especially certain birds whose visual spectrums extend into the UV range, appeared to focus on a seemingly empty space between the webcam and themselves possibly indicating the increase in localized UV radiation. Because of these potentially synchronous environmental changes, various methods to determine changes in heat and UV light will be used.

The experiment will be partially automated, blind, and randomized. Changes in heat, UV emissions, and random event generator (REG) data will be measured and recorded at both the source and treatment sites. In addition to analyzing data to evaluate the success of the application

of DMILS on animals by the volunteer, environmental data will be examined for synchronous changes possibly indicating the occurrence of entanglement and nonlocality during this type of psi phenomenon.

A MIXED METHODS EXPLORATORY STUDY OF ALLEGED TELEPATHIC INTERSPECIES COMMUNICATION WITH DOMESTIC DOGS (*CANIS LUPUS FAMILIARIS*)

Deborah L. Erickson
Saybrook University
San Francisco, CA, USA

This research explored the proposition that alleged telepathic interspecies communication, or human telepathic connection to animals, may be possible by learning simple contemplative/meditative techniques to quiet the mind and shift consciousness. Telepathy is a controversial topic not accepted by mainstream science, despite multiple research efforts over many years that have shown positive effects. This research is based on the hypothesis that the process to shift cognition into a pattern similar to daydreaming, or to the hypnagogic and hypnopompic states on the edge of sleep, may allow for a consciousness alteration that may enable telepathy.

The research explored the following questions: When a telepathic animal communication session was conducted with a domestic dog (*Canis lupis familiaris*), was accurate information received by the researcher for quantitative questions as judged by the human guardian on Likert Scale of 1 (entirely inaccurate) to 6 (entirely accurate)? What qualitative comments did the human guardian have for other information received by the researcher from the animal related to the questions posed by the guardian? What was the overall session accuracy rating as judged by the human guardians? And finally, what common issues were raised by the guardians' qualitative questions and comments?

This research completed 50 alleged telepathic animal communication sessions conducted by the researcher over the telephone with a human guardian and their domestic canine. All guardians were physically located in another city or state from the researcher; 36 cities and 35 breeds or mixed breeds were represented. Five standard questions were asked of the animal, three of which were quantitative and rated by the guardian; the remainder of the session was devoted to the guardian's questions for their animal. The five standard questions were: 1) How many humans do you live with? 2) Have you lived with your current guardian since you were young? 3) What is your favorite food or treat(s) you get now? 4) What do you like most about your life? and 5) What would you like to change about your life?

All sessions were recorded via a conference call service and the recording was available to the guardian after the session. The researcher transferred all questions asked and responses allegedly received telepathically from the animal during the session to an online survey form. The guardian judged the accuracy of the information received by the researcher on the survey form after the communication session was completed, independent of further contact with the researcher.

The average overall accuracy rating for all 50 sessions was 5.12, indicating a possibility that accurate information was received by a human from a canine via a telepathic human-canine connection. An analysis of the qualitative data indicated several common canine issues, such as canines reactive to other dogs in public, canines reactive to strangers entering their home, conflicts between canines in a multi-dog household, affection between canines in a multi-dog household, physical health issues, and emotional/spiritual support issues.

The results of this study contribute to the body of research into animal cognition and consciousness. The findings further contribute to interanimal empathy studies as well as the wealth of literature that supports the human-animal bond. Further research is needed to explore additional nuances of this category of parapsychological research.

JOURNAL OF EXCEPTIONAL EXPERIENCES AND PSYCHOLOGY

Erika A. Pratte
Gloucester, VA

This poster abstract is for the *Journal of Exceptional Experiences and Psychology* (www.exceptionalpsychology.com), an online, international, peer-reviewed scholarly journal dedicated to the exploration of exceptional experiences and is “an effort to discover what could be learned if all types of psychic, mystical, encounter, death-related, peak, and other anomalous experiences were viewed as members of a single class” (White, 1999, para. 1). Exceptional psychology is a field that studies experiences and phenomena traditionally germane to parapsychology and yet, goes beyond in breadth. Some examples of experiences under investigation by exceptional psychology include survival after death, out-of-body experiences, extrasensory perception, psychokinesis, poltergeists, mediumship, and hauntings. Also included are abduction scenarios, possession, psychic healing, and synchronicity.

The *Journal of Exceptional Experiences and Psychology* supports an integrative and pluralistic approach. This includes embracing the varieties of inquiry such as experimentation, ethnography, phenomenology, personal narratives, art, and poetry. Each seeks to reveal, in its own way, the essence of the exceptional experience. In addition, exceptional psychology encourages the application of helpful aspects of certain exceptional experiences to clinical praxis, which is a growing trend and area of interest in the parapsychological literature. This is just as much a part

of the project as research and theorizing. For instance, clinical approaches include the use of psychic healing practices and the application of mediumship to the bereavement process.

The *Journal of Exceptional Experiences and Psychology* encourages the submission of research manuscripts, creative writing, artwork, video, and other related creative pieces associated with exceptional experiences. The journal is published biannually while welcoming submissions all year.

RESOLUTENESS OF AURA LIFE COLOUR ACROSS DIFFERENT GENERATIONS

N. Ramkumar & V. Vaidehi Priyal
PSG Institute of Management
Coimbatore, Tamil Nadu, India

The purpose of this study is to determine aura life colour across different generations. The questionnaire was framed to assess seven aura colours and consisted of 112 questions grouped under eight components, such as approach to physical reality, mental attitude, emotional makeup, social style, personal power and leadership style, financial choices, career options and spirituality, and 27 questions from characteristics and motivations of different generations as well. Data from 189 respondents was drawn from service (academic and hospital) and manufacturing (textile and auto component) sectors in Coimbatore, Tamil Nadu (India). The questionnaire was subjected to reliability analysis and found to be reliable. Most of the individuals (45%) from four generations were identified as having a blue aura life colour of higher order chakras. Similarly, the majority of individuals working in academic (52%), hospital (50%) and auto component (50%) had blue aura life colour, while in textile (44%), individuals had red aura life colour. The results of this study will be able to help researchers formulate further research to develop strategies and measures to bridge the conflicts that arise from generation gap.

CHILDREN AND THEIR PARENTS' EXPERIENCE WITH AFTER-DEATH COMMUNICATION

Kimberly N. Jeska
Sofia University
Palo Alto, CA, USA

After-death communication (ADC) is a subset of an overarching umbrella of what can also be referred to as an Exceptional Human Experience. An ADC can also be classified as paranormal, indicating that which reaches beyond our physicality and tangible nature and transcends our dimension of earthly reality. ADCs can be direct or indirect communications between the earthly world and other dimensions of reality. These contacts are a reciprocal engagement between the physical, living person and the spiritual, non-physical being. ADCs have also been referred to as apparitions, afterlife encounters, ghosts, spirits, along with many other societal and scientific labels. Researcher intention for this study focused around the deeper meaning, understanding, and exploration of the lived experiences of the children and parents. Previous literature had not addressed the parent-child interrelationship and individual experiences with apparent after-death communications occurring in the present moment. Additionally, prior studies have often portrayed adults that have reflected back to childhood around spiritual experiences. A forum was provided for the participants in this study to express themselves with the potential for healing and integration of their experiences. This qualitative study included an Intuitive Inquiry and Thematic Content Analysis that incorporated a three-part procedure: (a) parent interview; (b) child interview (optional); and (c) creative expression art work component with the child (optional).

Results from the 14 participants indicated finding purpose and meaning with the experiences. These interactions appeared to co-create further understanding of death, validity of experiences, and potential for a life mission. Many unexpected findings unfolded from the study as only mother participants came forward. These female parents provided a wealth of understanding into the intricacies of living with ADCs throughout the generations and into the current lifetime with their children. The depth, perception, and awareness by both parents and their children portrayed the participants' vulnerability around their ADCs into a more public awareness and understanding about what they are actually going through and desiring from their communities. The need for further education for parents that have children experiencing after-death communications was identified as well as for the community. Public education around this topic was an aspect that the parents requested to bring further awareness, as well as providing professionals with resources and support. Suggestions for how to work with clients is included and the need for additional resources, education, and public awareness for adults and children is greatly needed and desired. The study presents a strong framework offering validity of ADC experiences for children and families abroad. Mental health practitioners, spiritual directors, and educators are presented with perspective and a foundation from which to build a treatment plan and understand our dimensionally growing and expanding capabilities. This research provides a bridge between the earth world and the possibility of other dimensional life and how to move forward in working with our youth and parents in our homes, churches, schools, and other social and non-social gatherings/settings. Personal lived ADC experiences by the researcher resonated with the participants as well as the findings in this study. An opportunity for growth exists for professionals working in the field and provides an expanded frame of reference for guiding clients as opposed to misdiagnosing and/or pathologizing.

THE VOLUME FIELD MODEL ABOUT THE STRONG INTERACTION AND THE WEAK INTERACTION

Rongwu Liu
1010 Scott ST
San Gabriel, CA, USA

The core foundation of natural science is the particle model. Over a long time, the particle model has been challenged in three fields of nature: (1) the physical mechanism of the strong interaction and the weak interaction in the structure levels below atomic nucleus, (2) the start and the end of the universe (that is, the “cosmic egg” and the black hole), and (3) the “special life” phenomena (including parapsychological phenomena and paraphysiological phenomena).

The quantum chromodynamics (QCD) and the quantum flavordynamics (QFD) established by imitating quantum electrodynamics (QED) haven't provided a satisfactory form of mathematical description in theory, they can only explain some experimental facts about the strong interaction and the weak interaction phenomenologically (usually obtained by particle collision in the particle collider). The speculation about the universe's origin and the black hole by using general relativity has also made the particle model fall into the abyss of the singularities of the universe and the black hole. In addition, the awkward situation that the particle model treats the special life phenomena of human body has also made people cast doubts on the authority and the range of application of the particle model, because the material ideas that the special life phenomena of human body manifest are incompatible with the physical concepts of the particle model.

This article systematically proposes a group of new physical concepts which are totally different from the conventional physical concepts: Volume field (corresponding to particle) is a form of material existence in plane space (corresponding to point space). It takes volume-changing motion (corresponding to displacement motion) in the form of non-continuous motion (corresponding to continuous motion). The volume fields interact between them by overlapping their volume fields (corresponding to exchanging intermediary particles). On the basis of the above concepts, this article further proposes the complex structure models of atomic nucleus (including the structure levels below) and organism, the plane space model, and the periodic jump function model.

Based on these models, this article ultimately formulates a volume field model uniformly describing the strong and weak interactions both in the atomic nucleus and in the organism, consequently bringing the special life phenomena of human body into the frameworks of the strong and weak interactions. In addition, this article also proposes a model of space-time conversion based on the volume field model, suggests that the plane space-time and the point space-time convert each other by means of rupture and merging, respectively; the essence of the space-time conversion is the mutual transformation of material and energy respectively. The model of space-time conversion also brings the cosmological singularities (cosmic egg and black

hole) into the frameworks of the strong and weak interactions, and explains some conventional and super-conventional natural phenomena related to the space-time conversion.

THOUGHTOGRAPHS FROM THE FUTURE AND FROM THE PAST

Lester Franklin Lomax III

511 East Grand Avenue, #325

Escondido, CA 92025

Our images showed up in Series “thoughtographs” taken in Polaroid cameras from ten and twenty years in the past, from over five years in the future, and from over a thousand miles away from the cameras, identifiable and identified.

A brief description of the strange experience of finding the first image is as follows. In a book written by Dr. Jule Eisenbud about Ted Serios, I found an image procured in the presence of Ted Serios, of images of my friend and I, as we were fishing at a lake in California. I had borrowed the book at a local library, on a whim, then I irrationally decided to leave one employee to run a complex repair contract at a bridge jobsite, and I then traveled many miles to visit the other guy in the image, before I opened and read the book. We witnessed some paranormal events that attracted my attention to his identifying features, e.g., a dark patch of hair behind one ear, surrounded by blond hair. We both experienced the presence of a person looking down on us from behind us, as well. We felt a vibration and noise, and, when asked, I verbally identified the effect as being caused by our mutual friend, who showed up in some of the images looking down at us. I seemed, in hindsight, to have been primed to recognize the dulled image in Dr. Eisenbud’s book (1967: page 249, figure 118).

An especially reliable correspondence between the image in the book, and the scene at the site that was thoughtographed many miles from the camera, is that the event occurred on the same date as the experimenters wrote on the border of the thoughtograph: November 29, 1965. That was the date of the fishing trip, as verified by our recollection of the event, a very memorable birthday celebration. Even though I did not find the “decoupage” image until ten years after the event, we vividly remembered the fishing event that occurred on that date. The bridge repair job helped to assuage my concern about the bridge in the background of figure 118, (there is no bridge at the site), until I first saw the bridge, later in 1975, on a trip to Ohio, while traveling over the Missouri River. The collage of features from different times was meaningful to us. These types of experiences are commonly experienced by some folks. It is time for one of us to share what we have been doing, possibly as a lineage for many centuries!

I called Dr. Eisenbud and told him that I thought that I may have identified the two guys in the image in figure 118. He mailed a large packet of thoughtographs to me, that he said may be connected with the identified scene (other men showed up without shirts on, as I did in figure

118, etc.). When I received the packet of images in the mail, I recognized most of them as images of identifiable and identified events that I had experienced. A recognizable image of the known woman, who I had identified earlier, to my friend, was in some of the images, looking down on us in the place of the dark blur behind the men in figure 118. Dr. Eisenbud offered that he was advised not to publish identifiable images of people. After the woman passed away, he published identifiable images of her in his Second Edition book (1989). The entire set of data is most likely at UMBC Special Collections, at the Albin O. Kuhn Library. The two events described in this Abstract are both marked “Water’s Edge”, in the collection of Serios images. The site is at Contentdm.ad.umbc.edu/cdm/landingpage/page/collection/Eisenbud. There is a “finding aid” at: aok.lib.umbc.edu/specoll/Eisenbud/Eisenbud.PDF.

When I received Dr. Eisenbud’s *Second Edition* in the mail, I found an image of another identified fishing trip that we had just experienced, two weeks before, in it. We had a prepaid charter boat hired to go to the same site in another two weeks, and we identified that imaged site, as well. That site and our pose was “thoughtographed” from twenty years in the past. That thoughtographed site is on the “East End” of Catalina Island; Satellite views of the site are available on the internet. A tall rectangular stone appears to be similar with the stones in the target picture of “Stonehenge”. It is still embedded, upright, in the sand in the surf, as of 2006. The site is ravaged by the current and tides. The data indicate that getting exact photographic images of the sites is masked and hindered by the phenomena. An example is that the exterior of the house at one of the scenes was extensively remodeled before I got to it. See photo #2 in the photos of the island at: Geology.campus.ad.CSULB.edu/people/grantphotos/CatalinaFeb06/156sealrocksRockQuarryFeb06L.jpg. The snapshots of the site, taken on fishing trips, are missing from my files.

I had used what I call (after others) the “Library Angel” to find books that answered questions, and I found Dr. Eisenbud’s book with that method, and I continued to use it for many years, in an attempt to understand how such type events could happen.

I recently found the work started by Dr. Yakir Aharonov, and others, on their mathematically and empirically derived Time Symmetry Quantum Mechanics conceptualizations. Their work, for this naïve, but highly experienced layman, provided the encouragement to share my experiences, and my findings and my explicated tacit knowledge with you. My explanatory scheme, when generalized from the limited domain of Serios thoughtography to the possible thoughtographing of the world, may help scientists understand the nature of time and of the self obscuring supra natural in our world.

I have contributed a copy of a 46 page background research brief on the conceptualized understanding of thoughtography to the Parapsychological Association. That report, and fourteen analyses of the data procured in the fourteen Eisenbud/Serios experimental conditions that are in the literature and detailed reports of interest to investigators who would understand the details of the nature of time, are available. The information must be couched in common sense first person narratives, and personal and scientific jargon, in order to not overtly attack the useful, but naïve materialistic general consensus that there are no supernatural events in this world, yet. I have been working on gaining an understanding of thoughtography for almost forty

years. I believe that the Serious thoughtographical images provide a long series of replicated paranormal data, unlike anything else in parapsychology. It is time for me to pass what I have learned on to others.

DECOMPOSITION OF FIELD RNG OUTPUTS DURING MASSIVE TWEETS DURING THE FILM, “LAPUTA: CASTLE IN THE SKY” IN JAPAN

Shimizu¹, T., & Ishikawa¹, M.

¹School of Information and Communication, Institute for Informatics of Consciousness, Meiji University, JAPAN
Tokyo, Japan

Analysis using Haar wavelets, proposed by Shimizu, Kokubo & Ishikawa (2013), would be expected to be useful in field RNG studies because all the variance of the RNG outputs can be decomposed by period (frequency) expectancies. This solves issues that field RNG studies have had with arbitrary bit-generation speeds, typically of 1 sample per second. However, there remains several unsolved practical issues. The current study focused on two of those issues as follows.

First, the previous analyses were restricted for event lengths equal to the power of 2 (e.g. 256sec, 1024sec). This had little practical use. The current study solves this point methodologically using zero padding. In wavelet analysis, sequences are repeatedly converted into two arrays: scale coefficients and detail coefficients. Here, (1) we create an array with length of power of 2. (2) The elements in the array out of the event range were filled by zero. (3) Additionally, degrees of freedom were counted independently, also being filled by zeroes during the non-event time range. This zero-padding can solve the above problems, which is also useful in dealing with processing missing data.

Second, available information from the highest level of wavelet analysis is limited by the RNG's generation speed. In previous experiments, the RNGs generated 64bits per 125 msec (1/8 sec) or 512 bits per second. Under this condition, one second with 8 trials can provide only 2 levels of wavelet decompositions ($4 = 2^2$). To moderate such inefficiency, we propose an alternative way to decompose variance of RNG outputs more deeply, by recording binary data of RNG outputs into the database without splitting trials. Since binary data in the database consists of arrays of bytes (8 bits), this could record all the information from the RNG outputs. Under the condition of 512 bits per sec generation, wavelets can provide 5 levels (depth) of analysis for 1 second ($32 = 2^5$).

After the improvement of the methodology, we analyzed the data recorded during broadcasting of the film “Laputa: Castle in the sky” in Japan, during which a huge TV audience tweeted simultaneously in the final stage of the film. Two RNGs generated random numbers, both of which were connected with 2 true RNGs, Psyleron and Rpg102, respectively. The two machines were about 7m distance from each other. Then, the outputs of 4 RNG devices were analyzed, respectively. All the RNGs generated 512 per second, recording as binary data into databases. Creating cumulative chi-squares statistics for each decomposed level, results found no biases for the 4 devices, confirming the validity of the methodology. Finally, we discuss several tasks for future research.

Abstracts of Invited Addresses

A MULTIPHASIC MODEL OF PRECOGNITION

Sonali Bhatt Marwaha, Edwin C. May
Laboratories for Fundamental Research
Palo Alto, CA US

Precognition is defined as the acquisition and cognition of information emerging from a distant point in spacetime that is space-like separated (i.e., not causally related), which is blocked from the usual sensory systems by distance, shielding or time. Despite the controversies, there is sufficient empirical evidence for the validity of the phenomenon. In this paper we present the Multiphasic Model of Precognition (MMPC) which is capable of addressing the experimental data. The MMPC identifies two distinct phases: the physics domain addresses the question: how is it possible for information to traverse from one space-time point to another? We suggest that the solution might be found within entropic considerations. The acquisition and interpretation of retrocognitive-signals is via three stages in the neuroscience domain: (1) perception of signals from an information carrier, which is based upon psychophysical variability in a putative signal transducer; (2) cortical processing of the signals is mediated by a cortical hyper-associative mechanism; and (3) cognition, which is mediated by normal cognitive processes that lead to a precognitive response. The model is comprehensive, brain-based, and provides a new direction for research, seeking the involvement of requiring multidisciplinary expertise.

AUTHORS OF THE IMPOSSIBLE: WHAT THE HUMANITIES HAVE TO OFFER PARAPSYCHOLOGY

Jeffrey Kripal

I would like to make a few suggestions about what the humanities might offer parapsychology. I am going to assume that everyone in this room knows what parapsychology is. I am also going to assume that almost no one in this room knows what the humanities are. That is not a dig. It is a near universal truth. Many humanists, I think, would also struggle to define what they do.

Toward our conversation this evening, allow me to venture three, increasingly technical, definitions.

1. The humanities are all those fields of study that attempt to understand and analyze the nature and construction of meaning, value, beauty, and narrative in the history of humanity as these have been crystallized in fields like philosophy, language, religion, literature, and art.
2. Put more technically, the humanities are all those forms of modern thought that assert that reality is not just made up of matter, numbers, objects, and causality (which is what the natural sciences assert), but also of experiences, meanings, values, words, subjects, and stories (which is what the humanities assert).
3. Put most technically, the humanities are *the study of consciousness coded in culture*.

Notes

