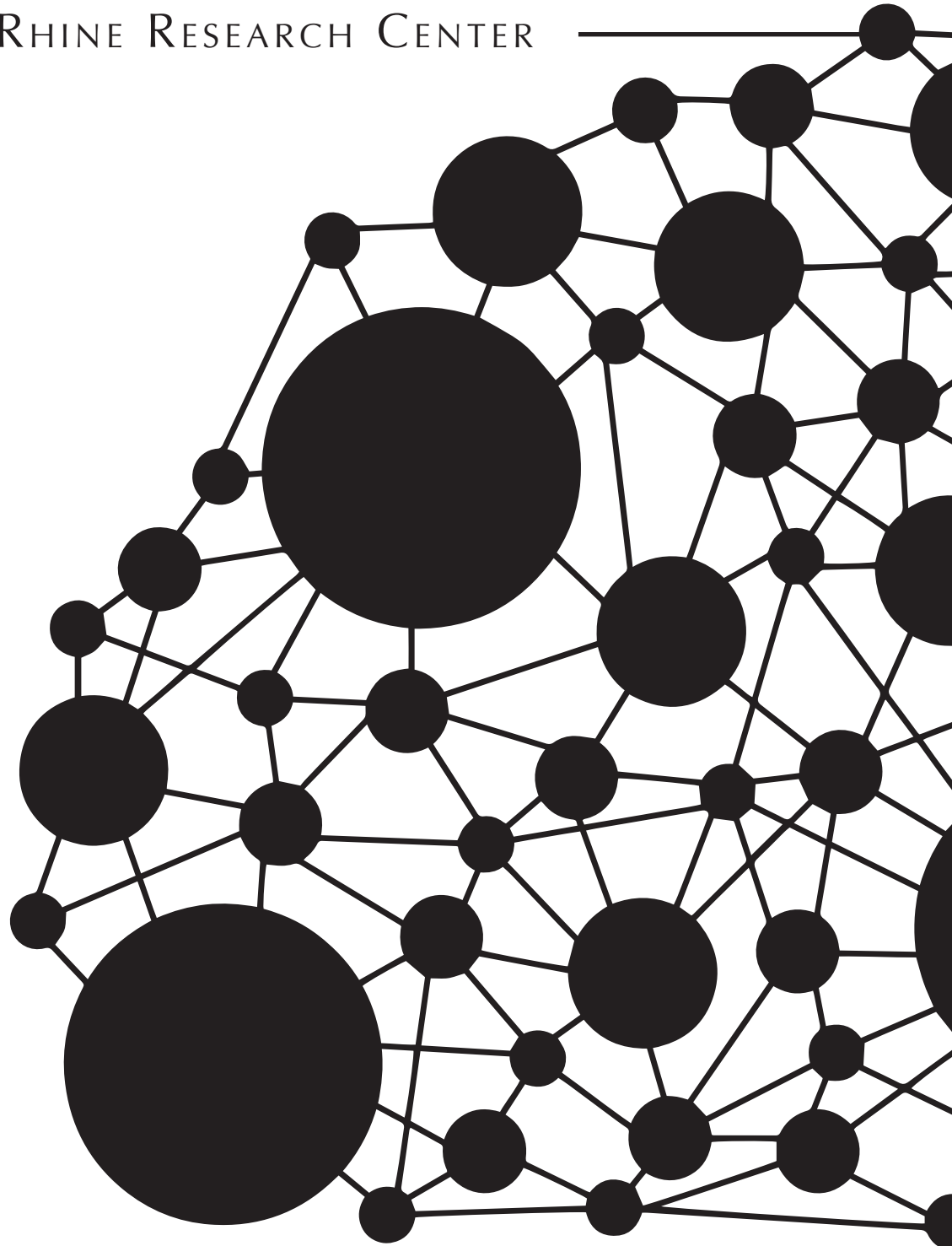


JOURNAL OF PARAPSYCHOLOGY

RHINE RESEARCH CENTER



Volume 88; Conference Issue 2024 ISSN 0022-3387

Journal of Parapsychology

Volume 88; Conference Issue
2024

ISSN 0022-3387

Journal of Parapsychology

Editor

John G. Kruth, Rhine Research Center

Associate Editors

Sally Ann Drucker, Rhine Research Center, USA

John Palmer, Rhine Research Center, USA

Chris A. Roe, University of Northampton, UK

Statistical Associate Editor

Jessica Utts, University of California, Irvine, USA

Editorial Board

Peter Bancel, Institute of Noetic Sciences

Pascal Baseilhac, Ki France, Tours, France

Renaud Evrard, University of Lorraine, France

Miguel Farias, Coventry University, UK

Morris Freedman, University of Toronto, Canada

Graham Jamieson, University of New England, Australia

Jacob Jolij, University of Groningen

Menas Kafatos, Chapman University, USA

Edward F. Kelly, University of Virginia Health System, USA

Jeffrey J. Kripal, Rice University, USA

Mark Leary, Duke University, USA

David Luke, University of Greenwich, UK

Gerhard Mayer, Institut für Grenzgebiete der Psychologie
und Psychohygiene, Germany

Robert Rosenthal, Harvard University, USA

Stefan Schmidt, Universitätsklinikum Freiburg, Germany

Daniel P. Sheehan, University of San Diego

Jerry Solfrin, University of Massachusetts, Dartmouth, USA

Paul Stoller, West Chester University, USA

Previous Editors

Founding editors: William McDougall and Joseph Banks

Rhine. Past editors: Etzel Cardeña, Sally Ann Drucker, Betty
M. Humphrey, Gardner F. Murphy, John A. Palmer, Dorothy
H. Pope, J.G. Pratt, K. Ramakrishna Rao, Louisa E. Rhine,
Bernard F. Riess, W. G. Roll, C. E. Stuart

Editorial Staff

Elizabeth Lord, *Copyeditor*

Nikolaos Koumartzis, *Layout Editing*

Daryl Junk, *Business Manager*

The *Journal of Parapsychology*, founded in 1937, is published 2-3 times a year by Parapsychology Press, a subsidiary of the Rhine Research Center, www.parapsychologypress.org. The *Journal* publishes original reports of experimental research in parapsychology, as well as research reviews, methodological, theoretical, and historical papers, abstracts, and selected invited addresses from Parapsychological Association conventions, book reviews, and letters.

Print and electronic version of the *Journal* are available.

Information on subscriptions: <https://www.parapsychologypress.org/about>. Orders for subscriptions or back issues, correspondence, and changes of address: journal@rhine.org, or *Journal of Parapsychology*, 2741 Campus Walk Ave., Building 500, Durham, NC 27705. Postmaster: Send address changes to the *Journal of Parapsychology*, 2741 Campus Walk Ave., Building 500, Durham, NC 27705. Subscribers: Send change of address notice 30 days before the change of address. The *Journal* will not replace undelivered copies resulting from address changes.

Copyright and permission. Authorization to photocopy items for internal or personal use, or the internal or personal use of specific clients, is granted by the Rhine Research Center, provided that the base fee is paid directly to Copyright Clearance Center, 222 Rosewood Dr., Danvers, MA 01923, www.copyright.com. For organizations that have been granted a photocopy license by CCC, a separate system of payment has been arranged. The *Journal* is the official publication of the Parapsychological Association, and is indexed in CROSSREF, EBSCO, PSYCINFO and SCOPUS.

Copyright © 2024 by Parapsychology Press

ISSN: 0022-338

Table of Contents

Editorial

Parapsychology Conference Issue	4
<i>John G. Kruth</i>	

66th Annual Convention of the Parapsychological Association

Abstracts of Presented Papers	5
Abstracts of Full Papers	7
Abstracts of Briefs	57
Abstract of Presidential Address	89
Abstract of Invited Address	90

42nd Annual Conference of the Society for Scientific Exploration

A Note from the Program Chair	91
Conference Abstracts	92

47th Society for Psychical Research International Annual Conference

Abstracts of Presented Papers	118
-------------------------------	-----

International Remote Viewing Association's 25th Year Anniversary

Conference on a Cruise Abstracts	145
Virtual Conference Abstracts	148

Information for Authors	154
--------------------------------	------------

Editorial Parapsychology Conference Issue

John G. Kruth

As we present the second annual Conference Issue of the *Journal of Parapsychology*, you will notice the international expansion of the conferences in 2024. The *Parapsychological Association* (PA) presented their annual conference in Merida, Mexico for their first conference in that country. The conference for the *Society for Psychical Research* (SPR) from Derby, UK is also included in this issue, along with the abstracts from the online conference of the *Society for Scientific Exploration* (SSE) and summaries of the *Conference on a Cruise* from the *International Remote Viewing Association* (IRVA).

When they are available, full abstracts are included to provide a very complete view of the presentations and the research work that is being done in the field. In some cases, the abstracts are very brief, specifically for the SSE and IRVA, and we recommend contacting the authors or those organizations directly for more details on the projects that were presented.

Looking through these abstracts, I am struck by the variety of ideas and the new topics that are being incorporated into the field of parapsychology by these diverse groups. As it is often the case, the IRVA conference was dominated by practical applications of remote viewing and an expansion of its use outside of the laboratory and into the field. Edge Science dominated the SSE online conference with topics ranging from non-physical beings assisting in healing events to the impact of emotions on random number generators to paranormal folklore in Georgia to the integration of artificial intelligence with psi research activities. Both the PA and the SPR provide very detailed abstracts that delve into topics that are essential to the continuation of traditional controlled studies and well-structured qualitative explorations of encounters and field investigations.

This issue contains a wealth of information that demonstrates the breadth of the current field of parapsychology. As you explore these brief descriptions, consider the number of researchers and investigators who have joined the field to increase our knowledge of psi, survival studies, and the paranormal. We continue to grow and to share our findings with the world.

66TH ANNUAL CONVENTION OF THE PARAPSYCHOLOGICAL ASSOCIATION

NH Collection Hotel
Mérida, México
August 22-25, 2024

ABSTRACTS OF PRESENTED PAPERS

Erika Annabelle Pratte
Program Chair

INTRODUCTION

“Our view of the world is truly shaped by what we decide to hear.”
— **William James**

The noun *convention* comes from the Latin *conventio*, meaning “a coming together.” It signifies a gathering of individuals for a particular purpose, often to discuss and exchange ideas. In the coming days, we will have the opportunity to listen, learn, and engage with various perspectives within the field of parapsychology. Each session, presentation, and conversation will help expand our understanding and shape our views about the field as it is now and how we progress it.

My hope is that we take this time to participate, be curious, and open our minds not only to the research presented, but also to the dialogues between researchers and the larger community. We are attending the first PA Convention in a Hispanic country, in a particular part of Mexico with a rich history intertwined with psychic and spiritual phenomena, rooted in its ancient Maya civilization. We have a unique opportunity to explore the science of parapsychological phenomena, but also the cultural legacy of exceptional experiences and spiritual practices of the Yucatán Peninsula.

I appreciate the trust that has been gifted unto me to be the program chair. I am only one person amongst many of have helped organize this event, however; I am much obliged to all who have contributed to organizing the convention, including but not limited to, the Convention Committee, the Board of Directors, and our host, UPIDE. I am also grateful to the speakers and attendees; all of our contributions combined shall ensure the success of this event.

Welcome to the 66th Annual Convention of the Parapsychological Association.

Erika Annabelle Pratte
Program Chair

For nearly three decades, parapsychology in Mexico has experienced a period of stagnation. The last notable consciousness researcher from Aztec lands was Jacobo Grinberg-Zylberbaum. He authored 54 books—academic works, theoretical explorations, and even fiction and poetry—dedicated to sharing his Syntergic Theory with a broad audience. He also contributed over a dozen research papers, pioneering protocols for telepathy using psychophysiological frameworks, among many other areas. His work was not limited to the study of “anomalous” human experiences; he also theorized and designed experiments on how our consciousness interacts with the fabric of reality and how collective consciousness might benefit humanity. He disappeared at the age of 47. The Unit of Parapsychological Investigation, Dissemination, and Education (UPIDE) started as a dream almost ten years ago. Today, it has evolved into a multidisciplinary team of ten researchers and four administrative volunteers. Though most of them never met Grinberg, I believe his legacy lives on through them; through their sweat and blood, in their passion to fight against the odds, and motivated by a shared vision rather than personal gain. As Grinberg (1990, p. 167) wrote, “those who possess the consciousness of unity do not feel separated from others, nor does it imply that they have lost their individuality.”¹

Finally, I extend my sincere gratitude to my Arrangements Assistant, Sandra Macías, for her tireless support and commitment to our cause, I’ve yet to earn the trust she puts in me every day; Executive Director Annalisa Ventola, the truest embodiment of a force of nature and the best mentor the universe could put in my path; the Program Chair Erika Pratte, for putting together such a wonderful program; and PA President Everton Maraldi, because if he hadn’t selected me as his program assistant in 2018, I wouldn’t be here. Moreover, thanks to the PA Board for entrusting us with the great responsibility of arranging this event. As the first time the Annual Convention has been held in a Spanish-speaking country, I hope we have met the standard it deserves. And finally, as I wrote here five years ago, to my fiancée, Jeniffer Trenado, who has been the guiding light and strength throughout this rich and enlightening journey.

So, without further ado, welcome to México! Immerse yourself in our vibrant atmosphere, savor the flavors of our cuisine, and feel the passion that we offer with open hearts. Let’s celebrate science, consciousness, and the 30th anniversary of Jacobo Grinberg’s enduring legacy together.

Ramsés D’León
Arrangements Chair

Grinberg-Zylberbaum, J. (1990). *La creación de la experiencia*. INPEC.

ABSTRACTS OF FULL PAPERS

Is psi rooted in biology? A theoretical proposal based on consilience

Alex A. Álvarez

Unidad Parapsicológica de Investigación, Difusión y Enseñanza (UPIDE), Mexico City, Mexico
Centro de Investigación de la Sintergia y la Consciencia (CISC), Mexico City, Mexico

Introduction: One of the main problems that parapsychology has faced throughout its history is the lack of a proper biological framework. Some efforts have been made to try to shorten the gap between parapsychology and biology (Broughton, 1987; 2010; 2015; Kennedy, 2004; Taylor, 2003), but these are mainly focused on the role of psi in *homo sapiens*, without giving sufficient weight to the results obtained in the field of animal psi (ANPSI) for more than half a century. If we want to get a better understanding of what we typically call “supernormal abilities”, including their evolutionary history, we need to go beyond the anthropocentric view that widely permeates parapsychology.

My proposal is that, by analyzing different pieces of complementary and concordant evidence from parapsychology and other disciplines through an approach known as consilience of inductions (Laudan, 1971), we can arrive at a scenario in which psi is anything but paranormal and thus be able to establish, relatively in time, its possible origin, and its further evolutionary path. These pieces of evidence are the following:

1. **Psi is not paranormal but natural and normal.** Psychic experiences are typically interpreted by conventional science as mere hallucinations, self-delusion, or extraordinary coincidences (Irwin & Watt, 2007). At first glance, this makes them look abnormal and could make us mistakenly believe that they mainly happen to people with some type of brain malfunction. However, different surveys applied to different populations reveal that psi experiences are quite ordinary and occur to millions of people worldwide (Haraldsson, 1985; Haraldsson & Houtkooper, 1991; Orth, 2022). Besides, accounts of psychic experiences can be found throughout the history of humanity in different cultures and societies.
2. **Psi is quite common in non-human animals.** There has been extensive literature for almost a century in which many instances of psychic phenomena in non-human animals have been described. These mainly comprise domestic animals like dogs (Sheldrake, 2011), but interesting results have also been obtained with chicken (Peoc’h, 1988; 1995), finches (Álvarez, 2012), rats (Kennedy, 1979), and fish (Morris, 1967; Braud, 1976). All of them, as well as humans, belong to the same monophyletic group: vertebrates, which suggests at first glance that vertebrate psi may have had a single, common origin before the divergence of this group into current phyla.
3. **The biological basis of psi must involve common structures for all vertebrates.** Although it has not yet been elucidated through which mechanism and what structures psychic function occurs,

it is widely acknowledged that, given the similarities of this capacity with different cognitive processes, the brain must be involved. But which parts of the brain? To date, this question remains unanswered, but if psi is truly common for most vertebrates, the structures involved would be expected to be the same, though there could be slight differences. Some candidate structures, given their conservation in all vertebrate groups, could be the cerebellum, the brain stem, basal ganglia, and the amygdala, all of which lie in the inner portion of the brain.

4. **The outer layers of the brain seem to inhibit psi function.** In keeping with the previous point, Freedman and colleagues have developed a neurobiological model whose central premise is that the frontal lobes are some sort of filter or inhibitor of psychic functioning. This hypothesis has been supported by experimental results in which subjects with left frontal lobe damage usually perform better than control ones in micro-psychokinesis (microPK) tasks (Freedman *et al.*, 2003; 2018). More recently, a study with participants whose left medial middle frontal lobe was inhibited by repetitive transcranial magnetic stimulation (rTMS) showed similar results: experimental subjects performed better than those in whom reversible inhibition of the frontal lobe was not induced (Freedman *et al.*, 2023).
5. **Psi confers some degree of evolutionary advantage.** The final and perhaps more controversial piece of evidence for this framework has to do with the possible evolutionary advantages conferred by psychic experiences. Then again, if we are to get a better understanding of this role, I propose to try to identify such advantages that could be common to a great diversity of species and not only to humans. Two of the most prominent examples are the feeling of being stared at, which provides an obvious advantage in terms of survival, especially for prey animals, and the telepathic connection between mothers and their babies, which is not only advantageous for survival (Sheldrake, 2015) but could also ensure reproduction once the babies reach reproductive age. However, this also suggests that psi may not be used at will but could be like intuition (Broughton, 2015) and emerge in very specific situations, such as those that have to do with ensuring survival and/or reproduction. Additionally, most evidence of spontaneous psi experiences suggests that its manifestation is closely related to the emotional system (Broughton, 2006; 2015), which in terms of primitive emotions (e.g., care, search, lust, rage, panic, etc.), is highly conserved across the vertebrate clade (Panksepp & Biven, 2012).

It seems reasonable to hypothesize that, at some point in animal evolutionary history, the ability to obtain information—and perhaps also to affect matter—without the use of conventional senses must have emerged. This could have occurred even millions of years before the appearance of vertebrates, but until now, we have no conclusive evidence to support it. What we have are different pieces of evidence that point to psi emerging at some point before the divergence of the vertebrate clade. As with many other traits common to this group, it is more parsimonious to assume a single origin of psi rather than multiple origins for each branch of current vertebrates. This might be supported by the fact that brain structures that seem more likely to mediate psychic functioning (i.e., those located at the inner part of the brain) are not only conserved in vertebrates but arose only once in their evolutionary history. Furthermore, that this capability has not yet been detected in all groups of vertebrates does not mean an independent origin in those that have. It could well mean that it simply has not been observed or even that it was lost at some point.

If psi is indeed rooted in biology, then we can think that it (or more specifically, the brain components that mediate its functioning) has been subject to evolutionary forces. Thus, we would not expect it to have remained unchanged since its origin, but rather that there would be differences in its manifestations in different groups of organisms, which could be linked to the specific organization of involved brain components. Despite a broad spectrum in the degree of complexity of the vertebrate brain, there is a core of elements common to all of them (Eilbert, 2014) at the genetic, cellular, and connectivity level (Karten, 2015), including neuronal networks associated with different cognitive processes (Pessoa *et al.*, 2020).

As of today, based on available evidence, we can hypothesize that whenever the biological components that allow psi functioning emerged, this must have occurred at an early stage of animal evolution. Given the non-teleological nature of evolution, there is no reason to think that psi arose to satisfy a need; rather, it may have conferred some degree of advantage so that evolutionary forces could operate on the structures that mediate it. But what specific forces? At least in principle, it seems likely that stabilizing selection—which reduces variation among individuals in a population—is involved in the evolution of psi functioning. Experimental data from thousands of different experiments suggest that most people show some level of psi, and only very few show no degree at all or are true prodigies at psi tasks. Individuals with a total lack of psi could be at a disadvantage when facing specific situations that would require psi-related process such as intuition. On the other hand, an individual's psi operating all the time could lead to a constant bombardment of information, most likely resulting in the individual being overwhelmed and not knowing what to do with such information.

Finally, I think that more light on the possible origin and evolution of this outstanding capability could be shed by first identifying the brain regions that are activated during psychic functioning. Then, phylogenetic analyses with genes expressed in those structures—both in human and non-human animals—could be performed. Thus, by comparing their distribution and analyzing their substitution rates, we could obtain a wider picture of their divergence times and evolutionary trajectories.

References

- Álvarez, F. (2012). A PK experiment with zebra finches and a virtual predator. *Journal of Scientific Exploration*, 26(2), 261-271.
- Braud, W. G. (1976). Psychokinesis in aggressive and nonaggressive fish with mirror presentation feedback for hits: Some preliminary experiments. *Journal of Parapsychology*, 40 (4), 296-307.
- Broughton, R. S. (1988). If you want to know how it works, first find out what it's for (Presidential address to the Parapsychological Association), In: D. H. Weiner and R. L. Morris (Eds.) *Research in Parapsychology*, 1987 (187-202). Metuchen: The Scarecrow Press.
- Broughton, R. S. (2006). Memory, emotion, and the receptive psi process. *Journal of Parapsychology*, 70(2), 255-274.
- Broughton, R. S. (2010). An evolutionary perspective on anomalous intuition. *Proceedings of the Eighth Bial Foundation Symposium: Aquém e Além do Cérebro: Intuição e Decisão*. Porto: Fundação Bial, 61–73.
- Broughton, R. S. (2015). Psi and Biology: An evolutionary perspective. In E. Cardeña, J. Palmer & D. Marcusson-Clavertz (Eds.), *Parapsychology: A Handbook for the 21st Century* (pp. 139-148). McFarland & Co.
- Eilbert, J. L. (2014). The vertebrate strategy for brain evolution. *Procedia Computer Science*, 41, 233-242.

- Freedman, M., Jeffers, S., Saeger, K., Binns, M. & Black, S. (2003). Effects of frontal lobe lesions on intentionality and random physical phenomena. *Journal of Scientific Exploration*, 17(4), 651–668.
- Freedman, M., Binns, M., Gao, F., Holmes, M., Roseborough, A., Strother, S., Vallesi, A., Jeffers, S., Alain, C., Whitehouse, P., Ryan, J. D., Chen, R., Cusimano, M. D. & Black, S. E. (2018). Mind-matter interactions and the frontal lobes of the brain: A novel neurobiological model of psi inhibition. *Explore (New York, N.Y.)*, 14(1), 76–85.
- Freedman, M., Binns, M. A., Meltzer, J. A., Hashimi, R., & Chen, R. (2023). Enhanced mind-matter interactions following rTMS induced frontal lobe inhibition. *Cortex*, S0010-9452(23)00273-3.
- Haraldsson, E. (1985). Representative national surveys of psychic phenomena: Iceland, Great Britain, Sweden, USA and Gallup's Multinational Survey. *Journal of the Society for Psychical Research*, 53, 145–158.
- Haraldsson, E. & Houtkooper, J. M. (1991). Psychic experiences in the Multinational Human Values Study. *Journal of the American Society for Psychical Research*, 85(2), 145–165.
- Irwin, H. J. & Watt, C. A. (2007). *An introduction to parapsychology*. North Carolina: McFarland & Co.
- Karten, H. J. (2015). Vertebrate brains and evolutionary connectomics: On the origins of the mammalian 'neocortex'. *Philosophical Transactions of the Royal Society B*, 370, 20150060.
- Kennedy, J. E. (1979). Exploratory PK experiments using light as the stimulus. *Journal of Parapsychology*, 43(4), 358-359.
- Kennedy, J. E. (2004). What is the purpose of psi? *Journal of the American Society for Psychical Research*, 98, 1-27.
- Laudan, L. (1971). William Whewell on the consilience of inductions. *The Monist*, 55(3), 368-391.
- Morris, R. L. (1967). Some new techniques in animal psi research. *Journal of Parapsychology*, 31(4), 316-317.
- Orth, T. (October 20, 2022). Two-thirds of Americans say they've had a paranormal encounter. YouGov.
- Panksepp, J. & Biven, L. (2012). *The archaeology of mind: Neuroevolutionary origins of human emotions*. New York: W. W. Norton & Company.
- Peoc'h, R. (1988). Chicken imprinting and the tychoscope: An ANPSI experiment. *Journal of the Society for Psychical Research*, 55, 1-9.
- Peoc'h, R. (1995). Psychokinetic action of young chicks on the path of an illuminated source. *Journal of Scientific Exploration*, 9(2), 223-229.
- Pessoa, L., Medina, L., Hof, P. R. & Desfilis, E. (2019). Neural architecture of the vertebrate brain: Implications for the interaction between emotion and cognition. *Neuroscience and Biobehavioral Reviews*, 107, 296-312.
- Sheldrake, R. (2011). *Dogs that know when their owners are coming home, and other unexplained powers of animals*. New York, NY: Three Rivers Press.
- Sheldrake, R. (2015). Psi in everyday life: Nonhuman and human. In E. Cardeña, J. Palmer & D. Marcusson-Clavertz (Eds.), *Parapsychology: A handbook for the 21st century* (pp. 350-363). McFarland & Co.
- Taylor, R. K. (2003). Evolutionary theory and psi: Reviewing and revising some need-serving models in psychic functioning. *Journal of the Society for Psychical Research*, 67(1), 1-17.

Direct vision: A research program exploring extra-ocular vision in children

Nili Bar, Alex A. Álvarez, Rodrigo Arriola, Gaia-Velvella Barbakow, Eros Quintero, Javier Martínez, Alfredo Silva, Carlos-Iván López-Miranda & Ramsés D'León

Unidad Parapsicológica de Investigación, Difusión y Enseñanza (UPIDE), Mexico City, Mexico
Centro de Investigación de la Sintergia y la Consciencia (CISC), Mexico City, Mexico

Since 2023, UPIDE has been studying Direct Vision (DV). To understand this ability, we have conducted exploratory research using controlled methods that have allowed us to obtain reliable information about the possibility of generating visual images from sources other than retinas. Being a multi-disciplinary team helped us to approach the phenomenon from different perspectives. We designed a series of tests for nine children trained using a method created by Nili Bar. A full description of the experiments appears in our article published in *EdgeScience* (2023).

Methods: In June 2023, we prepared nine children, aged seven to eleven years old, with six sessions of DV training, during which the children observed visual stimuli and performed playful activities such as coloring mandalas and board and movement games. “This method uses meditation as a basis to promote a favorable environment for both individual and collective work” (Bar et al., 2024). They were always blindfolded. Afterward, they completed a task series with control methods, some inspired by previous studies; others were novel.

Control Methods:

- **Blindfold:** Aligned with Gardener’s (1966) criticisms of earlier research, we used a nose-peek-proof blindfold that effectively blocks light without prejudice to its user.
- **Pupil Dilatation:** In some cases, we broadened our controls by inviting a retina specialist to administer pupil dilation (tetracaine as anesthesia and tropicamide and phenylephrine for dilation) to introduce a clinical condition that impairs reading ability, particularly with fine print.
- **DV Box:** Inspired by the bouclier of Romain (1924), we introduced an additional control between the child’s face and the experimental target by creating a non-reflective box, allowing us to display images on an internal electronic device so that only the child’s hands interacted with the projected pictures of color and number cards.
- **Cameras:** We monitored every session with four HD cameras positioned around the experimental area, 1.5 m (4.92 ft) away from the experimental setup, with an additional camera on the ceiling. Monitors were in a separate room, allowing parents to interact with staff while watching their children’s performance.

Materials:

- **UPIDE's DV app:** We developed a custom-made application that uses *kotlin.random.random* class to pick a random UNO card for the Box Task.
- **Child Assessment Battery:** Applied before and after the course to evaluate stress levels, coping and how children internalize and externalize their problems.

Tasks:

- **UNO Game**
- **Matching Cards**
- **Brain Monitoring Exploratory Tasks**
- **Seeing inside the DV box**

Results: *DV box Trial:* Out of the 27 expected trials, three were discarded because of technical issues. Given the binary nature of each prediction attempt (success or failure) and the fixed number of trials, we used a one-tailed binomial test to analyze the results obtained in this task. Each participant's prediction was separated according to the expected outcomes in both color and numbers of the randomly selected UNO digital cards, focusing on determining whether the participants' ability to predict cards exceeded chance levels.

Color Binomial Test: the observed success rate suggests that participants could perceive the card color at a rate significantly higher than chance ($p=0.021$). In contrast, the Numbers Binomial Test resulted in no significant deviation from chance in predicting the numbers ($p=0.707$).

Matching cards task: Each participant completed 5 trials, generating 45. We used a one-tailed binomial test to analyze the results due to the binary nature of each prediction attempt and the fixed number of trials. The expected probability of the task was 20%. With 29 successes and 16 misses, the Binomial Test suggests that participants could perceive the content of the hidden card to match with the ones they held at a rate significantly higher than chance ($p=0.00000000011251$).

Each participant completed between eight and 19 trials of the UNO Task, depending on the time of the other tasks, generating 103 trials in total. Given the binary nature of each prediction attempt and the fixed number of trials, we used a one-tailed binomial test to analyze the results. The expected probability of the task was 32.5%. With 75 successes, 18 misses and ten abstentions (which we removed from the analysis), the Binomial Test suggests that participants could perceive the content displayed in the UNO pile, as well as the ones they hold, at a rate significantly higher than chance ($p=1.5171^{-21}$). Considering abstentions as errors, the odds would still be significant ($p=5.3551^{-17}$).

Child Assessment Battery EIE (Children Stress Scale), EA (Readiness Scale) and CPIEN (Internalized and Externalized Problems Questionnaire for Children): Before proceeding with the comparative analysis, the Shapiro-Wilk test served to evaluate the normality of the distribution of each variable. Afterward, we realized a paired comparative analysis for each personality trait using a paired t-test for normally distributed variables and Wilcoxon test for the not normally distributed. There were no significant differences in the children's personality traits before and after the DV course.

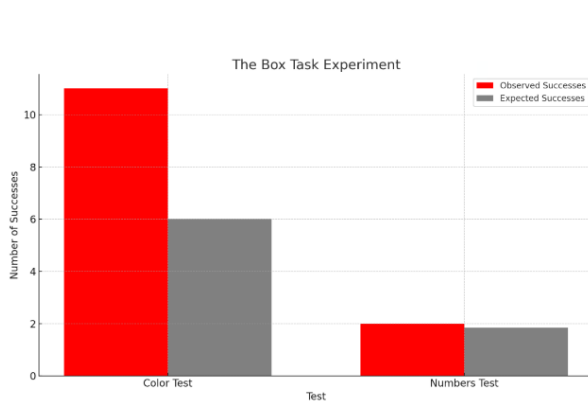


Fig. 1 Results of the Box Task Experiment

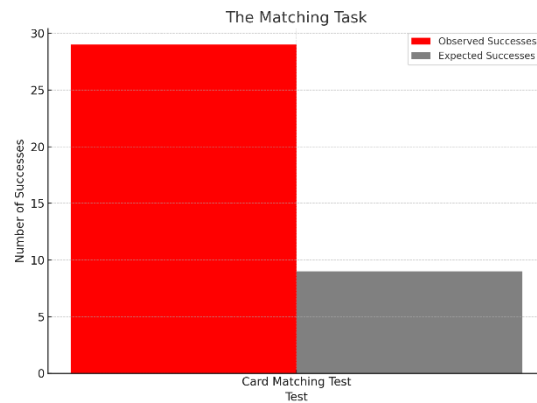


Fig. 2 Results of the Matching Cards Experiment

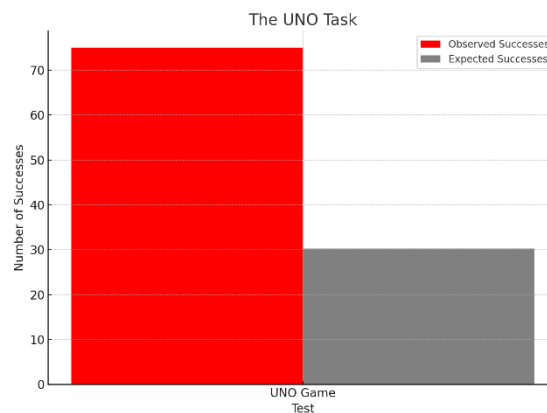


Fig. 3 Results of the UNO Game Task

Discussion: At the beginning of the study, we knew that we had a unique opportunity to investigate as much as possible about DV, so we decided to incorporate the dilation test and EEGs without being certain of what we were looking for, just wanting to explore and look for clues that could allow us to continue with new research later on. When we put dilation drops on two girls, we found that they could still read tiny letters with fully dilated pupils before activating their DV. This made us think that it is possible that, when exercising DV, something happens permanently in the individual, as if a new, automatically-activated system was incorporated to generate visual experiences (this specific topic is worth studying further).

During EEG Testing, we used Python MNE library to compare the EEG's power spectral density (PSD) of our subjects before and during the exploratory DV tasks. We will discuss clinical analysis of the

EEG trace and interpretation of topographical maps in our presentation. Regarding the Child Assessment Battery, we are not entirely sure about the veracity of these tests; some of the items were directly related to performance in school, and some of our students are homeschooled, which could have altered the results. It is necessary to consider that the small sample ($n=9$) might be obfuscating personality trait changes, so we encourage replicating these analyses with larger samples.

Regarding possible pitfalls, we could apply better control conditions for monitoring children, both for their follow-up throughout the completion of tasks and for the blindfold's correct use, specifically during matching cards and UNO game tasks. This last point could be addressed, for example, by using eye patches under the blindfold, but there is a risk of inhibiting DV when using additional controls. Therefore, it is necessary to balance controls and their impact on children's performance. Besides, there were also several technical problems like the malfunction of some cameras and the small space where children performed the tasks.

For further research, we suggest additional tasks with children who have not taken the course or with those who have but performing a set of tests before and after their "activation," both with and without the blindfold, to evaluate results more objectively.

References

- Bar, N., Alvarez, A., Arriola, R., Barbakow, G., Quintero, E., Martínez, J., Silva, A., Lopez, C., & D'León, R. (2023). Direct Vision: A research program exploring extra-ocular vision in children. *EdgeScience*, 54, 7-16.
- Gardner, M. G. (1966). Dermo-optical perception: A peek down the nose. *Science*, 151, 654.
- Romains, J. (1924). *Eyeless sight: A study of extra-retinal vision and the paroptic sense*. G. P. Putnam's Sons.

Parental encouragement and suppression of a child's past-life memories

Philip J. Cozzolino, Marieta Pehlivanova, & Jim B. Tucker

Division of Perceptual Studies, Department of Psychiatry and Neurobehavioral Sciences, University of Virginia School of Medicine, Charlottesville, VA, USA

Introduction: For more than 60 years, researchers have rigorously examined 'cases of the reincarnation type' (CORTs), in which young children appear to have memories of living a previous life (Haraldsson, 1991; Stevenson, 1974; 2001, Tucker, 2008). At the University of Virginia in particular, scholars follow a strict protocol (Stevenson, 1977) in which a trained researcher investigates potential CORTs by systematically interviewing the child, their parents, extended relatives, and even community members who can provide first-hand information for the child's claims. Some of these claims are so detailed that investigators have identified a deceased person whose life appears to match the child's memories. In

the most compelling cases, investigators have documented how birthmarks/defects in the child correspond to fatal wounds suffered by the “previous personality” (Stevenson, 1997), as well as preferences or phobias in the child that correspond to those same features in the previous personality (Stevenson, 1990). The bulk of these investigations, for obvious reasons, focus on the children, their claims, and on verifying those claims to determine how likely it is that the case may have a paranormal explanation or some other non-anomalous explanation, such as children’s fantasies, fraud, or socio-psychological needs of families with a belief in reincarnation (Moraes et al., 2022; Tucker, 2000).

Less studied in this long history of CORT research is the effect of these claims on the parents of the children in question. Mothers and fathers often must come together to handle common challenges in young children, including how to respond to imaginary companions (Majors & Baines, 2017) or how to deal with their child’s belief in fairies, monsters, or even Santa Claus (Braswell et al., 2012). How do parents react when their child insists that they were once a previous person who died and then returned in this child’s body, especially in cases when the child specifically states, “You are not my real parents”? It may be easy to discount initial claims as fantasy, but what about those CORTs that develop into strong cases with features suggesting the case may have a paranormal explanation? Among the many assessments made by CORT investigators and coded into the database in the past 50+ years is the degree to which parents are accepting and encouraging of their child’s memories compared to how discouraging they are, even to the extent of actively suppressing their child’s claims.

This paper presents findings from the first exploration of CORT data related to mothers’ and fathers’ convergent and/or divergent attitudes when it comes to their child’s past-life claims. Due to the retrospective nature of the CORT database, we present these findings with no *a priori* hypotheses, but rather view this paper as an important first step in a program of research investigating the family dynamics present in cases of the reincarnation type.

Methods: The current CORT database contains 2254 documented claims of reincarnation investigated by UVA Division of Perceptual Studies researchers, with more than 200 variables per case. To standardize the collection of evidence across cases and investigators, the investigators use a registration form that includes a checklist of salient features of CORTs to guide the interviews. In the full database, the median age when subjects first spoke of their past-life memories is 32 months, and the gender breakdown of children investigated is 859 girls (38%) and 1394 boys. For this study, we focused on cases with attitudinal assessments from the child’s mother *and* father so we could explore where the child’s parents converge and/or diverge in their attitudes toward the reincarnation claims. The variables used for inclusion assess the “subsequent attitudes” of the child’s mother and father toward the past-life claims on a 1 to 9 scale, ranging from (1) “greatly encouraged memories” at the low end of the response scale to “neutral or tolerant” in the middle and (8) “suppressed non-violently” and (9) “suppressed violently,” typically involving corporal punishment, at the high end. Including only cases with valid scores on these two variables left us with 529 cases ranging in date of investigation from 1962 to 2015. Our selected sample of cases involved past-life memories claimed by 196 girls (37%) and 333 boys, with a median age of 30 months when subjects first spoke of their memories.

Another key variable in our analyses is the 'strength of case' score (higher scores are suggestive of a paranormal explanation), generated from four factors. These factors are (1) birthmarks/defects that correspond to marks on the deceased individual, (2) statements the child made about the previous life, with points earned for verified statements and points lost for incorrect statements, (3) behaviors from the child that match those confirmed in the previous life, and (4) the connection between the subject and the previous personality, such that a lower association between the child and the previous personality earns more points, as it would be difficult for the child to have learned about the previous personality via normal means. Among our selected sample, this variable ranged from -3 (very weak cases) to 45 (very strong cases), with a mean of 13.25 and a SD of 9.70. Finally, we included a measure of parental educational level, ranging from (1) 'no school/illiterate' to (8) 'graduate degree' that was assessed for both mothers (valid scores $N = 230$) and fathers (valid scores $N = 257$).

Selected Results: A paired-samples t -test revealed that initial reactions from CORT mothers ($M = 4.45$, $SD = 1.87$) were significantly more encouraging than were the initial reactions from fathers ($M = 4.61$, $SD = 1.93$), $t(483) = -3.17$, $p < .001$ (two-tailed), Cohen's $d = .14$. However, attitudes of mothers ($M = 4.43$, $SD = 1.86$) and fathers ($M = 4.43$, $SD = 1.87$) after the investigation was complete did not differ from each other, $t(528) = 0.14$, $p = .88$ (two-tailed).

An independent samples t -test using the strength of case score as a dependent variable and a dichotomous variable that encoded suppression of the child's past-life claims by either parent, or both, revealed that cases were significantly stronger among parents who suppressed their child's claims ($M = 15.33$, $SD = 10.11$) compared to cases where parents did not suppress their child's claims ($M = 12.70$, $SD = 9.52$), $t(527) = -2.55$, $p < .05$ (two-tailed), Cohen's $d = .27$.

The next analysis was an independent samples t -test using the education level of the parents as a dependent variable and a dichotomous variable of suppression or no suppression, separately for mothers and fathers. The first analysis revealed that mothers who suppressed their child's claims were significantly less educated ($M = 2.12$, $SD = 1.62$) than were mothers who did not suppress their child's claims ($M = 2.99$, $SD = 1.86$), $t(228) = 2.85$, $p < .01$ (two-tailed), Cohen's $d = .48$. There was no difference in education level among fathers who did or did not suppress their child's claims, $p > .18$.

Finally, an ordinary least-squares multiple regression using the strength of case score as the dependent variable and the post-investigation attitudes of mothers and fathers as separate predictors revealed that post-investigation attitudes of fathers were significantly (negatively) related to the strength of case, such that as their child's case became stronger, the attitudes of fathers became more encouraging, $b = -1.10$, $b = -.21$, $t = -2.35$, $p < .05$. Conversely, the post-investigation attitudes of mothers were significantly (positively) related to the strength of case, such that as their child's case became stronger, the attitudes of mothers became less encouraging, $b = 0.95$, $b = .18$, $t = 2.01$, $p < .05$.

Discussion: Despite more than 50 years of scholarship, the work of CORT researchers is far from over. In addition to documenting – and potentially verifying – emerging CORTs to add to the list of legitimate cases, we also need to focus our attention on the structural and familial environments of these cases. This work does suggest fruitful avenues for future research. We believe a deep dive into the

family dynamics of these extraordinary cases is a necessary next step in the ongoing study of these children. These new studies should include modern assessments of attachment styles for all parents and/or caregivers involved with the child, as well as environmental assessments (e.g., socioeconomic status, substance abuse) and assessments of adverse childhood experiences that may have been present in the family prior to the onset of the child's memories, to name only a few such avenues. As is tradition, most of the questions/investigations regarding CORT cases understandably focus on the children themselves, the obvious source of the case. That fact, however, should not preclude researchers from exploring the antecedents and consequences of past-life memories as they relate to the parents, siblings, and extended families of the children under study. We hope this paper begins a robust effort to explore those extended elements of these cases of the reincarnation type.

References

- Braswell, G. S., Rosengren, K. S., & Berenbaum, H. (2012). Gravity, God and ghosts? Parents' beliefs in science, religion, and the paranormal and the encouragement of beliefs in their children. *International Journal of Behavioral Development*, 36(2), 99-106.
- Haraldsson, E. (1991). Children claiming past-life memories: Four cases in Sri Lanka. *Journal of Scientific Exploration*, 5, 233-261.
- Majors, K., & Baines, E. (2017). Children's play with their imaginary companions: Parent experiences and perceptions of the characteristics of the imaginary companions and purposes served. *Educational and Child Psychology*, 34(3), 37-56.
- Moraes LJ, Barbosa GS, Castro JPGB, Tucker JB, Moreira-Almeida A. Academic studies on claimed past-life memories: A scoping review. *EXPLORE*. 2022;18(3):371-378. doi:10.1016/j.explore.2021.05.006
- Stevenson, I. (1974). *Twenty cases suggestive of reincarnation* (2d rev. ed.). Charlottesville, VA: University Press of Virginia. (First published in 1966.)
- Stevenson, I. (1977). *Reincarnation: Field studies and theoretical issues*. In B. B. Wolman (Ed.), *Handbook of parapsychology* (pp. 631-663). New York: Van Nostrand Reinhold.
- Stevenson, I. (1990). Phobias in children who claim to remember previous lives. *Journal of Scientific Exploration*, 4(2), 243-254.
- Stevenson, I. (1997). *Reincarnation and biology: A contribution to the etiology of birthmarks and birth defects*. Praeger.
- Stevenson, I. (2001). *Children who remember previous lives: A question of reincarnation* (Revised ed.). Jefferson, NC: McFarland.
- Tucker, J. B. (2000). A scale to measure the strength of children's claims of previous lives: Methodology and initial findings. *Journal of Scientific Exploration*, 14(4), 571-581.
- Tucker, J. B. (2008). Children's reports of past-life memories: A review. *Explore* (New York, N.Y.), 4(4), 244-248.

Replication of Jacobo Grinberg's transferred potential through electroencephalography

Eros Quintero, Rodrigo Arriola, Alejandro Álvarez & Ramsés D'León

Unidad Parapsicológica de Investigación, Difusión y Enseñanza (UPIDE), Mexico City, Mexico
Centro de Investigación de la Sintergia y la Consciencia (CISC), Mexico City, Mexico

Introduction: The concept of telepathy and extrasensory perception (ESP) has intrigued humanity for centuries, with scientific interest dating back to the late 19th century. In the latter half of the 20th century, advancements in technology transformed the study of these phenomena from anecdotal cases to controlled research. Charles Tart's early 1960s electroencephalography (EEG) study marked a pivotal shift, revealing significant activity in the receiver coinciding with remote stimuli (Tart, 1963). Similarly, Duane and Behrendt (1965) observed EEG correlations in identical twins, suggesting a connection beyond the conventional sensory pathways.

Grinberg-Zylberbaum's experiments in Mexico during the late 80s and early 90s documented evidence of a connection between the brain of a person (the sender) who was shown light stimuli and the emergence of similar brain's evoked potentials in the occipital lobe in another person (the receiver) who had not been exposed to any stimuli. Remarkably, both individuals were placed in separate Faraday cages during the experiments, suggesting a profound, unexplained form of communication between their brains (Grinberg-Zylberbaum et al., 1987; 1993; 1994).

Despite controversy and criticism, subsequent studies sought to replicate these findings, exploring the nuances of EEG similarities between stimulated and non-stimulated subjects across various setups (Wackermann et al., 2003; 2004; Kittenis, 2004; Radin, 2004). More recent efforts by Patrizio Tressoldi and colleagues at Evanlab, employing auditory and visual stimuli, have underscored the potential role of the occipital and frontal brain regions in such interactions (Giroladini et al., 2016).

These studies collectively suggest that the correlations observed between EEGs might be linked to intuition, potentially bridging conscious and unconscious processes. Research at the Institute of Noetic Sciences, for instance, has indicated statistically significant correlations between the electrogastrograms (EGGs) of closely related subjects in response to emotionally charged stimuli (Radin & Schlitz, 2005). This body of research points towards a complex interplay between emotional connection, sensory perception, and non-local communication, challenging traditional understandings of human connectivity and consciousness.

Methods: This study utilizes a cross-sectional, descriptive, and correlational design to explore the phenomenon of transferred potential among pairs of people with significant emotional or consanguineous relationships. Of 65 interested participants, a convenience sample of $N = 7$ pairs aged 24 to 49 was selected based on inclusion criteria validated through online psychometric scores and previous psychic experiences. One of the selected pairs was discarded due to evident sleeping activity during the trials. Every participant filled in an informed consent.

Participants were screened using inclusion criteria (education beyond high school and a significant relationship lasting more than four years) and exclusion criteria (recent neurological or psychiatric disorders, hyperhidrosis, claustrophobia, and substance use within 24 hours before the study). Psychological instruments employed include the corrected 17-item Transliminality Scale, the Hamilton Anxiety Scale for global anxiety severity, and the 16 PF Questionnaire Fifth Edition for personality trait analysis.

Electroencephalography was the primary tool for recording brain electrical activity, using an Easy 3® EEG (v. 3.10.6.0 / 5.2.0.55, Cadwell; EEUU) with 21 gold electrodes placed according to the International 10-20 System. The EEG setup included settings for filters, sensitivity, and an EKG channel, with data analyzed for event-related potentials indicative of transferred potential. The study's protocol ensures rigorous monitoring and analysis of psychic phenomena within a controlled environment, aiming to provide a deeper understanding of non-ordinary communication between individuals.

As to the conditions under which the experiment was carried out, participants were summoned to the *Neurophysiology Laboratory of the International Centre for Epilepsy Surgery* in the *HMG Hospital Coyoacán*. For each couple, we spent about 20 minutes briefly explaining the conditions they would be subject to, and then we proceeded with the initial assembly of the electroencephalography equipment, which lasted about one hour. This was followed by a 10-minute mindfulness session to increase coherence in both members of the couple, and then we spent 5 minutes giving the final instructions to participants. Finally, the experimental session was carried out, in which random photostimulation cycles were presented first to one member of the couple and then to the other. The whole session lasted for about two hours. No electromagnetic shielding was used in any of the experiments, though participants were in separate, adjacent rooms throughout the experiments.

Results: The average age of the participants was 35.69 ± 9.4 , while their average scores on the Transliminality and Hamilton scales were 14.4 ± 2.4 and 15.6 ± 7.1 , respectively. The qualitative analysis of the EEG track showed no visual and clinical observations related to the described correlations of the transferred potential. The quantitative results of the EEG through Python's MNE library, and the clinical observations related to the PF16 scale will be presented during the convention.

Discussion: Preliminarily, the qualitative analysis of the EEG track shows no visual and clinical observations related to the described correlations of the transferred potential, but more research needs to be carried out to assess the mixed results obtained in this particular line of research.

References

- Duane, T., & Behrendt, T. (1965). Extrasensory electroencephalographic induction between identical twins. *Science*, 150(3694), 367.
- Giroladini, W., Pedrezoli, L., Bilucaglia, M., Caini, P., Ferrini, A., Melloni, S., et al. (2016). EEG correlates of social interaction at distance. *F1000Research*, 4, 457.
- Grinberg-Zylberbaum, J., & Ramos, J. (1987). Patterns of interhemispheric correlation during human communication. *International Journal of Neuroscience*, 36(1), 41-53.
- Grinberg-Zylberbaum, J., Delaflor, M., Attie, L., & Goswami, A. (1994). The Einstein-Podolsky-Rosen paradox in the brain: The transferred potential. *Physics Essays*, 7(4), 422-427.
- Grinberg-Zylberbaum, J., Delaflor, M., Sánchez-Arellano, M. E., Guevara, M. A., & Pérez, M. (1993). Human

- communication and the electrophysiological activity of the brain. *Journal of Subtle Energies*, 3(3), 25-43.
- Kittenis, M., Caryl, P. G., & Stevens, P. (2004). Distant psychophysiological interaction effects between related and unrelated participants. In *Proceedings of the 47th Annual Convention of the Parapsychological Association* (pp. 67-76).
- Radin, D. (2004). Event-related electroencephalographic correlations between isolated human subjects. *Journal of Alternative & Complementary Medicine*, 10(2), 315-323.
- Radin, D., & Schlitz, M. (2005). Gut feelings, intuition, and emotions: An exploratory study. *Journal of Alternative & Complementary Medicine*, 11(1), 85-91.
- Targ, R., & Puthoff, H. (1976). A perceptual channel for information transfer over kilometer distances: Historical perspective and recent research. *Proceedings of the Institute of Electrical and Electronics Engineers (IEEE)*, 64(3), 329-354.
- Tart, C. (1963). Physiological correlates of psi cognition. *International Journal of Parapsychology*, 5(4), 375-386.
- Wackermann, J., Naranjo Muradás, J. R., & Pütz, P. (2004). Event-related correlations between brain electrical activities of separated human subjects: Preliminary results of a replication study. In *Proceedings of the 47th Annual Convention of the Parapsychological Association* (pp. 465-468).
- Wackermann, J., Seiter, C., Keibel, H., & Walach, H. (2003). Correlations between brain electrical activities of two spatially separated human subjects. *Neuroscience Letters*, 336(1-2), 60-64.

The physical phenomena of spiritualist séances and sitter groups: A systematic review of the literature and discussion of psychological hypotheses

Everton de Oliveira Maraldi¹, Sonali Marwaha² & Jorge Moll¹

¹D'Or Institute of Research and Education, Rio de Janeiro, Brazil

²Laboratories for Fundamental Research, Palo Alto, CA

Introduction: In the annals of modern science, few subjects are as enigmatic and perplexing as the investigation of physical phenomena in modern Spiritualism (Podmore, 1902). This phenomenology, which involves the materialization of spirits and other reports of extraordinary phenomena, such as spontaneous movement of tables or other furniture, captured the imagination of millions and received close attention from towering figures of the scientific mainstream of their time, including Charles Richet (1850-1935), Sir William Crookes (1832-1919), and Marie (1867-1934) and Pierre Curie (1859-1906), only to become a fringe topic later on (Noakes, 2019). Still today, these experiences are reported in the context of Spiritualist gatherings and sitter groups (who may or may not have a spiritualist motivation but meet regularly to experience or document séance-like phenomena). Why is this unusual subject an interesting and timely one? One of the answers is that the variety of unusual perceptions and sensations typically reported during Spiritualist séances makes them privileged settings for investigating the phenomenology, cognitive features, and psychosocial impact of anomalous experiences in the nonclinical population. A series of psychological explanations were developed over time to account for these experiences, from deception and self-deception to cognitive illusions and ideomotor action. On the

other hand, coming from skepticism and ruling out detectable fraud and other biases, many eminent academics were convinced that some strange effects during séances were genuine, though unexplainable by available methods and frameworks. It is truly remarkable to verify the deep fascination and commitment of some highly reputable scientific figures to the exploration of these paradoxical occurrences. Despite the ridicule that their ideas attracted among mainstream academics, the fact is that part of the evidence they obtained remained without explanation (Braude, 1996). After more than a century, this remains a poorly understood and controversial area of research. To better comprehend the physical phenomena of Spiritualist séances and their underlying mechanisms, it is important to systematically examine the evidence and applicability/usefulness of existing hypotheses.

Methods: In 2022-2023, we searched different sources and databases for publications related to the following keywords or subjects: physical mediumship, mediums, Spiritualism, Spiritism, psychical research, and specific physical mediumship phenomena (apports, table-turning etc.). A fundamental source was the collection of papers by parapsychology's historian and researcher Carlos Alvarado (1955-2021), which initially yielded 110 peer-reviewed publications focusing on physical mediumship. References from the Alvarado papers were first listed, following which a search on Google Scholar was conducted for papers of interest, ensuring no duplication. Where appropriate, original papers/books were consulted for further information as required. This search on Google Scholar rendered other 1739 references. We also relied on two other sources: Adam Crabtree's (1988) comprehensive annotated bibliography on animal magnetism, early hypnotism, and psychical research (1766-1925), which yielded 477 references, and the Society for Psychical Research catalog (1884-2011) available on their website (241 references). While the above-mentioned sources do not cover all the publications in this area, they nevertheless afford us a more comprehensive and inclusive overview than previous qualitative reviews.

Based on the first total of 2567 references extracted from the databases, we employed the inclusion criteria to select those references that were specifically relevant to the review, resulting in a total of 1678 publications. Our inclusion criteria comprised any reference (articles, chapters, books, conference presentations, dissertations/theses) with either empirical or theoretical contributions regarding physical mediumship and associated topics (e.g., table-turning, ectoplasm, sitter groups). No constraint of date or language was adopted. The search process and inclusion/exclusion of references were performed by S.M. and then reviewed by E. M., who decided on the final classification. All three authors collaborated on the data analysis and discussion. We extracted from each reference the following information: year of publication, authors, language of papers, and subject matter (e.g., materialization, table-turning, studies with specific mediums). Finally, a qualitative examination of the methodological procedures and hypotheses employed in the reviewed studies was carried out to identify existing limitations, as well as directions and challenges for future research.

Main findings: The main period during which works on physical mediumship were published was the late 19th and early 20th centuries, covering about a century of research. The topic saw a decline in publications during the second half of the 20th century, resuming interest by the end of the 20th century and beginning of the 21st century, now with a greater focus on historical approaches to physical mediumship and Spiritualism. In the first decade of Spiritualism, the phenomena were given more emphasis than the mediums. However, this gradually shifted in the following decades, with publications on specific mediums reaching higher rates between 1900 and 1939. Focusing on empirical/investigative studies (N

= 569), we found that the phenomenon with more publications was materialization ($n = 183$), followed by table-associated phenomena ($n = 137$), apports ($n = 41$), ectoplasmic formations ($n = 38$), raps ($n = 34$), and levitation ($n = 19$). A few publications also dealt with less frequent phenomena (e.g., lights) and were therefore combined in a single category ($n = 42$). The review identified some variation among the phenomena in terms of historical prevalence; some phenomena are still being reported in the context of sitter groups and Spiritualist circles (such as table tilting, Gimeno, 2015), while others seem to have completely disappeared from the literature (such as slate writing, Seybert Commission, 1887).

The two most common explanations for the phenomena were the “spirit hypothesis” and “fraud or deception.” In most cases, the authors concluded in favor of the fraud hypothesis, but more than one-third of the studies concluded that the phenomena were either genuine or the explanation was uncertain. The controls against fraud and psychological explanations could vary from one investigation to another, but in many cases, the authors were able to significantly reduce the possibility of hallucinations, memory, and attentional biases, deception (or self-deception), and ideomotor action (with regard to table phenomena), by relying on a series of devices and systematic procedures (a list of these procedures will be provided in the full presentation). In this sense, it is important to differentiate the more controlled and sophisticated studies from those carried out under less rigorous control of the medium, the sitters, or the objects involved. The tests carried out by different investigators with different mediums demonstrate that whatever the nature or cause of the phenomena, the alleged physical anomalies could be measured and manipulated on demand, even if not always successfully.

Discussion: Despite reports of some remarkable phenomena in conditions that prevented fraud and illusion, the genuineness of séance phenomena is still to be scientifically established. More systematic, contemporary research with the use of state-of-the-art technology is needed to ascertain the reality of séance phenomena beyond highly skilled trickery, malobservation, and psychological factors such as hallucinations. It remains unclear how common cognitive biases are among participants of Spiritualist séances and scientists studying those contexts. It is crucial to determine whether their perceptions correspond to objective phenomena, including potential fraud, or if they are better explained by personal experiences and group influence or suggestion. Prevalence studies alone cannot provide insight into the circumstances surrounding these experiences, but exploring ethnographic and experimental data from specific groups may yield valuable information. Some hypotheses, such as hallucinations and ideomotor action were considered particularly weak and unable to account for the best controlled cases (e.g., Petrovo-Solovovo, 1908-1909; Dingwall, 1953). Research on the role of ideomotor action in séance phenomena remains underdeveloped (e.g., Spitz, 1997; Stock & Stock, 2004), and more contemporary studies and robust theorization are required to explain the cognitive, psychomotor, and neurophysiological processes underlying ideomotor processes during séances.

References

- Braude, S. (1996). *The limits of influence: Psychokinesis and the philosophy of science*. University Press of America.
- Crabtree, A. (1988). *Animal magnetism, early hypnotism, and psychical research, 1766–1925: An annotated bibliography*. Kraus International Publications.

- Dingwall, E. J. (1953). Psychological problems arising from a report of telekinesis. *British Journal of Psychology*, 44(1), 61-66.
- Gimeno, J. (2015). Shortage of rabbits or insufficient traps? Table-turning and the discovery of a presumably PK-gifted person in Argentina. *Journal of Scientific Exploration*, 29(4), 585-600.
- Noakes, R. (2019). *Physics and psychics: The occult and the sciences in modern Britain*. Cambridge University Press.
- Podmore, F. (1902). *Modern spiritualism: A history and a criticism* (Vol. 1 & 2). Methuen & Co.
- Petrovo-Solovovo, M. (1908-1909). The hallucination theory as applied to certain cases of physical phenomena. *Proceedings of the Society for Psychical Research*, 21, 436-482.
- Seybert Commission. (1887). Preliminary report of the commission appointed by the University of Pennsylvania to investigate modern spiritualism in accordance with the request of the late Henry Seybert. University of Pennsylvania.
- Spitz, H. H. (1997). *Nonconscious movements: From mystical messages to facilitated communication*. Lawrence Erlbaum Associates.
- Stock, A., & Stock, C. (2004). A short history of ideo-motor action. *Psychological Research*, 68(2-3), 176-188.

An online repository of poltergeist cases with their phenomenology

Eric Dullin

Psychophysics and Cognitive Dissonance Laboratory, Lyon, France

Introduction: Poltergeist phenomena (also known as recurrent spontaneous psychokineses) have been reported since ancient times and in many geographical regions. As reported in Dullin (2021, 2022), numerous studies have been carried out to present cases in detail or with comparative analyses.

In addition, studies have been conducted to analyze recurrences and phenomenological trends based on online forms filled in by people recounting having experienced this type of event. For example, Houran et al (2019) hypothesized a one-dimensional factor underlying ghostly episodes based on an analysis of 426 forms entered online and using 32 parameters. Others have compared reported events/experiences with the psychological profiles of the people who reported them (Ventola et al., 2019), introducing the notion of transliminality and the theory of “Haunted People Syndrome” (Laythe et al., 2022). Experiments have also been conducted to measure the influence of the environment, such as specially designed places likely to trigger haunting phenomena (French et al., 2009).

It would be interesting to complement these approaches by focusing on the individual and his perceptions with detailed statistical analyses of documented cases, recent or old, involving multiple witnesses and objective physical phenomena in a variety of environments. To date, however, it has been difficult to perform statistical analyses, as there appears to be no digital repository containing a wide variety of cases with their associated phenomenology. The project presented here, which began four years ago, consists of putting online a database of over 1,300 international cases, including, for more than 1,000 of them, a detailed phenomenology of the type of events that took place.

Methods: A survey was carried out among the main organizations likely to collect cases, including Center for Information, Research and Consultation on Exceptional Experiences (France), Institut für Grenzgebiete der Psychologie und Psychohygiene (Germany), Institut Métapsychique International (France), Institute of Noetic Sciences (USA), Parapsychological Association (USA), Psychical Research Foundation (USA), Society for Psychical Research (UK), and Society for Scientific Exploration (USA). However, few elements existed in the form of structured digital files.

The construction of this repository was therefore mainly based on detailed international bibliographical research (56 countries), and supplemented by contacts and exchanges of information with the above-mentioned organizations. In addition, local case studies such as those by Biondi & Caratelli (1993) in Italy and Marie-Charlotte Delmas in France (2025) completed the database.

The starting point was the 500 cases proposed by Gauld & Cornell (1979). These cases were all drawn from printed sources, and Alain Gauld and Tony Cornell excluded from them all cases for which the only sources were newspapers or magazines. The sources were open-ended enough not to be caught up in the “belief program” of a specific investigator, author or publisher.

The same approach was adopted for the other cases, concentrating on qualified authors and cases with sufficient detail for the physical phenomenology to be assessed. Where possible, the level of testimony and level of detail proposed by Gauld & Cornell (1979) were also used to rate each case.

The Italian cases (250) proposed by Massimo Biondi and Giulio Caratelli are more closely linked to relevant information extracted from local newspapers. They also used the same parameter grid that Gauld & Cornell (1979) established to characterize case phenomenology (see below). Most cases have multiple sources. The user can, therefore, compare the different sources.

Cases involving apparitions only have been excluded, as this database aims to focus on physical manifestations. Cases more akin to a legend about a place were also excluded.

To characterize the phenomenology of the case, the 63 parameters proposed by Gauld & Cornell (1979) were used as a starting point. Those proposed by Huesmann & Schriever (1989) were also studied, as well as the SSE (Survey of Strange Events) scale proposed by Houran et al. (2019). In the end, two approaches were selected:

A set of parameters as detailed as possible for the repository (92), enabling a fine selection of cases.

A more synthetic set, built on the previous one by aggregating parameters, for statistical studies (30).

Typical parameters include: duration, diurnal and/or nocturnal events, movement of small objects, high-energy events (heavy object move, structural damage, door slamming), apports/deports/teleportation, water-related phenomena, lighting of fires, knocking/raps, other noises (such as voices, footsteps, dragged furniture, scratching), bell ringing, aggression, “possession,” spontaneous breaking of objects,

the opening of doors/locks/latches, strange trajectories, hot object, intelligent behavior, communication/interaction with the phenomenon, electrical disturbance, light effects, apparitions, misty figures, smell/taste, cold or hot zone, identified poltergeist agent, female/masculine agent, agent under 20, disturbed agent, house-centered phenomenon, end through ritual ceremony, link with a death, fraud, and natural cause.

Results: A database prototype (developed with MySQL and PHP) will be presented with:

A search for poltergeist cases for which a given phenomenology has been reported. For example, find all cases with a fire outbreak combined with an identified agent or all cases with house-centered phenomena, apparitions, and a duration of more than six months. The search result will return all the cases concerned by the above selection, with their detailed characteristics (location, year, duration, phenomenology parameters, origin of database entry, source to consult for more detailed analysis, optional comments...etc.).

Statistical results for the entire reference database, by period or geographical zone. For example, Figure 1 shows the number of cases for each historical period's six most represented geographical area.

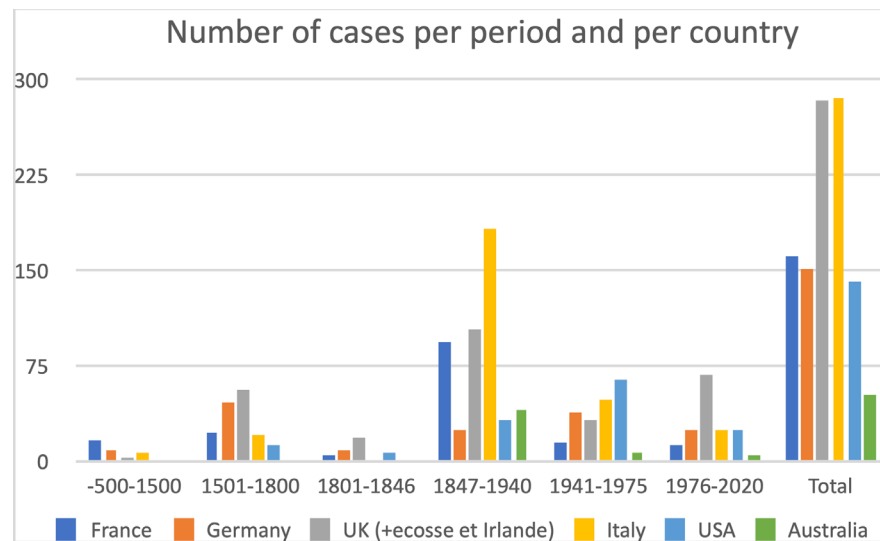


Fig. 1 Example of a graph showing the number of cases for the six most represented geographical areas for different historical periods.

The user interface for proposing new cases for inclusion in the database, traceability tools to identify which organization is responsible for this entry, the validation process for including new cases, and the change request process if errors are detected.

Discussion: This repository is an ongoing project with the aim of opening it up to the entire parapsychological community. Contacts will be made with the organizations mentioned above so they can use it and submit new entries to keep it up to date. The connection with other resources on the Internet concerning psi will also be evaluated. In addition, an article on the detailed phenomenology of poltergeists, illustrated by over 100 cases taken from this directory, is currently being published (Dullin, 2024).

References

- Biondi, M., & Caratelli, G. (1993). La natura del poltergeist. *Quaderni di Parapsicologia*, 24(2), 12-36.
- Delmas, M. C. (2025). *Quand les pierres tombent en pluie*. [Manuscript submitted for publication]
- Dullin, E. (2021, July 26). Poltergeist/RSPK quantitative and qualitative study from antiquity until now. Paper presented at the SSE-PA Connexion Annual Convention 2021, Online Airmeet platform. https://www.youtube.com/watch?v=8Exfi_t6Vpg
- Dullin, E. (2022, June 20). Trying to validate and get some clues about poltergeist activities using quantitative and qualitative studies: An historical overview. Lecture done at a SPR monthly event, Online Zoom platform. <https://www.youtube.com/watch?v=D8fHEajsm2o>
- Dullin, E. (2024). A detailed phenomenology of poltergeist events. Manuscript in preparation.
- French, C. C., Haque, U., Bunton-Stasyshyn, R., & Davis, R. (2009). The "Haunt" project: An attempt to build a "haunted" room by manipulating complex electromagnetic fields and infrasound. *Cortex*, 45(5), 619-629. <https://doi.org/10.1016/j.cortex.2007.10.011>
- Gauld, A., & Cornell, A. D. (1979). *Poltergeists*. White Crow Books.
- Houran, J., Lange, R., Laythe, B., Dagnall, N., Drinkwater, K., & O'Keeffe, C. (2019). Quantifying the phenomenology of ghostly episodes: Part 2 - A Rasch model of spontaneous accounts. *Journal of Parapsychology*, 83(2), 168-192.
- Huesmann, M., & Schriever, F. (2022). Wanted: The poltergeist. Description and discussion of a collection of 54 RSPK reports of the years 1947-1986, kept at the Friburg Institute for Frontier Areas of Psychology and Mental Health [1989]. *Journal of Anomalistics*, 22, 76-135. https://www.igpp.de/allg/ZfA/ZfA_2022_1/07%20Huesmann-Schriever_JAnom_2022_1.pdf
- Laythe, B., Houran, J., Dagnall, N., Drinkwater, K., & O'Keeffe, C. (2022). *Ghosted!: Exploring the haunting reality of paranormal encounters*. McFarland & Co.
- Ventola, A., Houran, J., Laythe, B., Parra, A., & Kruth, J. (2019). A transliminal 'dis-ease' model of 'poltergeist agents'. *Journal of the Society for Psychical Research*, 83(3), 144-171.

Macro-PK experiments - New results in confined mode and observation of a learning curve

Eric Dullin, Steeven Frosio Roncalli & David Jamet
Psychophysics and Cognitive Dissonance Laboratory, Lyon, Paris, Poitiers, France

Introduction: Following the experiments shown at the 65th Annual Convention of the Parapsychological Association in Oslo, Norway (Dullin et al., 2023), new results obtained since then will be exposed. During the convention, the following findings were presented:

- Highly repeatable results (80%) on putative macro-PK effects in a partially confined mode on two-gram targets (rotation of plastic domes weighing 2g).
- Putative effects of macro-PK on lighter targets (0.15g psi wheels) in confined or highly confined mode (double glass jar) and at a distance of several meters in some cases.

The new experiments presented below mainly concern attempts to obtain rotational motion of objects in a confined environment with high repeatability with the same targets as those previously used in partial confinement.

Methods: The method used is the same as described in Dullin et al., 2023; However, the experiments presented were exclusively conducted in a confined environment as shown in Figure 1, using a laboratory glass bell and without any contact of the hands with the bell.



Fig. 1 PK experiment on two hemispheric plastic domes (2g each) with a laboratory glass bell (image extracted from live video).

Until now, in this confined environment, the targets used were very light (0.15g) “psi wheels” made of aluminum foil. Only a few successes had been achieved with the heavier targets (2g plastic domes). The latter, which are less sensitive to air or thermal currents than the psi wheels due to their greater inertia, among other things, were mainly used in non-confined environments (Dullin & Jamet, 2018, 2020). On the other hand, it seemed difficult to get rotations with them in confined mode.

The PK agent (Steeven Frosio), with his strong searcher attitude, has carried out numerous experiments with these heavier targets while trying to evolve the repeatability situation in partial containment, presented at the PA convention 2023 (Dullin et al., 2023), to a replicable situation in total confinement.

A trial was considered successful if the target moved at least 3 quarters of a turn or more than the 30s.

As before, all the tests were documented (success and failure) with full videos, reports of the PK agent and commentaries by the scientific team after study of the report and detailed analysis of the videos provided by the PK agent. So a complete history of all the experiments, trials and their evolution is preserved and could be consulted on demand.

Results: A particular focus is placed on 24 experiments in full confined mode with a heavy target (2g) corresponding to 139 trials in the space of two months between December and February this year.

Not only have rotations of the targets been observed, but these have evolved into high repeatability. Indeed, out of the last 13 experiments (49 trials), each has obtained at least one successful trial. The average percentage of success on the trials was 55%, with an average turnaround time of the target of 140 seconds up to ten minutes.

These results, in total containment, are an advance compared to those previously presented using aluminum foil psi wheels weighing 0.15 g as a target. In addition, success is currently achieved in every set of tests conducted. Also, a detailed analysis of the observed learning effect will be presented, which will be compared with the one published by (Black & Carpenter, 2014).

After having obtained good repeatability, attempts were made by the PK agent, first to move the hands away after a successful start of the target, and then to move away just after putting down the bell. Even in these cases, a rotation of the target could be achieved.

No decline effect was observed despite repeated experiments under the same conditions. The current documentation contains the full videos of the trials carried out with one or two cameras (some will be presented to illustrate the talk).

Discussion: These results confirm and enhance the previous results (Dullin et al., 2023). Currently, there is no direct physical explanation of the motion of the target in the laboratory bell. It should be noted that, for most of the tests carried out to date, two almost identical targets are placed under the glass bell, and each time, only one target spun. If a known physical phenomenon were to take place inside this symmetric bell, it can be assumed that it would act in the same way on both targets. As the targets are always slightly different concerning the friction force between the needle and the plastic dome, other tests have been conducted with the exchange of support, dome, and needle. The same results were obtained: only one target was spinning.

Also, if there was a physical effect not discovered until now in these experiments, only some modifications in the environment or the protocols would have modified the result and so a learning effect could not have been observed with identical environment and protocols. However, in this experiment (and many others before in this research), the effect observed seems to be progressing with more repeatability with the accumulation of trials by the PK agent.

On the distance factor, some research has been done through the Internet with other PK agents, but no significant repetitive results have been obtained yet. As announced in Dullin et al. (2023), to better understand these putative PK effects, a new experiment is also conducted using sufficient vacuum to eliminate any potential air action on the target.

References

- Black, C.M., & Carpenter, J.C. (2014, August 15). A self-study of the role of mood on ostensible PK. Paper presented at the 57th Annual Convention of the Parapsychological Association, Concord, CA
- Dullin, E. & Jamet, D. (2018). A methodology proposal for conducting macro-pk test on light spinning objects in a non-confined environment. *Journal of Scientific Exploration*, 32(3): 514–554. doi: 10.31275/2018.1266.

- Dullin, E & Jamet, D. (2020). A Portable Bench for Research on Telekinetic Effects on a Spinning Mobile and Experimental Results Obtained with it. *Journal of Parapsychology*, 84 (2), 254-275. <http://doi.org/10.30891/jopar.2020.02.07>
- Dullin, E & Jamet, D. & Frosio Roncalli, S. (2023). Macro-pk experiments: level of control – repeatability – distance effect - confinement effect. Paper presented at the 65th Annual Convention of the Parapsychological Association, Oslo, Norway. <https://www.youtube.com/watch?v=urt8PNzm59k>

Exceptional experiences as phenomenological and empirical evidence for dual-aspect monism

Wolfgang Fach

Institute for Frontier Areas of Psychology and Mental Health (IGPP)

Introduction: When the Institute for Frontier Areas of Psychology and Mental Health (IGPP) began to professionalize its counseling and intensify its research in the field of “Exceptional Experiences” (ExE) in the 1990s, it adopted the term from Rhea White. At the time, she was examining a wide range of ExE, and in particular, she was looking for general characteristics of ExE: “The reason we consider these experiences as a group is that they may be points on a continuum, or that there are connections between some, if not all, of them that we would not see if we considered them only as individual experiences” (White, 1999, p. 1). In this contribution, it is argued that such a continuum of ExE can be established in manifestations of autonomy and bonding as complementary aspects of an underlying holism.

Conceptual and empirical background: Based on some key postulates of Metzinger’s (2003) theory of mental representations, Fach (2011) developed a phenomenological classification of exceptional experiences (ExE). According to the dual structure of an overall phenomenal reality-model with a self-model and a world-model as its fundamental subcomponents, the multitude of different ExE can be traced back to two pairs of basic phenomenon classes. One pair refers to the localization of experiential content as external phenomena in the world-model (e.g., poltergeist phenomena) or internal phenomena in the self-model (e.g., ego-dystonic feelings or thoughts). The second pair of classes refers to deviations from the “baseline” of ordinary psychophysical correlations as coincidence phenomena (e.g., extrasensory perceptions) or, conversely, as dissociation phenomena (e.g., out-of-body experiences).

The model of phenomenon basic classes is confirmed by a series of studies (Atmanspacher & Fach, 2019; Fach, 2018; Fach et al., 2013) using the revised Questionnaire on the Phenomenology of ExE (PExE-R) and its validated version, PExE-II. Using different samples (general populations, ExE clients, people with near-death experiences, people with sleep paralysis, meditators) from different countries (Germany, Switzerland, Italy, France, USA), factor analyses result in a general ExE factor and the four phenomenon classes as subfactors as the most robust and best generalizable model. The surveys also show that ExE are widespread and that they occur, albeit less frequently, in all variants in the general population. While the frequencies of ExE differ continuously in the various samples, the proportions of the basic phenomenon classes are always similar, which indicates latent structural principles.

Dual-Aspect-Monism: If all ExE-patterns have their origin in a general factor that is completely abstract, and if self and world are understood as models, the question arises as to what they are representations of. Metzinger conceptualized the self and world as representations of physical states of the human organism. An alternative is dual-aspect monism, where the mental and the physical are aspects of a psychophysically neutral reality. A dual-aspect monism approach developed by Pauli and Jung, inspired by quantum physics, is particularly fruitful for understanding ExE (Atmanspacher & Fach, 2013, 2015; Fach, 2014). They see the emergence of physical objects through measurement and the observation of “mental objects” in consciousness as analogous processes. According to this, the mental and the material arise through a splitting of the psychophysically neutral reality (which Jung called *unus mundus*). The connections between self and world (e.g. mind-brain correlations, psychosomatics) are not based on direct interactions but are arranged by structural and psychophysically neutral determinants (*archetypes*). The relationship between self and world and their common origin, on the other hand, is considered bidirectional. This means that events in the mental or material domain can have an effect on the primordial wholeness. This means, for example, that psychological defense mechanisms such as repression can induce exceptional phenomena in the outside world via the unconscious or the underlying holism.

Autonomy and Bonding: Principal component analyses and cluster analyses based on a sample of over 2300 IGPP counseling cases recorded with a special documentation system confirm the model of phenomenon basic classes (Fach, 2022): Internal and external phenomena each represent an ExE-pattern, while the coincidence and dissociation phenomena each form a pattern associated with internal phenomena and a pattern associated with external phenomena. The six ExE-patterns form two complementary continua of anomalous representations of autonomy and bonding: An internal continuum begins with extrasensory perceptions through phenomena in the self-model that are related to persons and events in the world-model and thus represent a subtle form of bonding. In the internal intrusion phase, bonding in the self-model is reinforced by the internal presence and influence of an external entity or person that threatens personal autonomy. In the internal occupation scenario, mediumship and automatisms appear to displace the autonomy of the self-model through psychophysical dissociation into the world-model. Conversely, an external continuum is characterized by a steady increase in the autonomy of the world-model. It begins with the perception of meaningful coincidences in the world-model that appear to be autonomously designed and directed to the self-model. In the external intrusion phase, the increased autonomy of the world-model is represented by poltergeists and apparitions that override lawful physical bonding. In the external intrusion phase of nightmares and sleep paralysis, the bonding between the self-model and the physical body as part of the world-model is severed through psychophysical dissociation.

In addition, statistical analyses show significant correlations between social bonding (partnership, marital status, housing situation, etc.) and ExE-patterns. Biographical case analyses also point to systematic correlations with insecure bonding styles, which are described by empirical attachment research as “dismissing,” “enmeshed,” and “disorganized.” The avoidance of autonomy or bonding associated with insecure bonding styles has implications for unconscious self-regulation. Autonomy and bonding are not only basic human needs. In systems theory, self-organization and structural coupling to the environment are the existential prerequisites for all living systems. Against this background, autonomy and bonding

can be understood as structural determinants that are anchored in *unus mundus* and act as organizing principles in the sense of “archetypes.” Exceptional phenomena can be interpreted as representations of non-integrated autonomy or bonding, which are induced by repercussions of insecure bonding styles on the *unus mundus* and as expressions of holistic self-regulation.

Conclusion: The phenomenological and empirical research findings together support the thesis that autonomy and bonding play a central role in the occurrence of ExE, both as basic human needs and as structural determinants. The observation that avoided autonomy is expressed in the world-model and blocked bonding in the self-model points to an organizing principle that is oriented towards balance and integration. It is plausible to assume that insecure bonding styles, if they restrict the fulfillment of basic needs too much, have an impact on the foundations of the whole system and human existence. While “whole system” in the theory of mental representations refers to organismic self-regulation, dual-aspect monism is based on a psychophysically neutral reality. Regardless of which interpretation one prefers, it can be assumed that a person’s bonding behavior feeds back to the organismic or holistic level, causing the structural determinants to respond. The new paradigm presented here not only deepens the understanding of ExE but, in particular, offers a new approach to improving counseling and therapy for those affected.

References

- Atmanspacher, H., & Fach, W. (2013). A structural-phenomenological typology of mind-matter correlations. *Journal of Analytical Psychology*, 58(2), 219–244. <https://doi.org/10.1111/1468-5922.12005>
- Atmanspacher, H., & Fach, W. (2015). Mind-matter correlations in dual-aspect monism according to Pauli and Jung. In E. F. Kelly, A. Crabtree, & P. Marshall (Eds.), *Beyond physicalism: Toward reconciliation of science and spirituality* (pp. 195–226). Rowman & Littlefield.
- Atmanspacher, H., & Fach, W. (2019). Exceptional experiences of stable and unstable mental states, understood from a dual-aspect point of view. *Philosophies*, 4(1), 1–21. <https://doi.org/10.3390/philosophies4010007>
- Fach, W. (2011). Phenomenological aspects of complementarity and entanglement in exceptional human experiences (ExE). *Axiomathes*, 21(2), 233–247. <https://doi.org/10.1007/s10516-010-9143-7>
- Fach, W. (2014). Complementary aspects of mind-matter correlations in exceptional human experiences. In H. Atmanspacher & C. A. Fuchs (Eds.), *The Pauli-Jung conjecture and its impact today* (pp. 255–273). Springer.
- Fach, W. (2018). Comparative studies with the revised questionnaire for assessing the phenomenology of Exceptional Experiences (PAGE-R). In D. Vaitl (Ed.), *Biennial report 2016-2017* (p. 42): Institut für Grenzgebiete der Psychologie und Psychohygiene e.V. (IGPP).
- Fach, W. (2022). Exceptional Experiences (ExE) and bonding styles: Autonomy and bonding as basic human needs and as structural determinants of ExE. *Psychotherapy Section Review*, (67), 12–41. <https://doi.org/10.53841/bpspsr.2022.1.67.12>
- Fach, W., Atmanspacher, H., Landolt, K., Wyss, T. A., & Rössler, W. (2013). A comparative study of exceptional experiences of clients seeking advice and of subjects in an ordinary population. *Frontiers in Psychology*, 4, 1–10. <https://doi.org/10.3389/fpsyg.2013.00065>
- Metzinger, T. (2003). *Being no one: The self-model theory of subjectivity*. MIT.
- White, R. A. (1999). *Exceptional human experiences: A brief overview*. EHE Network, Inc. <http://www.ehe.org/display/ehe-page53e5.html?ID=5>.

Subtle energies, photons, & physiology

John G. Kruth

Rhine Research Center, Durham, NC, USA

Introduction: Physiology is the examination of the workings of the body, including autonomic processes, in an effort to reveal how the body functions and the mechanisms that may contribute to human experience. Oftentimes, autonomic activity, recorded by physiological measurements, reveals hidden or unrecognized factors that contribute to more obvious expressions of the body, including health and illnesses or psychological states like emotions, stress, and relaxation.

Many psi events occur spontaneously, unconsciously, or unintentionally (e.g. Pratt & Roll, 1957; Rhine, 1961; Feather & Schmicker, 2005; Cardeña, Lynn, & Krippner, 2014), and the mechanisms that lie behind them continue to be a mystery. As researchers continue to mine the research data for greater insight into the working of ESP, PK, and other psi phenomena, a natural extension is to explore the physiology of the body to look for physiological correlates to psi experiences.

The Rhine Bioenergy Lab measures ultra-weak photon emissions (UPE) in the near-ultraviolet range to the low visible range (wavelengths 350-700 nm). Previous studies in the Rhine Bioenergy Lab have produced evidence that an increase in UPE is detected when some people focus their intention on a specific task, such as meditation, martial arts, energy healing, or even the performance of some psi tasks (Joines, Baumann, & Kruth, 2012 – BIAL Project 151/06).

Studies in this lab for over 12 years have produced a standard procedure for measuring UPE emissions and have identified specific participants who are able to reliably increase the number of UPE detected with very significant results (Kruth, 2016).

Despite the intentional variation in UPE observed during times of focus, no information has been recorded to determine if there are physiological correlates to the moments of increased UPE detection. This study examines whether physiological activity is correlated with the photon count to determine if there are specific physical states that are present when a person is producing a higher count of UPEs.

An increase in UPE activity has been demonstrated to be correlated with the activity of energy healers during a healing session, martial artists who are manipulating chi, meditators who are experiencing an increase in kundalini energies, and mediums who claim to be communicating with spirits. Knowledge about the physiology of these people during moments of increased UPE will shed light on the similarities and differences between these practitioners and provide a greater insight into the mechanisms that contribute to these activities.

Methods

Sample: Five participants known to have produced variations in UPE measurements in the Rhine Bioenergy Lab took part in 50 sessions, where 20 sessions involved significant variations in the UPE photon counts.

Hypothesis 1 (confirmatory): Selected participants will demonstrate more UPE during periods of focus than during periods of rest, implying that the production of UPE can be controlled by focused intention.

Hypothesis 2 (exploratory): Changes in physiology will correlate with changes in the quantity of UPE detected during times of focused intention.

Hypothesis 3 (exploratory): Physiology indicating increased arousal will produce a stronger correlation with an increase in UPE during times of focused intention.

Rhine Bioenergy Lab: The Rhine Bioenergy Lab consists of a double dark room that is completely painted black to avoid any light reflection. A Photomultiplier Tube (PMT) in the lab is electronically cooled to -23C and powered by an independent and consistent power supply. Photons are counted via an electron cascade device connected to a modulator and amplifier, allowing the photon counts to be recorded on a computer system. Data from each session is electronically recorded with a timestamp and photon count for each half-second of the session.

Sessions in the bioenergy lab integrate a control period for each participant by including a baseline period before and after the experimental phase of the session. The photon counts from the baseline period are compared with the photon counts from the period of focus. Though most sessions do not vary from the baseline, some participants are able to consistently produce variations in nearly every session.

Because of the large number of readings in each session (3600 in a 30-minute session), a small number of large variations can be lost when computing the mean. For this reason, each session is evaluated for both the mean and a count of the number of readings that are at least double that of the baseline mean. This allows the researcher to compare the experimental phase with the baseline phase to determine if there is a significant difference between the phases of the session.

Physiological Measures: A BioPac system was used to continuously monitor each participant for heart rate (HR), heart rate variability (HRV), electrodermal activation (EDA), vasoconstriction (BF), and skin temperature (TEMP) during each session.

Analysis: The analyses examined two major areas and in three additional subcomponents. The initial examination of UPE examined a confirmatory hypothesis (H1), which predicted that the selected participants would produce more UPE during periods of focus than they would in periods of rest. The subsequent exploratory analyses examined correlations between physiological activity and the measurements of UPE. The physiological correlations were explored across all of the sessions, across all sessions showing six-sigma differences in UPE, and for each individual session that showed six-sigma differences in UPE readings. The exploratory hypothesis (H2) predicted that there would be correlations between physiological measurements and high readings of UPE.

Results

Ultraweak photon emissions: Across all 50 sessions, the photons counted during periods of rest ranged from 0 – 146 photons per half second, with a mean of 3.75 photons and a median of 3.00 pho-

tons. During active periods of focus, the range was 0 – 1116 photons per half second, with a mean of 49.07 photons and a median of 23.00 photons. A Welch Two Sample *t*-test demonstrated a very significant difference between the samples ($t = -79.28$, $df = 19172$, $p < 2.2e-16$) with a 95% confidence interval, indicating that more photons were measured during periods of focus than during periods of rest.

The first confirmatory hypothesis (H1) was supported across all of the sessions, but a further evaluation was completed for each individual session. Each session was evaluated separately to identify which most clearly demonstrated the difference between photon expression in the resting and active periods.

Because each session includes a large number of individual readings, a small number of large variations in a single session can be lost in a means evaluation. For this reason, each session was evaluated for the mean and the number of readings that exceeded a two-sigma and six-sigma threshold, as described below.

Two-sigma variations: The mean and standard deviation (SD) of the photon count were calculated for the resting period of each session. A significant threshold was calculated by adding 2SD to the resting mean. The mean plus 2SD demonstrate a two-sigma variation, which is unlikely to occur more than five times in every 100 readings. The number of readings in each session that exceeded the threshold were counted for both the resting and the active periods. If a single session had at least twice as many significant readings during the active period, that session was considered to support H1.

For example, if the mean of the photon count for the resting period was 3.50 photons per half second and the SD was 1.25 photons, the significant threshold would be the mean plus 2SD or $3.50 + 2(1.25) = 6.00$ photons per half second. Any photon value above 6.00 would be considered a significant, two-sigma difference. The number of significant photon counts (>6.00) would be tallied in the resting period and the active period. If there were more than twice as many significant values in the active session, that session would be considered to support H1.

Of the 50 sessions, 20 produced at least twice as many two-sigma differences in the active period, showing very strong support for H1. Each of the five participants in the study produced at least one session that supported H1.

Six-sigma variations: In order to provide even stronger support for H1, the threshold value was increased to a six-sigma difference (mean + 6SD) which would be likely to occur less than 3.4 times for every million readings. Sixteen of the 50 sessions demonstrated at least twice as many six-sigma values in the active sessions. These sessions produced the strongest support for H1 and were used to examine physiological correlations with photon counts.

Defining events: When a session contained a significant, six-sigma variation in photon counts, there would often be a series of significant readings in a short period of time. In order to determine if these readings were associated with changes in physiology, the individual readings were grouped into events. Because autonomic physiological factors typically precede moments of expression, events were defined with five seconds before and after each event. In other words, five seconds of nonsignificant readings were followed by at least one significant reading, which was again followed by five seconds without a significant reading.

Table 1. *Duration of one event.*

Five consecutive seconds of nonsignificant readings	Any number of six-sigma signif- icant readings and fewer than five consecutive seconds of nonsignificant readings	Five consecutive seconds of nonsignificant readings
(5 seconds)	(Indeterminant amount of time)	(5 seconds)

There were 103 six-sigma events in 16 sessions and zero (0) six-sigma events in 34 sessions. The six-sigma events were used for additional physiological analyses.

Physiological correlations: Five physiological factors were examined in each session including heart rate per minute (HR), heart rate variance (HRV), blood flow/vasal constriction (FLOW), electrodermal activity (EDA), and skin temperature (TEMP). Respiration was also measured but was not considered as a potential correlating factor.

All five factors were examined to determine if they were different during periods of focus and periods of rest. The means for each factor was compared across all sessions using a Welch Two Sample *t*-test.

Physiology and photon counts for all sessions: All of the physiological factors were compared to the count of photons at each moment during the sessions using the Pearson correlation coefficient. There was a weak correlation between the photon count and HRV across all of the sessions ($r = 0.239$), indicating that when photon counts increase, the heart rate is more consistent. During the resting period, there were no correlations that were weak or stronger ($r > 0.2$) between the photon count and any of the physiological measurements.

In the active period of focus, there is a weak correlation between FLOW and photon count ($r = -0.256$), indicating that blood flow decreases as photon count increases. Also, in the active period, there is a weak correlation between photon count and HRV ($r = -0.230$) indicating that the heart rate becomes more consistent (R-R period) as the photon counts increases.

Session correlations: Each session where a six-sigma variation in photon expression was registered was examined in depth to determine if there were physiological patterns correlated to each event. HR increased strongly in 9 of 16 sessions, decreased in four sessions, with no change in three sessions. HRV decreased strongly in 11 of 16 sessions, only increasing in one session, with no change in four sessions. FLOW, EDA, and TEMP showed no consistent pattern of change in the sessions.

These results support the findings from the analyses across all sessions that an increase in photon counts is correlated with an increased heart rate and more consistency between heartbeats (R-R period).

Discussion: The first hypothesis was confirmatory, and it was strongly supported by this study. All five participants demonstrated a two-sigma variation in photon counts during the active periods of the session when they were focusing their intention on activities that they described as energy healing, projecting energy from their body, or increasing the light within the room. In 16 of the 50 sessions, a strong,

six-sigma variation was recognized during the period of focus, demonstrating that experienced participants can intentionally produce consistent ultraviolet light events through a focus of their intention.

The second hypothesis of this study proposed that there would be correlations between physiological activity and ultra-weak photon emissions (UPE). It was found that an increased HR and a more consistent heart rate were strongly correlated with the expression of UPE. This hypothesis was confirmed across all sessions and through a detailed analysis of the 16 sessions that produced the strongest UPE expressions. There was also a weak correlation indicated between a reduced blood flow and UPE expressions.

The third hypothesis proposed that physiological measurements that indicated increased arousal in a participant would be correlated with increased UPE expression. H3 was weakly supported by reduced blood flow (FLOW) to the extremities (across all sessions) and increased HR when UPE expressions increased. Further explorations of the correlations between physiology and arousal would confirm these findings.

If ultraviolet light is produced during moments of high emotion and arousal, it may be a protective mechanism used by the body to adjust to stress or physical challenges. Due to the unique qualities of light, UPE may also carry information that would communicate a stressful situation or the aroused state of the individual. In this study, we included people who were purposely attempting energy healing, deep meditation, and visualizing the production of light. It is possible that UPE are a mechanism to communicate healing intention or provide a sense of relaxation associated with meditation. Through further examinations of the healing effect and UPE, we may find that healing has less to do with energy and more to do with an exchange of information. Furthermore, we may find that people who perform successful healing sessions evoke an aroused physical state to perform these activities which could contribute to the creation of training methods for healers or deep meditations.

Acknowledgments: We would like to thank the BIAL Foundation for their generous support of this study (249/2020).

References

- Cardeña, E., Lynn, S. J., & Krippner, S. (2014). *Varieties of anomalous experiences*. American Psychological Association.
- Feather, S. R., & Schmicker, M. (2005). *The gift: ESP, the extraordinary experiences of ordinary people*. St. Martin's Press.
- Joines, W. T., Baumann, S., & Kruth, J. G. (2012). Electromagnetic emission from humans during focused intent. *Journal of Parapsychology*, 76(2), 275-294.
- Kruth, J. G. (2016). PK is real [Video]. Rhine Research Center. <https://www.rhineonline.org/media-library-members-only>
- Pratt, J. G., & Roll, W. G. (1957). The Seaford disturbances. *Journal of Parapsychology*, 22(1), 79-124.
- Rhine, L. (1961). *Hidden channels of the mind*. William Morrow & Co.

Information dynamics in anomalous phenomena

Javier Martínez

Unidad Parapsicológica de Investigación, Difusión y Enseñanza (UPIDE), Mexico City, Mexico
Centro de Investigación de la Sintergia y la Consciencia (CISC), Mexico City, Mexico

Introduction: Parapsychological (or psi) phenomena have remained elusive to scientific explanation for decades. However, current extensive research within this domain, exemplified by Radin's work into psi phenomena involving entangled photons (2021), Delorme's exploration of blinded mediumship (2020), and the endeavors of the Unidad Parapsicológica de Investigación, Difusión y Enseñanza (UPIDE) concerning extrasensory information retrieval by children (Bar et al., 2024) has sparked new avenues for exploration. One such promising avenue involves the development of a mathematically rigorous framework capable of making predictions about macroscopic observables linked to the efficacy of psi in influencing outcomes within psychokinetic (PK) events.

In this paper, a model for mind-matter interactions is proposed by employing the tools of Information Theory (Shannon, 1948), a valuable mathematical discipline that quantifies the transmission of information in communication processes. While it is primarily used in fields like telecommunications and computer science, it provides a unique vantage point from which to examine parapsychology. By leveraging concepts such as entropy, mutual information, and channel capacity, we aim to mathematically model the exchange of information in PK events. We outline a promising formalism wherein probability distributions of events undergo stochastic mapping to other probability distributions under the influence of psi acting on physical systems. To address experimental considerations, we suggest the use of quantitative variables positively correlated with psi influence as a means to establish the relationship between the mapping of probabilities pre- and post- psychophysical interactions.

$$H_m = \sum_{k=1}^N p(x_{kf}) \log\left(\frac{p(x_{kf})}{p(x_{k0})}\right) - \sum_{k=1}^N p(x_{k0}) \log(p(x_{k0})) + \sum_{k=1}^N p(x_{kf}) \log(p(x_{k0})) \quad (2)$$

Where the first term is the Kullback–Leibler divergence between distributions, while the second and third are the entropy of the initial distribution and cross entropy, respectively. Therefore:

$$H_m = D_{K.L.}(X_f||X_0) + H(X_0) - H(X_f, X_0) \quad (3)$$

Fig. 1 Excerpt of the derivation of the entropy difference in physical systems pre- and post- Psi influence.

Methodology: We aim to understand the evolution of psi-influenced systems by analyzing changes in expected informational entropy. This involves quantifying the difference between the theoretical informational entropy, and the empirical entropy obtained from probability distributions gathered in experiments. This comparison provides a fundamental basis for interpreting mind-matter interactions as dynamic processes that lead to alterations in the probability distribution of a system's states over time.

Additionally, we provide justification for constructing a probability transition matrix to model distribution evolution. We explain how to derive expected probability distributions for events following psi interactions using the coefficients within this matrix. By drawing parallels to established physical phenomena driven by variations in energetic potentials, we validate the interpretation of these coefficients within the transition matrix as functions of observable macroscopic properties in experimental subjects (such as parameters measured through brainwave analysis of participants during psychokinetic experiments), thus creating a conceptual framework that links theoretical concepts with empirical data.

Results: We obtain a formalism where it is possible to relate macroscopic observations of aspects which are positively correlated with a greater psi influence to the evolution of physical systems, as well as a manner in which to determine the expected probability distribution after such influence is given.

The mapping of probability distributions given by the transition matrix previously discussed is expanded to continuous psi interactions by taking a limit where psi information transfer between consciousness and the physical system is carried out in rapid succession. A brief overview of the application of this formalism to the study of precognition is mentioned. We mention a natural codification leveraging the channel's memory in order to increase the chances of a desired outcome by decreasing noise.

$$\begin{array}{c}
 \left[\begin{array}{cccc} (1,0) & (1,0) & (\frac{1}{2}, \frac{1}{2}) & (0,1) \\ (1,0) & 0.15 & 0.8 & 0.05 \end{array} \right] \\
 \downarrow \\
 \left[\begin{array}{cccc} (1,0) & (1,0) & (\frac{1}{2}, \frac{1}{2}) & (0,1) \\ (1,0) & 0.28 & 0.7 & 0.02 \end{array} \right] \\
 \downarrow \\
 \left[\begin{array}{cccc} (1,0) & (1,0) & (\frac{1}{2}, \frac{1}{2}) & (0,1) \\ (1,0) & 0.59 & 0.4 & 0.01 \end{array} \right] \\
 \downarrow \\
 \left[\begin{array}{cccc} (1,0) & (1,0) & (\frac{1}{2}, \frac{1}{2}) & (0,1) \\ (1,0) & 1 & 0 & 0 \end{array} \right]
 \end{array}$$

And, as is to be expected, the center of the probability distribution would eventually shift to that of the desired state, with probability 1, overcoming the channel noise.

Fig. 2 Example of the evolution of the first row of a transition matrix between a finite set of probability distributions as alphabets.

Discussion: This research suggests the presence of a medium through which consciousness interacts with the physical world. Properties of such a medium contribute to the probability transition matrix, indicating that its coefficients may not be entirely given by macroscopic observables. We propose using a Fokker-Planck type equation (Payliotis, 2014) to model the wandering of probability distributions under psychophysical “potentials.” However, further work is required to refine the model for generating

testable predictions in experimental settings. Nonetheless, this framework offers insights into the link between consciousness and physical reality, warranting continued investigation.

References

- Bar, N., Álvarez, A., Arriola, R., Barbakow, G-V, Quintero, E., Martinez, J., Silva, A., López-Miranda, C-I. & D'León, R. (2024). Direct Vision: A Research Program Exploring Extra-Ocular Vision in Children. *Edge-Science*, 54, 7-16.
- Cardeña, E. (2018). The experimental evidence for parapsychological phenomena: A review. *American Psychologist*, 73(5), 663–677. <https://doi.org/10.1037/amp0000236>
- Delorme, A., Cannard, C., Radin, D., & Wahbeh, H. (2020). Accuracy and neural correlates of blinded mediumship compared to controls on an image classification task. *Brain and Cognition*, 146, 105638. <https://doi.org/10.1016/j.bandc.2020.105638>
- Pavliotis, G. A. (2014). In *Stochastic processes and applications: Diffusion Processes, the Fokker-Planck and Langevin equations* (pp. 38–40). essay, Springer.
- Radin, D., Bancel, P., & Delorme, A. (2021). Psychophysical interactions with entangled photons: Five exploratory studies. *Journal of Anomalous Experience and Cognition*, 1(1-2).
- Shannon, C. E. (1948). A mathematical theory of communication. *Bell System Technical Journal*, 27, 379–423.

Psi as a threat – The poltergeist case of Carol Compton

Gerhard A. Mayer

Institute for Frontier Areas of Psychology and Mental Health, Freiburg Breisgau, Germany

Introduction: There is a long, although not often addressed, discussion in the parapsychological literature about the fear of psi. One area is the reactions of skeptical scientists and journal editors to experiments and articles by parapsychologists, with the former being devalued as pseudo-scientific and the latter being rejected or censored (e.g. Cardeña, 2015). However, the fear of psi is not only found outside our field of research, but also within it. According to some psychologists, this is true for most people, as the assumption that the existence of psi is connected to themselves gives rise to a variety of possible fears related to the issue of the uncontrollability of the world (Eisenbud, 1967; Tart, 1984). Kenneth Batcheldor identified two types of resistance with participants in sitter-group experiments: the “ownership resistance” and the “witness inhibition” (Batcheldor, 1984). Stephen Braude took up some of these considerations and gave an overview from a philosopher’s perspective (Braude, 2008).

The case: In my presentation, I will take up another aspect of possible fear of psi that has so far received little attention. By reconstructing a historical case study, I will show what consequences the broad public acceptance of psi could have for the administration of justice. In 1982/1983, a legal case attracted international attention when a young Scottish woman, Carole Compton, who was working as a nanny in Italy, was charged with arson and attempted murder (Compton & Cole, 1990). There were a total of five fires at two different places where she worked, including bed mattresses that caught fire.

Due to the peculiarities of the Italian legal system at the time, she was imprisoned and found herself in a helpless situation. The parapsychological community learned of this and interpreted the fires as RSPK phenomena. The German parapsychologist Prof. Hans Bender interviewed the detainee in the Italian prison to get an idea of her psychological state and to check to what extent the criteria for an RSPK case were met. According to his assessment, this was the case. The burn marks of the mattresses furthermore showed inexplicable features that were untypical for “normal” burn marks. Bender then intended to act as a psychological court expert in the criminal trial to support the defendant, but this was ultimately not realized. The charge of attempted murder was dropped for lack of evidence, and the defendant was sentenced to two and a half years in prison for arson and attempted arson – apparently without any evidence. Due to the long pre-trial detention, Carole’s remaining sentence was waived.

Method: The case is reconstructed on the basis of archive material including correspondences, protocols, and interview materials, which are available in the archive of the IGPP. In addition, Compton (together with Gerald Cole) published in 1990 a book on her experiences as a biographical report. Particular attention is paid to the role and reception of parapsychology by the public, the media, the legal profession, and the courts. Other sources that are included in the reflections on the consequences of the consideration of psi by the judiciary are academic works on German criminal law and superstition, witchcraft, magic and extrasensory perception (e.g. Dorn-Haag, 2016).

Findings and discussion: This case is a perfect example of how strongly the judiciary of Western-style countries is shaped by the idea of a rationalistic reality based on classical principles of causality and how its smooth functioning depends on it. The case was a feast for the tabloids. Compton was portrayed as a “witch girl.” She was unable to distinguish such forms of superstition from psychodynamic poltergeist interpretations by parapsychologists and misunderstood Bender’s aim to help her. She feared being declared insane by a psychiatric expert. She did not see herself as the cause of the fires, however they may have happened. The defense attorney was unsure of the effect of a parapsychological interpretation on the judge and the jurors and, therefore, chose a pragmatic strategy that did not rely entirely on a parapsychologically-based claim of innocence and finally dispensed with an expert opinion from Bender. He had cautiously put forward the parapsychological explanation as a hypothesis and asked the prosecutor to consider the latest developments in parapsychological theory in view of the lack of evidence, but the prosecutor “only and from his point of view (and that of Italian law) scoffed at any inference in this regard” (letter from Sergio Minervini to Paola Giovetti from November 19, 1984; archive of the IGPP, E/23_Fall “Carole Compton [1982–1984]). The court accepted an implausible factual situation regarding the origin of the fires, disregarding the expert opinions of the fire experts concerning the unusual burn marks. They accepted an “irrational” explanation of the causes of the fires in order to avoid having to resort to parapsychological explanatory models. In a telephone conversation with journalist Paola Giovetti, Bender called this “an embarrassment to the judiciary. They needed something to justify the one-year remand”, to which Giovetti commented, “The fires have not been proven. (...) Apparently, the judges were also perplexed. The paranormal hypothesis was mentioned a lot, but the judge didn’t want to consider it” (transcript of a telephone conversation from December 21, 1983; *ibid.*).

The dilemma for the jurisdiction becomes obvious: If one understands psi phenomena in a psychodynamic interpretation as an externalization of inner psychological tensions, for example, as sup-

pressed aggression towards another person, and accepts them as real, then the question of causation, responsibility, and guilt arises anew. As long as psi phenomena can be legally treated as belonging to the realm of superstition, the court can find regulations on the basis of a physicalist model of the world. But if court members and the public accept the spontaneous combustion of a bed mattress through a mind-matter interaction, then an image quickly appears on the horizon that is reminiscent of medieval and early modern witch trials, because this mind-matter interaction could also have been initiated deliberately and consciously. Like the skeptics, representatives of jurisprudence would hardly admit that they were afraid of psi, because it would be irrational to show fear of something that, in their opinion, does not exist or should not exist at all.

Conclusion: Psi, therefore, not only generates “fears” among skeptics, parapsychologists, and participants in parapsychological experiments, because as a macro-phenomenon it not only shakes the foundations of our prevailing scientific worldview and the scientific community based on it, but also confronts modern jurisprudence with great difficulties. Due to the social relevance, it must therefore be assumed that the “official” acceptance of particularly large-scale psi phenomena will take a long time for pragmatic reasons alone and independently of the experimental findings.

References

- Batcheldor, K. J. (1984). Contributions to the theory of PK induction from sitter-group work. *Journal of the American Society for Psychical Research*, 78(2), 105–122.
- Braude, S. (2008). The fear of psi: It's the thought that counts. In G. Taylor (Ed.), *Darklore, Volume 2*. Daily Grail Publishing. https://www.academia.edu/2643579/_The_Fear_of_Psi_Its_the_Thought_that_Counts_
- Cardeña, E. (2015). The unbearable fear of psi: On scientific suppression in the 21st century. *Journal of Scientific Exploration*, 29(4), 601–620.
- Compton, C., & Cole, G. (1990). *Superstition: The true story of the nanny they called a witch* (1st ed.). Ebury. <https://katalog.ub.uni-freiburg.de/link?kid=1606636545>
- Dorn-Haag, V. J. (2016). *Hexerei und Magie im Strafrecht: Historische und dogmatische Aspekte*. Mohr Siebeck.
- Eisenbud, J. (1967). The problem of resistance to psi. *Proceedings of the Parapsychological Association*, 3, 63–79.
- Tart, C. T. (1984). Acknowledging and dealing with the fear of psi. *Journal of the American Society for Psychical Research*, 78, 133–143.

Online group pk experiments: Recent results and hypothesis testing

James McClenon

Chesapeake, VA, USA

Introduction: This presentation updates findings from a previous series of online group PK experiments, completed in February 2023 (McClenon, 2021, 2024). Participants met weekly online, at multiple locations, passively seeking to influence pinwheels viewed by cameras in a closed room. A motion-activated camera recorded pinwheel turning frequency, pinwheel speed, and participant conversations. This allowed the evaluation of three hypotheses, all achieving statistical significance. Hypothesis #1: Pinwheel turning would be greater during group meetings than during equivalent non-meeting times (group meeting hypothesis). Hypothesis #2: Direct observation, indicated by participant conversation, would be associated with reduced pinwheel turning (direct observation hypothesis). Hypothesis #3: Rapid turning would occur more often during conversations involving psychical research, anomalous experience, occult traditions, and psychic readings than during miscellaneous conversations (conversation content hypothesis).

The previous experiments also generated qualitative observations: (1) The group perceived that the pinwheels turn more rapidly during conversations with emotional content. (2) Pinwheel behavior exhibits *psi trickster* characteristics (Kennedy, 2024). Experimental scrutiny was associated with reduced pinwheel turning, equipment failures, and unexpected, quirky events such as poltergeist-like phenomena.

Hypotheses and Theory: The study draws on hypotheses derived from Batcheldor's artifact induction model (Batcheldor, 1984; Batcheldor & Giesler, 1994) and the ritual healing theory (McClenon, 1997, 2002, 2021). Batcheldor hypothesized that exposure to artifacts (normal processes that seem paranormal, such as unconscious pushing of the table by table-tipping groups) helps overcome psychological barriers that thwart psi. These barriers include *fear of psi* and *ownership resistance* (the desire to avoid responsibility for generating PK). Participants can overcome these obstacles through exposure to artifacts, resulting in belief and allowing authentic psi to occur (artifact induction). Batcheldor's groups found that table-tipping phenomena declined when experimental controls were increased, causing him to revise his model to include innovative ideas regarding consciousness (Batcheldor & Giesler, 1994). Although Batcheldor's model explains psi's elusive qualities, it has received only limited parapsychological evaluation (Wehrstein, 2018).

The ritual healing theory hypothesizes that artifact induction shaped Paleolithic shamanism (McClenon, 1997, 2002, 2021, 2024). The theory argues that Paleolithic people, gathering around fires over many millennia, discovered ways to experience collective psi and that these endeavors resulted in shamanic rituals. Over the millennia, shamanic healing provided survival benefits to those with dissociative and hypnotic propensities, shaping modern genetic propensities for dissociation, spirituality, and religiosity. The theory implies that modern researchers should be able to experience contemporary forms of collective PK. The present study, a social psychological field experiment, evaluates this hypothesis while seeking insights regarding artifact induction processes.

Methods: The present paper describes data from 42 experiments (Feb. 2023 - Feb. 2024), evaluating the previous three quantitative hypotheses. Geographically distant participants, varying in number from two to five, watched a camera focused on three pinwheels located in the researcher's closed-off meditation room. Two motion-activated cameras documented the number of pinwheel turning events, speed of pinwheel turning during each activation, and conversations during each activation. A coding system (McClenon, 2024) allowed classifying conversation topics thought to affect pinwheel turning. Hypothesized topics include *psychical research*, *anomalous experience*, *occult traditions*, *psychic reading*, and *observation of pinwheel turning*. All other conversations were coded as *miscellaneous*. The three original hypotheses were evaluated by comparing: (1) camera activations during group meetings to activations during equivalent non-meeting times (group meeting hypothesis). (2) pinwheel turning speed during direct observation of pinwheels (noted during conversations) to turning during all other conversations (direct observation hypothesis). (3) turning speed during conversations regarding predicted conversation to conversations involving miscellaneous topics (conversation content hypothesis).

Results: Hypothesis #1: Average camera activation, quantifying pinwheel turning during experimental periods (19:00-22:00) was 65.6/session. During equivalent non-experiment periods, average camera activation was 12.8/session ($t = 5.42$, $p = .000003$, significant at the .01 level). This finding supports hypothesis #1, implying that group meetings enhanced pinwheel turning.

Hypothesis #2: Unlike the previous series, direct observation (indicated by conversations during camera activations) was associated with more rapid turning compared to other conversations (chi square = 7.4, $df = 1$, $p = .006$, significant at the .01 level). This relationship was opposite of that predicted by hypothesis #2; direct observation did not thwart pinwheel turning.

Hypothesis #3: During the first two months of this series (Feb.-Mar.), there were seven sessions with low pinwheel activity. In April and May, complete transcription of all conversations became problematic due to time constraints and highly robust pinwheel activity. For seven experiments, transcriptions for the most rapid turns were compared to transcriptions associated with the slowest turns. Analyses found patterns in the predicted direction, but, overall, the evidence was inconclusive. During seven sessions, there were sporadic, unexplained audio failures, resulting in missing data. After late July, all pinwheel-turning conversations were transcribed and categorized.

Although equipment failures and incomplete conversation coding reduced methodological validity, hypothesis #3 was evaluated using all available transcriptions. Turning speeds during conversations pertaining to predicted conversation variables (psychical research, anomalous experience, occult traditions, and psychic readings) were significantly greater than during miscellaneous conversations (chi square = 19.3, $df = 1$, $p = .00001$, sig. at 0.01 level). This result coincided with participants' strong subjective impressions. Statistical evaluations excluding sessions with missing data were also highly significant. There was no evidence that missing data deviated from general patterns to a degree that would negate significant findings. Overall, the analyses supported hypothesis #3: predicted conversation topics tended to coincide with rapid pinwheel turning.

Further qualitative observations included: (1) Pinwheels turned rapidly and simultaneously during emotion-laden statements. (2) Equipment failures and other quirky outcomes, which included polter-

geist-like events, had qualities that implied *psi trickster* effects. (3) Participants regarded pinwheel turning behavior as anomalous.

Discussion: Although the hypothesis #2 result coincided with the commonsense argument that people tend to perceive, and take note of, rapid pinwheel turning, this result was at variance with previous findings. Batcheldor's model might suggest that repeated exposure to pinwheel turning reduced fear of psi, allowing further experiences. The average frequency of camera activation during this series was about twice that of the previous series, suggesting that obstacles to anomalous experience had declined.

Conclusion: These experiments support Batcheldor's model regarding variables facilitating or inhibiting group PK. The results also coincide with the ritual healing hypothesis that modern groups can successfully experience compelling PK-like events and that Paleolithic people probably discovered equivalent strategies. Although social scientific field experiments do not prove that PK is *real*, these experiments offer insights regarding collective anomalous experiences.

References

- Batcheldor, K. (1984). Contributions to the theory of PK induction from sitter-group work. *Journal of the American Society for Psychical Research*, 78, 105-122.
- Batcheldor, K., & Giesler, P. (1994). Notes on the elusiveness problem in relation to a radical view of paranormality. *Journal of the American Society for Psychical Research*, 88, 91-111.
- Kennedy, J. E. (2024). Coming to terms with the trickster. *Journal of Scientific Exploration*, 38, 110-121.
- McClenon, J. (1997). Shamanic healing, human evolution, and the origin of religion. *Journal for the Scientific Study of Religion*, 36, 345-354.
- McClenon, J. (2002). *Wondrous healing: Shamanism, human evolution, and the origin of religion*. Northern Illinois University Press.
- McClenon, J. (2021). Ritual healing theory: Qualitative evaluation of a group PK experiment. Presentation at the 2021 joint meeting of the Society for Scientific Exploration and Parapsychological Association. <https://youtu.be/clb0fg8Bhkw>
- McClenon, J. (2024). Online group PK experiments: Hypothesis testing and theory development. *Journal of Scientific Exploration*, 38(2), 296 – 113.
- Wehrstein, K. M. (2018). Kenneth Batcheldor. *Psi Encyclopedia*. London: The Society for Psychical Research. <https://psi-encyclopedia.spr.ac.uk/articles/kenneth-batcheldor>. Retrieved April 11, 2023.

Cognitive styles and Psi: Psi researchers are more similar to skeptics than to lay believers

Marieta Pehlivanova & Bruce Greyson

Division of Perceptual Studies, Department of Psychiatry and Neurobehavioral Sciences, University of Virginia School of Medicine, Charlottesville, VA, USA

Introduction: Individual differences in psi belief are associated with factors related to demographics, personality, cognition, and culture (Dean et al., 2022; French, 1992; Gray & Gallo, 2016; Irwin, 1993) prompting the need for a comprehensive review. The current systematic review aims to identify the reported associations between paranormal beliefs and cognitive functioning, and to assess study quality. Method We searched four databases (Scopus, ScienceDirect, SpringerLink, and OpenGrey. According to leading hypotheses, high belief in psi can be explained by deficits in cognition, including critical and scientific thinking, reasoning, and overall cognitive ability (Alcock, 1981; Irwin, 1993). This hypothesis has received support, although findings have been mixed depending on the domain, methodology, and population studied (Dean et al., 2022; Gray & Gallo, 2016; Irwin, 1993) prompting the need for a comprehensive review. The current systematic review aims to identify the reported associations between paranormal beliefs and cognitive functioning, and to assess study quality. Method We searched four databases (Scopus, ScienceDirect, SpringerLink, and OpenGrey. According to a recent review (Dean et al., 2022) prompting the need for a comprehensive review. The current systematic review aims to identify the reported associations between paranormal beliefs and cognitive functioning, and to assess study quality. Method We searched four databases (Scopus, ScienceDirect, SpringerLink, and OpenGrey, high psi belief is consistently associated with increased intuitive thinking (quick and emotion-based) and bias towards confirmatory evidence. Differences in self-reported cognitive styles—how people perceive and process information— have also been associated with different levels of psi belief (Dean et al., 2022; Gray & Gallo, 2016) prompting the need for a comprehensive review. The current systematic review aims to identify the reported associations between paranormal beliefs and cognitive functioning, and to assess study quality. Method We searched four databases (Scopus, ScienceDirect, SpringerLink, and OpenGrey. In particular, greater belief in psi correlates with lower “actively open-minded thinking” (AOT)—a rational disposition marked by extensive exploration of alternatives and evidence to find the optimal answer, even if it contradicts one’s beliefs (Pennycook et al., 2020; Rizeq et al., 2021; Stanovich & West, 1997) values, and opinions. Participants indicated the extent to which they think beliefs (Study 1. Collectively, these findings suggest that individuals endorse psi beliefs at least partially on the basis of emotion and insufficient consideration of conventional explanations for seemingly anomalous occurrences.

One area of inquiry that remains unexplored is whether these associations between cognition and psi belief extend to academics engaged in psi research. The majority of studies investigating these links used undergraduate and/or general population samples (Dean et al., 2022) prompting the need for a comprehensive review. The current systematic review aims to identify the reported associations between paranormal beliefs and cognitive functioning, and to assess study quality. Method We searched

four databases (Scopus, ScienceDirect, SpringerLink, and OpenGrey. Yet, many psi researchers are trained scientists and scholars (Cardeña, 2014). Even though they may endorse the reality of psi (Irwin, 2014), they likely differ cognitively from lay believers. Among academics, high endorsement of psi phenomena as assessed on standardized measures of psi belief, may be strongly influenced by researchers' assessments of the experimental evidence on psi (Irwin, 2014).

Cognitive styles related to how one evaluates evidence and reaches conclusions are particularly relevant to the controversial nature of psi, as they may contribute to how researchers (whether proponents or skeptics) and lay individuals form beliefs about, or engage with, psi research. As it relates to evidence of psi, psi researchers have been accused of being poor thinkers, while skeptics have been viewed as uninformed dogmatists (Roe, 2017).

We investigated differences in cognitive styles among academic psi researchers, lay psi believers, academic skeptics, and lay skeptics. Specifically, we assessed AOT, "need for cognitive closure"—a disposition towards quick and definitive knowledge on an issue, avoiding ambiguity (Webster & Kruglanski, 1994), psi beliefs and experiences and examined differences among groups. This research sought to shed light on two questions: 1) Are psi researchers different from lay believers in how they approach knowledge, evidence, and ambiguity? 2) Are psi researchers—who are engaged in a field of study that often yields observations incompatible with mainstream scientific consensus—equally open to considering inconsistent evidence and equally motivated to search for the "correct" answer compared to skeptics?

Methods

Participants: The study included four participant groups: (1) 44 individuals who have engaged in academic psi research ("psi researchers"), recruited from parapsychology mailing lists (e.g., "Survival Net," an invitation-only international electronic mailing list for discussion of survival of consciousness, non-local consciousness, and related topics, and "Parapsychology Discussion List"), as well as institutions focusing on related research (e.g., the Institute of Noetic Sciences and the Windbridge Research Center); (2) 32 individuals identified as psi believers or enthusiasts not engaged in psi research ("lay believers"), recruited from large Facebook groups of interest in paranormal topics and through organizations with a focus on psi phenomena and/or psi research (e.g., the Monroe Institute); (3) 35 individuals who are academic or professional skeptics of psi ("academic skeptics"), recruited primarily among Fellows of the Committee for Skeptical Inquiry (CSI) and some academics who have been active contributors against psi research; (4) 33 individuals who are skeptics of psi, but not academics ("lay skeptics"), recruited through the Skeptical Inquirer blog—published by the CSI—and a Facebook group focused on skepticism.

Online Questionnaire: Participants completed an online questionnaire administered via Qualtrics and were offered a \$10 Amazon gift card upon completion. The questionnaire included three self-report measures described below. Additionally, we inquired about participants' socio-demographic characteristics, their professional involvement in psi research, and any feedback they wished to share.

Measures: The online questionnaire included: 1) The Noetic Experiences and Beliefs Scale

(NEBS)—a 20-item self-report questionnaire assessing psi beliefs and experiences as separate constructs (Wahbeh et al., 2020) we created the Noetic Experiences and Beliefs Scale (NEBS; 2) a 10-item AOT scale (adapted by Society for Judgment and Decision Making from 11-item version in Baron, 2019), assessing actively open-minded thinking as a dispositional cognitive trait; 3) a brief 15-item Need for Closure Scale assessing need for closure (Roets & Van Hiel, 2011) the Need for Closure (NFC—a disposition towards seeking quick and firm answers in order to avoid ambiguity.

Selected Results

Quantitative data: As anticipated, there were differences between the groups on both psi beliefs ($p < .0001$) and experiences ($p < .0001$), as measured by the NEBS. Post-hoc tests revealed that psi researchers and lay believers have significantly higher psi belief scores than both skeptic groups (all $ps < .0001$).

ANOVA revealed group differences in AOT ($p = .003$), but not in need for closure ($p = .67$). Post-hoc tests showed no significant difference in AOT between psi researchers ($M = 4.5$, $SD = 0.3$) and academic skeptics ($M = 4.5$, $SD = 0.3$; $p = .91$), as hypothesized. Psi researchers were also not significantly different in AOT scores from lay skeptics ($M = 4.5$, $SD = 0.4$; $p = .80$). Lay believers had significantly lower AOT scores ($M = 4.2$, $SD = 0.4$) than psi researchers ($p = .04$), academic skeptics ($p = .01$), and lay skeptics ($p = .005$).

Narrative data: Although not necessarily representative, certain comments by participants help contextualize differences and similarities between the groups. Some psi researchers commented on the appropriateness of asking about *belief* in psi presumably as the basis of one's interest in psi phenomena. Some skeptics stated an openness to the possibility of psi if the right evidence or explanation is presented, emphasizing the importance of evidence being "*valid and reproducible*" and "*indisputable*."

Discussion: Even though psi researchers reported significantly greater psi belief compared to academic skeptics, the two groups showed no difference in the cognitive styles of actively open-minded thinking and need for closure. These findings suggest that these two groups that are empirically and philosophically at odds with each other regarding evidence for psi phenomena nonetheless agree on the principles of "good" thinking about evidence (Baron et al., 2015). These principles encompass evaluating evidence that contradicts one's beliefs, being willing to update one's beliefs in light of new evidence, and being comfortable with ambiguity (Stanovich & Toplak, 2023) sensitivity to evidence contradictory to current beliefs, the willingness to postpone closure, and reflective thought. AOT scales are strong predictors of performance on heuristics and biases tasks and of the avoidance of reasoning traps such as superstitious thinking and belief in conspiracy theories. Nevertheless, AOT is most commonly measured with questionnaires rather than performance indicators. Questionnaire contamination becomes even more of a danger as the AOT concept is expanded into new areas such as the study of fake news, misinformation, ideology, and civic attitudes. We review our 25-year history of studying the AOT concept and developing our own AOT scale. We present a 13-item scale that both is brief and accommodates many previous criticisms and refinements. We include a discussion of why AOT scales are such good predictors of performance on heuristics and biases tasks. We conclude that it is because such

scales tap important processes of cognitive decoupling and decontextualization that modernity increasingly requires. We conclude by discussing the paradox that although AOT scales are potent predictors of performance on most rational thinking tasks, they do not predict the avoidance of myside thinking, even though it is virtually the quintessence of the AOT concept.”,”container-title”:”Journal of Intelligence”,”DOI”:”10.3390/jintelligence11020027”,”ISSN”:”2079-3200”,”issue”:”2”,”journalAbbreviation”:”J Intell”,”language”:”eng”,”note”:”PMID: 36826925\nPMCID: PMC9966223”,”page”:”27”,”source”:”PubMed”,”title”:”Actively open-minded thinking and its measurement”,”volume”:”11”,”author”:[{“family”:”Stanovich”,”given”:”Keith E.”},{“family”:”Toplak”,”given”:”Maggie E.”}],”issued”:{“date-parts”:[[“2023”,1,28]]}],”schema”:”https://github.com/citation-style-language/schema/raw/master/csl-citation.json”} .

Psi researchers showed greater levels of actively open-minded thinking compared to lay believers, indicating a greater willingness to consider a range of evidence when forming opinions, including evidence that contradicts their beliefs. These findings suggest there is a distinction between individuals engaged in academic psi research and those who are not but have a strong interest and belief in psi. Although this distinction is rarely or never made in research that focuses on believers’ cognition (Gray & Gallo, 2016), it is an important one for the proponents of psi research and its skeptics. Psi researchers rightfully view their public image as one of the major hurdles facing their field (Irwin, 2014). Thus, any evidence challenging the “deficit hypothesis” as it relates to their own cognition about the legitimacy of psi phenomena should be highlighted. Additionally, skeptics’ engagement with psi research—increasingly published in mainstream journals (Bem, 2011; Bösch et al., 2006; Cardeña, 2018; Freedman et al., 2023) whether those responses are conscious or nonconscious, cognitive or affective. This article reports 9 experiments, involving more than 1,000 participants, that test for retroactive influence by “time-reversing” well-established psychological effects so that the individual’s responses are obtained before the putatively causal stimulus events occur. Data are presented for 4 time-reversed effects: precognitive approach to erotic stimuli and precognitive avoidance of negative stimuli; retroactive priming; retroactive habituation; and retroactive facilitation of recall. The mean effect size (d)—will benefit from viewing psi researchers as fellow academics who may disagree rather than individuals prioritizing belief over evidence (Reber & Alcock, 2020).

Acknowledgements: This study was fully supported by a research grant from Fundação Bial (Grant N° 212/2020).

References

- Alcock, J. E. (1981). *Parapsychology, Science or Magic: A Psychological Perspective* (First Edition). Pergamon Press.
- Baron, J. (2019). Actively open-minded thinking in politics. *Cognition*, 188, 8–18. <https://doi.org/10.1016/j.cognition.2018.10.004>
- Baron, J., Scott, S., Fincher, K., & Emlen Metz, S. (2015). Why does the cognitive reflection test (sometimes) predict utilitarian moral judgment (and other things)? *Journal of Applied Research in Memory and Cognition*, 4(3), 265–284. <https://doi.org/10.1016/j.jarmac.2014.09.003>
- Bem, D. J. (2011). Feeling the future: Experimental evidence for anomalous retroactive influences on cognition and affect. *Journal of Personality and Social Psychology*, 100(3), 407–425. <https://doi.org/10.1037/a0021524>

- Bösch, H., Steinkamp, F., & Boller, E. (2006). Examining psychokinesis: The interaction of human intention with random number generators--A meta-analysis. *Psychological Bulletin*, 132(4), 497–523. <https://doi.org/10.1037/0033-2909.132.4.497>
- Cardeña, E. (2014). A call for an open, informed study of all aspects of consciousness. *Frontiers in Human Neuroscience*, 8. <https://www.frontiersin.org/articles/10.3389/fnhum.2014.00017>
- Cardeña, E. (2018). The experimental evidence for parapsychological phenomena: A review. *American Psychologist*, 73(5), 663–677. <https://doi.org/10.1037/amp0000236>
- Dean, C. E., Akhtar, S., Gale, T. M., Irvine, K., Grohmann, D., & Laws, K. R. (2022). Paranormal beliefs and cognitive function: A systematic review and assessment of study quality across four decades of research. *PLOS ONE*, 17(5), e0267360. <https://doi.org/10.1371/journal.pone.0267360>
- Freedman, M., Binns, M. A., Meltzer, J. A., Hashimi, R., & Chen, R. (2023). Enhanced mind-matter interactions following rTMS induced frontal lobe inhibition. *Cortex*. <https://doi.org/10.1016/j.cortex.2023.10.016>
- French, C. C. (1992). Factors underlying belief in the paranormal: Do sheep and goats think differently. *The Psychologist*, 5, 295–299.
- Gray, S. J., & Gallo, D. A. (2016). Paranormal psychic believers and skeptics: A large-scale test of the cognitive differences hypothesis. *Memory & Cognition*, 44(2), 242–261. <https://doi.org/10.3758/s13421-015-0563-x>
- Irwin, H. J. (1993). Belief in the paranormal: A review of the empirical literature. *Journal of the American Society for Psychical Research*, 87(1), 1–39.
- Irwin, H. J. (2014). The views of parapsychologists: A survey of members of the Parapsychological Association. *Journal of the Society for Psychical Research*, 78(915), 85–101.
- Pennycook, G., Cheyne, J. A., Koehler, D. J., & Fugelsang, J. A. (2020). On the belief that beliefs should change according to evidence: Implications for conspiratorial, moral, paranormal, political, religious, and science beliefs. *Judgment and Decision Making*, 15(4), 476–498. <https://doi.org/10.1017/S1930297500007439>
- Reber, A. S., & Alcock, J. E. (2020). Searching for the impossible: Parapsychology's elusive quest. *The American Psychologist*, 75(3), 391–399. <https://doi.org/10.1037/amp0000486>
- Rizeq, J., Flora, D. B., & Toplak, M. E. (2021). An examination of the underlying dimensional structure of three domains of contaminated mindware: Paranormal beliefs, conspiracy beliefs, and anti-science attitudes. *Thinking & Reasoning*, 27(2), 187–211. <https://doi.org/10.1080/13546783.2020.1759688>
- Roe, C. A. (2017). PA presidential address 2017: Withering skepticism. *Journal of Parapsychology*, 81(2), 143–159.
- Roets, A., & Van Hiel, A. (2011). Item selection and validation of a brief, 15-item version of the Need for Closure Scale. *Personality and Individual Differences*, 50(1), 90–94. <https://doi.org/10.1016/j.paid.2010.09.004>
- Stanovich, K. E., & Toplak, M. E. (2023). Actively open-minded thinking and its measurement. *Journal of Intelligence*, 11(2), 27. <https://doi.org/10.3390/jintelligence11020027>
- Stanovich, K. E., & West, R. F. (1997). Reasoning independently of prior belief and individual differences in actively open-minded thinking. *Journal of Educational Psychology*, 89(2), 342–357. <https://doi.org/10.1037/0022-0663.89.2.342>
- Wahbeh, H., Yount, G., Vieten, C., Radin, D., & Delorme, A. (2020). Measuring extraordinary experiences and beliefs: A validation and reliability study. *F1000Research*, 8, 1741. <https://doi.org/10.12688/f1000research.20409.3>
- Webster, D. M., & Kruglanski, A. W. (1994). Individual differences in need for cognitive closure. *Journal of Personality and Social Psychology*, 67(6), 1049–1062. <https://doi.org/10.1037/0022-3514.67.6.1049>

The intersection of psychotherapy and near-death experiences: Schmeidler Outstanding Student Award (2021) invited address

Erika Annabelle Pratte

Anomalies Research, Counselling, & Consultation, London, UK

Introduction: Near-death experiences (NDEs) are spontaneous, exceptional psychological events characterized by perceptions of movement through light and darkness, encounters with spiritual beings, intense emotions, and a profound understanding of the universe. These experiences can occur during life-threatening situations or unexpectedly without physical trauma. According to Moody (1977), common features include:

- Hearing one's own declaration of death
- Out-of-body experiences (OBEs)
- Encounters with a dark tunnel or radiant light
- Meetings with deceased individuals or spiritual beings
- Panoramic life reviews
- Feelings of tranquility and boundless love
- Ineffability of the experience

Near-death experiencers (NDErs) may seek therapy for various reasons, including difficulties in personalizing emotions, integrating new spiritual values, navigating social relationships, and processing the demarcation of life before the NDE and life after near-death. They often face challenges in communication, relationships, and adjusting to a radical shift in reality. Therapists should aim to help NDErs process both primary and secondary aftereffects of their experiences. Primary aftereffects include personality changes directly caused by the NDE, while secondary aftereffects involve struggles related to these changes, such as social isolation and rejection. Addressing social challenges, improving life satisfaction, and discovering life purpose are crucial for effective integration (Pratte, 2021;2022).

Integration – The Goal of Psychotherapy: Integration is the process of fully embracing and organizing an NDE into one's life, maintaining health and well-being. It involves ongoing development and achieving a balance where the experience is consciously acknowledged without hindering present functioning. The exploration of how mental health professionals may best aid in integration has been nodded at by the research community but never fully embraced. Literature is very much lacking and therefore, so is support for NDErs (Greyson & Harris, 1987).

References

- Greyson, B., & Harris, B. (1987). Clinical approaches to the near-death experiencer. *Journal of Near-Death Studies*, 6(1), 41–52. <https://doi.org/10.1007/bf01073267>
- Moody, R. (1977). *Reflections on life after life*. Mockingbird.
- Pratte, E. A. (2021). Wellbeing impacts and clinical implications of near-death experiences (dissertation).
- Pratte, E. A. (2022). Near-death experiences and psychological wellbeing: A quantitative analysis. *Journal of Parapsychology*, 86(1), 99–124. <https://doi.org/10.30891/jopar.2022.01.05>

Are my deceased loved ones still with me?: Mourning and hope in mediumistic practices

Jorge Villanueva & Mariano Villalba

Instituto de Psicología Paranormal, Buenos Aires, Argentina

Introduction: Inspired by previous studies (Beischel, Mosher, & Boccuzzi, 2015; Cooper, 2017; Cox, Cooper, & Smith, 2017; Evenden, Cooper, & Mitchell, 2013), we designed a study to compare a sample of medium's clients with another sample composed of no-mediums' clients (religious widows). We planned additionally to determine the covariation between the degree of distress over the loss of a loved one and the degree of hope remaining in the lives of the bereaved, as well as a number of unusual sensory experiences. It was hypothesized (H1) that the medium's clients would experience a greater degree of complicated grief compared to that of religious widows, as well as (H2) less hope compared to that of religious widows, but (H3) that a negative and significant relationship would be found between complicated grief and hope in the medium's clients.

Methods

Participants: Two samples were used: thirty women who were looking for a medium to facilitate spiritual communication with their deceased loved ones (the "medium" group), mean age 51 years, whose time since the death until the moment of completing the instruments was from one to 20 years (Mean = 6.13 years). Fifty-six percent of this sample was without a current partner (only 40% were in a relationship). The second sample to compare with the mediums' clients, were thirty women, all widows, with an age mean 60 years old, who had lost their spouses in a period between three and nine years earlier (Mean = 3.73 years) at the time of completing the instruments. Fifty-six percent were without a current partner, and 26% were living with a partner.

Instruments: A questionnaire was administered with questions related to sex, age, marital status, religion, and spirituality (self-perceived). Three scales were also used, including the *Complicated Grief Inventory* (Prigerson, 1995; Gamba-Collazos & Navia Arroyo, 2017), the Hope Scale (Herth, 1991; Arnau et al., 2007; Martínez Uribe, Cassaretto, Bardales, & Herth, 2012), and the Unusual Perceptual Experiences Questionnaire.

Procedure: The religious widows were part of a previous study of 160 religious widows from whose database 30 cases were selected, matched by age and time after their loss. For both samples, each participant produced a signed consent. The data were treated with confidentiality and anonymity in their responses. Any cases of incomplete or incorrectly answered questionnaires were excluded from the sample; moreover, the medium's clients must (1) have requested his guidance for the first time, and (2) done so a year or more after the death of their loved one, while the religious widows (3) had to have been widowed for more than one year at minimum, and (4) had been married/partnered for five years or more. A medium (LK) was willing to cooperate in this study with his own clients. Small groups of 5 to 20 women, who were gathered at the Institute of Paranormal Psychology over a period of eight months at the rate of one Saturday afternoon a month, were summoned by the medium for individual readings, at the end of which they were invited to complete the three instruments.

Results: H1 predicted that the medium's clients would have experienced a greater degree of complicated grief than the religious widows, which was confirmed ($z = 3.57, p < .001, d_{\text{Cohen}} = .62$), along with the subscales referring to the memories of the deceased ($p = .01, d_{\text{Cohen}} = 1.06$), and Feelings of Emptiness and Presence of the Deceased (both $p < .001, d_{\text{Cohen}} = .85$, and $d_{\text{Cohen}} = .91$). H2 predicted that the medium's clients experienced less hope than the religious widows, which was confirmed ($z = 3.52, p < .001, d_{\text{Cohen}} = .94$), particularly on the Optimism ($p < .001, d_{\text{Cohen}} = .83$) and Hopelessness subscales (in favor of the medium's clients, $p = .006, d_{\text{Cohen}} = .70$). Finally, H3 predicted that the mediumship clients would experience a greater frequency of unusual perceptual experiences than the religious widows, which was confirmed ($z = 4.16; p < .001, d_{\text{Cohen}} = .13$), as well as the six perceptual modalities (Auditory $d_{\text{Cohen}} = .66$, Visual $d_{\text{Cohen}} = .99$, Gustatory/Olfactory $d_{\text{Cohen}} = 1.06$, Tactile $d_{\text{Cohen}} = .12$, HG/HP $d_{\text{Cohen}} = .94$). H4 predicts that, in the cases of mediumistic clients, a negative correlation will be found between complicated grief and hope, which was confirmed ($r_s = -.37, p = .02$), particularly in Optimism ($r_s = -.56, p = .001$), Agency ($r_s = -.54, p = .001$), and Hopelessness (positive, $r_s = .69, p < .001$). On the other hand, for the religious widows, no significant relationships were found; in fact, overall, 17 (85%) correlations were presented for the mediumistic clients in contrast to six (30%) for the religious widows.

Discussion: The results showed that the medium's clients experienced greater difficulty in processing the pain of loss, particularly in terms of difficulty in carrying out daily tasks due to their memories, greater pessimism and hopelessness, and avoidance behaviors associated with painful memories of the deceased, in comparison with the religious widows. Conversely, the widows showed more optimism and less hopelessness than the mediumistic clients, but they also showed greater discouragement and helplessness regarding the future. The medium's clients also experienced a greater frequency of unusual perceptual experiences than the religious widows in the six sensory modalities (hearing voices, seeing the deceased, smelling perfumes, sensation of physical contact, and other experiences on the threshold of sleep or upon awakening). Certainly, we must recognize that this study has a small number of limitations; for example, it evaluates mediumistic clients who have lost a wide spectrum of loved ones (from friends and spouses to parents/grandparents and children), in contrast to a small sample of widows alone.

References

Arnau, R., Rosen, D., Finch, J., Rhudy, J., & Fortunato, V. (2007). Longitudinal effects of hope on depression and anxiety: A latent variable analysis. *Journal of Personality, 75*(1), 43-63.

- Beischel, J. (2014). Investigating mediums: A Windbridge Institute Collection. Tucson, AZ: Blurb.
- Beischel, J., Mosher, C., & Boccuzzi, M. (2015). The possible effects on bereavement of assisted after-death communication during readings with psychic mediums: A continuing bonds perspective. *Omega: Journal of Death and Dying*, 70, 169-194.
- Evenden, R. E., Cooper, C. E., & Mitchell, G. (2013). A counselling approach to mediumship: Adaptive outcomes of grief following an exceptional experience. *Journal of Exceptional Experiences and Psychology*, 1, 1219.
- Cox, C., Cooper, C., & Smith, M. D. (2017). Exploring the effects of mediumship on hope, resilience, and post-traumatic growth in the bereaved. *Journal of Exceptional Experiences and Psychology*, 5(2), 6-15.
- Gamba-Collazos, H. A., & Navia Arroyo, C. E. (2017). Adaptation of the *Inventario de Duelo Complicado* published in Colombia. *Revista Colombiana de Psicología*, 26, 15-30.
- Herth, K. (1991). Development and refinement of an instrument to measure hope. *Scholarly Inquiry for Nursing Practice*, 5(1), 39-51.
- Martínez, P., Cassaretto, M., & Herth, K. (2012). Propiedades psicométricas de la *Escala de Esperanza de Herth* en español. *Revista Iberoamericana de Diagnóstico y Evaluación Psicológica*, 33(1), 127-145.
- Prigerson, H. G. (1995). Inventory of Complicated Grief: A scale to measure maladaptive symptoms of loss. *Psychiatry Research*, 59, 65-79.

The noetic signature inventory norms and patterns

Helané Wahbeh, Beth Glick, & Michael Kreigsman
Institute of Noetic Sciences, Novato, CA USA

Introduction: This study builds upon previous research on the Noetic Signature Inventory (NSI: Wahbeh, Fry, & Speirn, 2022; Wahbeh, Fry, Speirn, et al., 2022; Wahbeh & Kreigsman, 2023), which is based on a 12-factor model that describes how people experience noetic information and demonstrated internal consistency, convergent and divergent content validity, and test-retest reliability. The 12-factors are: (1) General Intuition, (2) Embodied Sensations, (3) Visualizing to Access or Affect, (4) Inner Knowing Through Touch, (5) Healing, (6) Knowing the Future, (7) Physical Sensations from Other People, (8) Knowing Yourself, (9) Knowing Other's Minds, (10) Apparent Communication with Non-physical Beings, (11) Knowing Through Dreams, and (12) Inner Voice (Wahbeh, Fry, et al., 2022). In a recent confirmatory factor analysis, the chi square statistic equaled 2866.65 with 836 degrees of freedom and $p < .001$. The model diagnostics demonstrated a very good model fit to the data. All 44 items had factor loadings above the 0.5 cutoff, ranging from 0.58 to 0.77, with an average factor loading of 0.71 (Wahbeh & Kreigsman, 2023). The objectives of this study were to evaluate norms and patterns of the twelve factors of the Noetic Signature Inventory by answering three research questions.

1. What are the norms for the 12 factors by age, gender identification, and ethnic identification? (no *a priori* hypothesis)
2. What are the relationships between the 12 factors?
3. We hypothesized the following groupings of the 12 factors *a priori*: 1) Embodied Sensations, Inner Knowing Through Touch, and Physical Sensations from Other People, 2) Apparent Commu-

nication with Non-Physical Beings and Inner Voice; 3) Visualizing to Access/Affect and Healing, 4) Intuition and Knowing Yourself, and 5) Knowing the Future, Knowing Others' Minds, and Knowing Through Dreams.

4. Are there patterns within individuals such that "types" of noetic signatures emerge? (no *a priori* hypothesis).

Methods: This is a cross-sectional study of a convenience sample of global participants who provided demographic information and completed the Noetic Signature Inventory (NSI). This dataset was analyzed to evaluate norms, relationships between the 12 factors, and patterns of noetic "types." Participants were recruited from multiple sources, including the Institute of Noetic Sciences (IONS) website, social media, newsletters, and a participant recruiting firm. Inclusion criteria for all data collection were: (1) age 18 years or older, (2) fluent in English, (3) having had a prior noetic experience, (4) agreeing to the study consent form, and (5) completed all items of the NSI. All participants signed an informed consent to participate in the study, and all study activities were approved and overseen by the Institutional Review Board at the Institute of Noetic Sciences (IORG#0003743).

Participants entered their age, gender identification, education, ethnic identification, and country. The NSI is a 44-item subjective questionnaire that evaluates 12 factors of intuitive inner knowing (Wahbeh, Fry, & Speirn, 2022). Each item is answered on a sliding scale anchored by Strongly Disagree (0), Neither Agree Nor Disagree (50) and Strongly Agree (100). The resulting scores include 12 factor scores and one total NSI score (NSI_Global) calculated by averaging the 12 factor scores.

Means and standard deviations were calculated for age categories, gender, and ethnic identification variables. Principal Component Analysis (PCA) explored between-factor similarity structure in orthogonal space. Cluster analysis evaluated patterns or noetic "types" across participants.

Results: Participants ($n = 3,884$) completed the NSI between January 26, 2021 and January 11, 2024. The means and standard deviations in ascending order were: Inner Knowing Through Touch 42.5 ± 29.6 ; Embodied Sensations 43.3 ± 23 ; Physical Sensations from Other People 56.8 ± 29.3 ; Healing 56.7 ± 30.6 ; Visualizing to Access or Affect 61.7 ± 25.9 ; Knowing Others' Minds 57.6 ± 26.4 ; NSI_Global 62 ± 17.6 ; Apparent Communication with Non-Physical Beings 66.6 ± 24.3 ; Inner Voice 69.2 ± 29 ; Knowing the Future 71.3 ± 23.5 ; Knowing through Dreams 69.6 ± 27.6 ; Intuition 74.3 ± 17.4 ; and Knowing Yourself 74.3 ± 21.8 . Participants aged 40 to 69 represented 59.2% of the participants. More participants identified as female (70%) than male (29%) and another gender identification (1%). The ethnic identification breakdown for those who answered the question ($n=3,773$) was: Native American (430, 11.4%); Native Pacific Islander (47, 1.2%); Asian (221, 5.9%); African (208, 5.5%); Middle Eastern (80, 2.1%); Latino/a or Hispanic (326, 8.6%); and European (2902, 76.9%).

The PCA identified seven-factor groupings, four consistent with the hypothesized groupings (1 to 4). However, the statistical analysis did not support the hypothesized group 5, which included Knowing the Future, Knowing Others' Minds, and Knowing Through Dreams. In fact, the data suggested that each of these factors was distinct and should be treated separately (Figure 1).

The Cluster Analysis revealed that the noetic patterns seen in the ribbon plot of five clusters revealed two general effects; the most prominent characteristic of the noetic patterns was the magnitude

of the overall noetic level. The second most prominent was the variability of Knowing through Dreams (and less so on Precognition). In the ribbon plot, there was one cluster with generally high scores, one with generally low scores, and three with mid-range scores, distinguished mainly by their scores on Knowing through Dreams and Knowing the Future (Figure 2). Notably, we do not posit that these five clusters in Figure 2 are necessarily replicable, but more so (using ANOVA-like terminology) that the (potentially replicable) pattern of variability is akin to a main effect of noetic score with an interaction on Dreams.

Discussion: Dreams can categorize individuals based on their ability to receive noetic information through them. Factors such as dream recall, cultural beliefs, cognitive systems, personality traits, and brain asymmetry may contribute to individual differences in noetic dreaming experiences. In addition, sleep is an altered state of consciousness that may facilitate access to noetic information by relaxing cognitive filtering. Further research is required to understand the relationship between individual noetic expression, dream experiences, and access to noetic information.

	Factor Names	Abbrev	Hypothesized 5	Final 7 Super-Factors
8	<i>Knowing Yourself</i>	KnowSelf		Applied Intuition
1	<i>General Intuition</i>	Intuition		
11	<i>Knowing through Dreams</i>	Dreams		Dreams
6	<i>Knowing the Future</i>	Precognition		Precognition
12	<i>Inner Voice</i>	InnerVoice		Inner Listening
10	<i>Apparent Communication with Non-Physical Beings</i>	Beings		
9	<i>Knowing Others' Minds</i>	Telepathy		Telepathy
3	<i>Visualizing to Access or Affect</i>	Visualize		Intention Effect
5	<i>Healing</i>	Healing		
7	<i>Physical Sensations from Other People</i>	SenseOthers		Embodied Wisdom
2	<i>Embodied Sensations</i>	EmbSens		
4	<i>Inner Knowing through Touch</i>	Touch		

Figure 1. Super-Factor Structure. The 12 factors are listed here in the same descending order as depicted in all other applicable figures. Color-coding depicts the alignment between the (5) hypothesized super-factors and the final set of (7) super-factors that we investigate in this manuscript.

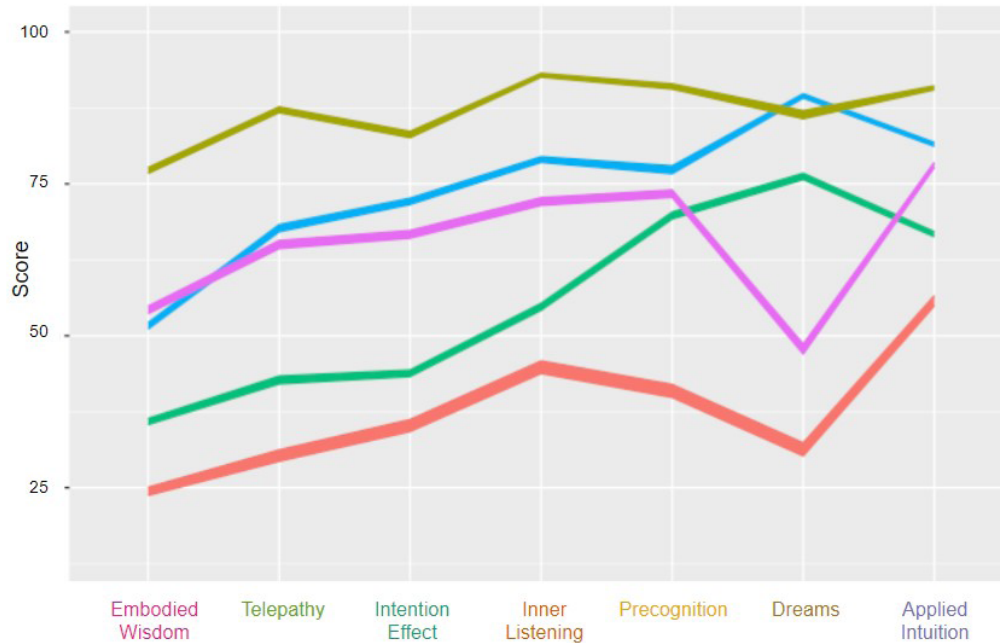


Figure 2. Noetic Patterns across Super-Factors. The ribbons represent means and standard errors for participant patterns for the five observed noetic patterns selected based on cluster analyses. After inspecting many clustering solutions, this one was selected as representative, not because these five noetic profiles are necessarily replicable, but more so because they reflect an intersection of two effects: the overall noetic magnitude across super-factors, and the particularly variable scores on the Dreams super-factor.

References

- Wahbeh, H., Fry, N., & Speirn, P. (2022). The Noetic Signature Inventory: Development, exploration, and initial validation. *Frontiers in Psychology*, 13. <https://www.frontiersin.org/articles/10.3389/fpsyg.2022.838582>
- Wahbeh, H., Fry, N., Speirn, P., Hrnjic, L., Ancel, E., & Neibauer, E. (2022). Qualitative analysis of first-person accounts of noetic experiences [version 3; peer review: 2 approved]. *F1000Research*, 10(497), 497. <https://doi.org/10.12688/f1000research.52957.3>
- Wahbeh, H., & Kriegsman, M. (2023). The Noetic Signature Inventory: 12-factor confirmatory analysis. *F1000Research*, 12, 828.

ABSTRACTS OF BRIEFS

The return of a high performing psi participant: Behavioral results of an ESP task with EEG

David J. Acunzo, James E. Lenz, W. J. Ross Dunseath, Elizabeth Hanchak, & Edward F. Kelly
University of Virginia, Charlottesville, VA, USA

Introduction: One approach towards understanding the nature and characteristics of what facilitates psi experiences and phenomena is to study the neural activity of participants while they engage in an overt psi task. Few studies have successfully reported a significant psi effect while concurrently measuring brain activity. Most of them date back to the 60s and 70s using electro-encephalography (EEG), but their scope is strongly limited by the EEG systems used. These only used a few concurrent channels, and EEG quantification and processing methods were limited predating the advent of digital acquisition and personal computing (Krippner & Friedman, 2010; Williams, 2011, 2015).

The current study intends to pursue a similar approach using contemporary EEG acquisition and analyses methods with a high-performing participant at various laboratory psi tasks, participant B.D. This participant has been involved in a series of studies that took place approximately 50 years ago (Kanthamani & Kelly, 1974b, 1974a, 1975; Kelly, 1982; Kelly et al., 1975; Kelly & Kanthamani, 1972).

Methods: *Participants:* B.D., percipient in the task and whose EEG was recorded, is a 74-year-old male, approaching retirement from his law practice. The experiment also involved two “agents” (or “senders”): the main agent, M.B. had been B.D.’s roommate during their years together at law school in the 1970’s. They have remained close friends ever since. The other agent was one of the experimenters, E.K., who served as agent for only three sessions when M.B. was not able to participate. B.D. and E.K. worked together throughout the 70s and have stayed intermittently in touch ever since.

Procedure: B.D. engaged in a computerized psi task similar to the Location Test on psiarcade.org (see also Delorme et al., 2022). The task consisted of estimating the unknown location of a target (a circular dot) that could be located anywhere within the surface of an ellipse on the screen (horizontally flattened disk with a width/height ratio of 1.342). Feedback showing the target location was given after each trial. Importantly, an agent was located in a distant room with its own screen, and each trial could either show the target location to the agent while B.D. was attempting to estimate the location (*Agent* condition) or the agent saw a blank screen during the whole trial (*NoAgent*), with 50% chance. It is to be noted that throughout the whole experiment, B.D. did not know at any point whether a given trial was in the *Agent* or *NoAgent* condition.

Trials were self-paced and initiated by B.D. with a mouse click, triggering the random selection of

the Target Location by the computer and initiating the Decision Period. In approximately 50% of the trials, the click would also correspond to the onset time of the Target Location in the agent room. B.D. indicated the end of the Decision Period by a second mouse click. If the duration was shorter than four seconds, the trial was aborted and a new trial was initiated. The Decision Period is the main period of interest for later EEG analysis. B.D. then indicated his Decision Location by clicking on the chosen location on the computer screen using the mouse pointer, after which he (and the agent for *Agent* trials) received feedback on the actual Target Location. See *Figure 1*. 353 such trials were completed in 13 sessions over ten days.

The task was performed by B.D. in a sound-attenuating, electromagnetically shielded booth. The computerized task was controlled using a custom C# library, allowing timing of mouse-click and screen-display events in the EEG data stream. The agent room and EEG booth were located on opposite sides and different floors of the same building. EEG was recorded with a 128-channel BioSemi ActiveTwo system (Biosemi BV, Amsterdam, NL).

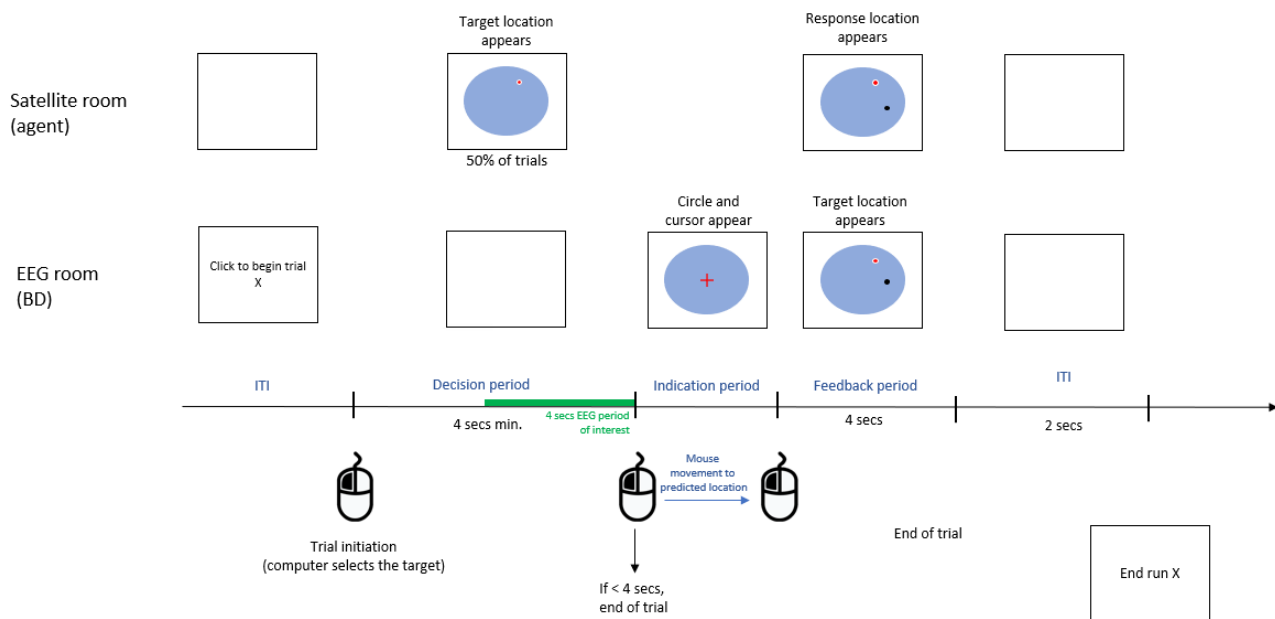


Figure 1. Structure of a Trial. The top row shows the sequence of displays on the agent's screen in the Agent condition trials (~50% of trials). The bottom row shows the sequence of displays for the participant in the EEG booth. Inter-trial interval, Decision and Indication periods were terminated by BD by a mouse click.

Behavioral Performance Scoring: For each trial, the distance p between the Target and Response locations was calculated, and a score r corresponding to the probability of obtaining a distance equal to or smaller than p was derived. r was derived from the cumulative density function (CDF) of p given the Response location of the current trial. The exact CDF for an elliptic delimitation was approximated using a polygon of 200 sides. Under the null hypothesis, the distribution of scores r is uniformly distributed between 0 and 1. Scores were calculated using Mathematica (Wolfram Research, Inc., IL, USA), and subsequent analyses were carried out in Matlab (The Mathworks, Inc., MA, USA). Z-scores are calculated from the mean of r score values across N trials against the theoretical normal distribution of mean 0.5 and standard deviation $\sqrt{1/12}/\sqrt{N}$, and corresponding p-values are one-tailed.

Future EEG Analyses: EEG data will be pre-processed and analyzed in Matlab, using the EEGLab (Delorme & Makeig, 2004) and FieldTrip (Oostenveld et al., 2011) an open source software package that we developed for the analysis of MEG, EEG, and other electrophysiological data. The software is implemented as a MATLAB toolbox and includes a complete set of consistent and user-friendly high-level functions that allow experimental neuroscientists to analyze experimental data. It includes algorithms for simple and advanced analysis, such as time-frequency analysis using multitapers, source reconstruction using dipoles, distributed sources and beamformers, connectivity analysis, and nonparametric statistical permutation tests at the channel and source level. The implementation as toolbox allows the user to perform elaborate and structured analyses of large data sets using the MATLAB command line and batch scripting. Furthermore, users and developers can easily extend the functionality and implement new algorithms. The modular design facilitates the reuse in other software packages.”,“container-title”:“Computational Intelligence and Neuroscience”,“DOI”:“10.1155/2011/156869”,“ISSN”:“1687-5265, 1687-5273”,“journalAbbreviation”:“Computational Intelligence and Neuroscience”,“language”:“en”,“license”:“http://creativecommons.org/licenses/by/3.0/”,“page”:“1-9”,“source”:“DOI.org (Crossref toolboxes, as well as custom scripts, and will involve the following steps: interpolation of identified noisy channels, filtering (1-40 Hz), re-referencing to the common average, removal of artifactual components from independent component analysis (ICA), epoching, removal of noisy epochs through visual inspection. For each *Agent* condition, we will investigate correlations between trial-wise behavioral scores and EEG-derived metrics from the last four seconds of the Decision Period. EEG-derived metrics will include spectral power with a particular focus on alpha, instantaneous frequency in the alpha band, Lempel-Ziv complexity, and GLOBAL measures (Wackermann, 1999).

Results: Aggregated behavioral results reached statistical significance with $p = 0.04$ and $Z\text{-score} = -1.75$ ($N = 353$). Interestingly, a clear contrast was apparent between the *NoAgent* and *Agent* conditions, with $p = 0.486$ and $Z\text{-score} = -0.036$ ($N = 175$), and $p = 0.0075$, $Z\text{-score} = -2.43$ ($N = 178$), respectively. Median scores did not differ between the *Agent* and *NoAgent* conditions using an approximated Wilcoxon rank sum test ($p=0.07$, $Z\text{-score} = -1.76$), but the overall distributions did, using a two-sample Kolmogorov-Smirnov goodness-of-fit hypothesis test ($p = 0.01$, $ks_stat = 0.1643$). The magnitude of the effect was similar between the two agents, for *Agent* condition trials: M.B. yielded $p = 0.038$ and $Z\text{-score} = -1.77$ with $N = 129$; and E.K. $p = 0.039$ and $Z\text{-score} = -1.77$ with $N = 49$. No difference in median scores ($p = 0.48$, $Z\text{-score} = 0.69$) or score distributions ($p = 0.37$, $ks_stat = 0.1595$) were found.

Discussion: The overall behavioral result of this experiment is suggestive of the psi hypothesis, with significant deviation from chance across trials regardless of condition. Furthermore, we found no evidence for an effect for trials that did not show the target location to the agent, but a very reliable effect for trials that did. It is remarkable that participant B.D. was able to perform well at a psi task at a later stage of his life, approximately 50 years after his latest laboratory experiment. This indicates that high performance at psi tasks in a laboratory context can be a persisting individual trait.

It is interesting to note that for the present study, B.D. had told us that he thought having M.B. in particular as an agent might help him. The fact that the effect appeared with both agents is reassuring in that it blunts any concerns that B.D. and M.B. might have found a way to cheat, but it also raises the question of whether what really mattered was simply the display of targets in the agent room, rather than anything the agents themselves did.

The agent effect observed in the present study surprised us, in particular given that B.D. had performed well in clairvoyance tasks in the past (Kanthamani & Kelly, 1974a, 1974b; Kelly et al., 1975). The literature is unclear regarding the role of the agent (sender) in ESP tasks. Honorton (1995) reported that ganzfeld experiments with a sender have stronger results in a meta-analysis. Further studies have failed to confirm this observation, although some sender-receiver parameters appear to have an effect (see Pooley et al., 2023).

The presence of a reliable behavioral effect is encouraging for the subsequent analysis of the EEG data, whose aim is to identify trial-wise EEG features associated with higher task performance.

Acknowledgments: This study was funded by the Hittman Family Foundation, Inc.

References

- Delorme, A., & Makeig, S. (2004). EEGLAB: An open source toolbox for analysis of single-trial EEG dynamics including independent component analysis. *Journal of Neuroscience Methods*, 134(1), 9–21. <https://doi.org/10.1016/j.jneumeth.2003.10.009>
- Delorme, A., Wahbeh, H., & Radin, D. (2022). Protocol for finding talent with accurate intuitive abilities. *Abstracts of Presented Papers: SSE-PA Breakthrough 2022*, 70–71.
- Honorton, C. (1995). Impact of the sender in ganzfeld communication: Meta-analysis and power estimates. *Proceedings of Presented Papers: The Parapsychological Association 38th Annual Convention*, 132–140.
- Kanthamani, B. K., & Kelly, E. F. (1974a). Awareness of Success in an Exceptional Subject. *Journal of Parapsychology*, 38(4), 355–382.
- Kanthamani, B. K., & Kelly, E. F. (1974b). Card experiments with a special subject. I. Single-Card clairvoyance. *Journal of Parapsychology*, 38(1), 16–26.
- Kanthamani, B. K., & Kelly, E. F. (1975). Card experiments with a special subject. II. The shuffle method. *Journal of Parapsychology*, 39(3), 207–221.
- Kelly, E. F. (1982). On grouping of hits in some exceptional psi performers. *Journal of the American Society for Psychical Research*, 76(2), 101–142.
- Kelly, E. F., & Kanthamani, B. K. (1972). A subject's efforts toward voluntary control. *Journal of Parapsychology*, 36(3), 185–197.
- Kelly, E. F., Kanthamani, H., Child, I. L., & Young, F. W. (1975). On the relation between visual and ESP confusion structures in an exceptional ESP subject. *Journal of the American Society for Psychical Research*, 69(1), 1–31.
- Krippner, S., & Friedman, H. L. (Eds.). (2010). *Mysterious minds: The neurobiology of psychics, mediums, and other extraordinary people*. Praeger ABC-CLIO.
- Oostenveld, R., Fries, P., Maris, E., & Schoffelen, J.-M. (2011). FieldTrip: Open source software for advanced analysis of MEG, EEG, and invasive electrophysiological data. *Computational Intelligence and Neuroscience*, 2011, 1–9. <https://doi.org/10.1155/2011/156869>
- Pooley, A., Murray, A., & Watt, C. (2023). Understanding the factors at play in the sender-receiver dynamic during the telepathy ganzfeld: A Meta-Analysis. *Journal of Anomalous Experience and Cognition*, 3(1), Article 1. <https://doi.org/10.31156/jaex.23878>
- Wackermann, J. (1999). Towards a quantitative characterisation of functional states of the brain: From the non-linear methodology to the global linear description. *International Journal of Psychophysiology*, 34(1), 65–80. [https://doi.org/10.1016/S0167-8760\(99\)00038-0](https://doi.org/10.1016/S0167-8760(99)00038-0)
- Williams, B. J. (2011). Exploring the psychic brain: On neuroscience and psi phenomena. *Australian Journal of Parapsychology*, 11(2), 154–192.

Williams, B. J. (2015). *Psychic phenomena and the brain: Exploring the neuropsychology of psi*. Australian Institute of Parapsychological Research, Inc.

From brain waves to seismic beats: A proposal for studying anticipatory physiological activity through earthquake-related stimuli

Rodrigo Arriola, Eros Quintero & Ramsés D'León

Unidad Parapsicológica de Investigación, Difusión y Enseñanza (UPIDE), Mexico City, Mexico
Centro de Investigación de la Sintergia y la Consciencia (CISC), Mexico City, Mexico

Introduction: Anticipatory Physiological Activity (APA), the ability of the autonomic nervous system to predict future events through physiological responses, has garnered research interest due to its implications for understanding human intuition and preconscious processing. Numerous studies have explored a variety of physiological markers, including measurements of brain activity using functional magnetic resonance imaging (Bierman & Scholte, 2002) and slow cortical potentials through electroencephalography (McCraty et al., 2004a, 2004b; Radin & Lobach, 2007; Radin et al., 2011). Additional physiological indicators such as pupillary dilation, eye movements, and spontaneous blinking have been assessed using electrooculography (Radin & Borges, 2009; Tressoldi et al., 2011). Other studies have measured skin conductance levels with an electrodermograph (Radin, 1997; James et al., 2003; Radin, 2004; McCraty, et al., 2004a, 2004b), as well as heart rate and its variability through electrocardiography (Radin, 1997; McCraty, et al. 2004a, 2004b), and blood volume pulse with photoplethysmography (Radin, 1997).

Method: Despite advancements in APA research, challenges remain in replicating the phenomena and confirming findings across different stimuli and physiological responses. This study aims to build upon previous research (D'León & Izara, 2018) to develop software that generates random inputs for the stimuli and intervals using a Psyleron REG-1 or TrueRNG v3 to explore the physiological activity associated with APA. We will measure the skin conductance level (SCL) using a Neulog's GSR logger sensor NUL-217, heart rate variability (HRV) using Neulog's Heart Rate & Pulse logger sensor NUL-218, and electrical activity in the frontal and frontotemporal regions of the brain (FP1, FP2, F7, F8) using Open-BCI's Ganglion Board and electroencephalography (EEG) headset. Previous studies have shown that activity in these brain regions relates to specific cognitive processes, such as thinking and anticipation.

The new experiment we are designing will test the fear associated with earthquakes among a cohort from Mexico City, a location notably prone to seismic activities. We will incorporate both auditory and visual stimuli to evoke responses. Auditory stimuli will consist of the national "seismic alert" sound to simulate an earthquake warning, contrasted with natural sounds serving as control stimuli. Visual stimuli will include mundane images (e.g., walls, glass, a book) as controls, alongside a collection of excitatory images depicting earthquake-related scenarios. To assemble this visual dataset, an online survey will solicit ratings from Mexican citizens on these images based on their visual correlation to earthquake-in-

duced fear, selecting the most impactful images for the experimental dataset. We decided to create a new visual dataset instead of using the International Affective Picture System (IAPS) or the Open Affective Standardized Image Set (OASIS; Kurdi, et al., 2017) as it fell short of images that could elicit more arousal analyzing a particular segment of personality traits or set of fears.

Sessions will consist of an initial ten-second delay to decrease the expectancy effect, followed by a finite number of free-running trials. Each trial will begin with a three-second blank screen and no sound: then the computer will randomly select a pair of visual and auditory stimuli and present them for three seconds. Finally, the screen will go blank again, and there will be no sound for nine seconds, plus a random interval of zero to five seconds (Fig. 1). In summary, each trial will consist of a period of 15-20 seconds. This design will be double-blind, in the sense that neither the participant nor the experimenters will know in advance which stimuli will be displayed in each session, in what sequential order, or in what timeframe due to the random intervals.

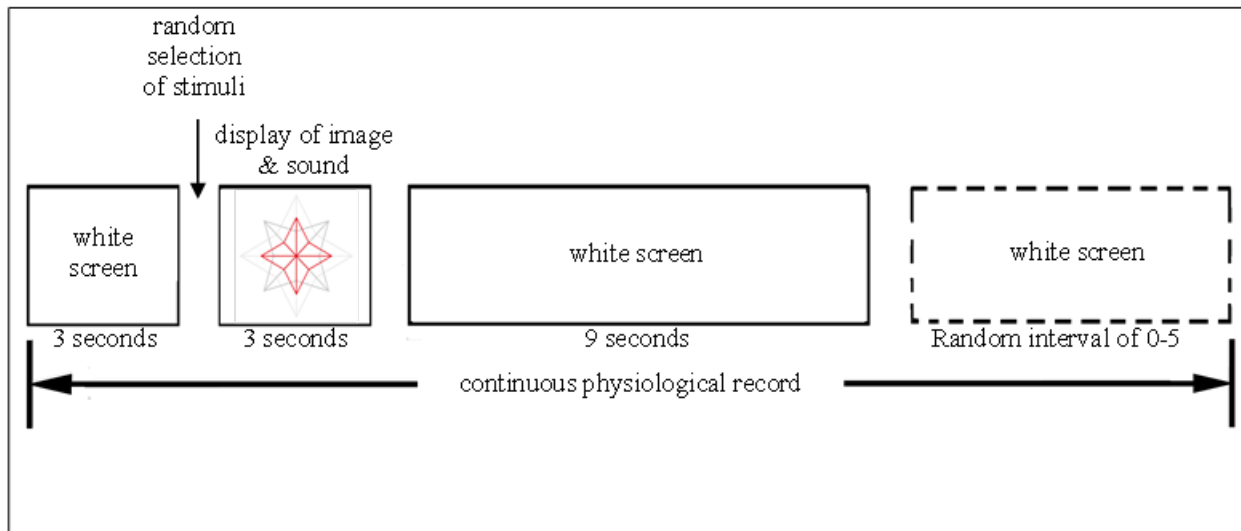


Fig. 1. Diagram of the free-running PAA experimental protocol.

For the physiological responses (PR) the developed software used statistical analysis based on *changes in normalized physiological responses* (ΔPR) and *randomized permutation analysis* (Blair & Karniski, 1993) found in previous experiments (Radin, 2004; McCarty et al., 2004a; Radin & Lobach, 2007; Radin & Borges, 2009). Normalized PR is used rather than absolute PR because, in an analysis that combines data across subjects, a few participants with high magnitude or high variance PR could otherwise strongly skew most data from other, less labile participants.

Results: Preliminary results consisting of the final visual and auditive dataset will be presented at the convention, as we are still collecting funds to complete the experimental setup. We expect to obtain valuable feedback from our peers during the event.

References

Bierman, D., & Scholte, H. (2002). A fMRI brain imaging study of presentiment. *Journal of International Society of Life Information Science*, 20(2), 380-389.

- Blair, R., & Karniski, W. (1993). An alternative method for significance testing of waveform difference potentials. *Psychophysiology*, 30, 518-524.
- Delorme, A., & Makeig, S. (2004). EEGLAB: An open source toolbox for analysis of single-trial EEG dynamics including independent component analysis. *Journal of Neuroscience Methods*, 134(1), 9-21. <https://doi.org/10.1016/j.jneumeth.2003.10.009>
- Delorme, A., Wahbeh, H., & Radin, D. (2022). Protocol for finding talent with accurate intuitive abilities. *Abstracts of Presented Papers: SSE-PA Breakthrough 2022*, 70-71.
- D'León, R. & Izara, N. (2018). Development of a Predictive Anticipatory Activity (PAA) Software: A First Step Towards a Medium-Term Goal. *Journal of Parapsychology*, 82(2), 106-107.
- Honorton, C. (1995). Impact of the sender in ganzfeld communication: Meta-analysis and power estimates. *Proceedings of Presented Papers: The Parapsychological Association 38th Annual Convention*, 132-140.
- James, S., Spottiwoode, P., & May, E. (2003). Skin conductance prestimulus response: Analyses, artifacts and a pilot study. *Journal of Scientific Exploration*, 17(4), 617-641.
- Kanthamani, B. K., & Kelly, E. F. (1974a). Awareness of success in an exceptional subject. *Journal of Parapsychology*, 38(4), 355-382.
- Kanthamani, B. K., & Kelly, E. F. (1974b). Card experiments with a special subject. I. Single-card clairvoyance. *Journal of Parapsychology*, 38(1), 16-26.
- Kanthamani, B. K., & Kelly, E. F. (1975). Card experiments with a special subject. II. The shuffle method. *Journal of Parapsychology*, 39(3), 207-221.
- Kelly, E. F. (1982). On grouping of hits in some exceptional psi performers. *Journal of the American Society for Psychical Research*, 76(2), 101-142.
- Kelly, E. F., & Kanthamani, B. K. (1972). A subject's efforts toward voluntary control. *Journal of Parapsychology*, 36(3), 185-197.
- Kelly, E. F., Kanthamani, H., Child, I. L., & Young, F. W. (1975). On the relation between visual and ESP confusion structures in an exceptional ESP subject. *Journal of the American Society for Psychical Research*, 69(1), 1-31.
- Krippner, S., & Friedman, H. L. (Eds.). (2010). *Mysterious minds: The neurobiology of psychics, mediums, and other extraordinary people*. Praeger ABC-CLIO.
- Kurdi, B., Lozano, S., & Banaji, M. (2017). Introducing the Open Affective Standardized Image Set (OASIS). *Behavior Research Methods*, 49(2), 457-470.
- McCraty, R., Atkinson, M., & Bradley, R. (2004a). Electrophysiological evidence of intuition: Part 1. The surprising role of the heart. *The Journal of Alternative and Complementary Medicine*, 10(1), 133-143.
- McCraty, R., Atkinson, M., & Bradley, R. (2004b). Electrophysiological evidence of intuition: Part 2. A system-wide process? *The Journal of Alternative and Complementary Medicine*, 10(2), 325-336.
- Oostenveld, R., Fries, P., Maris, E., & Schoffelen, J.-M. (2011). FieldTrip: Open source software for advanced analysis of MEG, EEG, and invasive electrophysiological data. *Computational Intelligence and Neuroscience*, 2011, 1-9. <https://doi.org/10.1155/2011/156869>
- Pooley, A., Murray, A., & Watt, C. (2023). Understanding the factors at play in the sender-receiver dynamic during the telepathy ganzfeld: A meta-analysis. *Journal of Anomalous Experience and Cognition*, 3(1), Article 1. <https://doi.org/10.31156/jaex.23878>
- Radin, D. (1997). Unconscious perception of the future emotions: An experiment in presentiment. *Journal of Scientific Exploration*, 11(2), 163-180.
- Radin, D. (2004). Electrodermal presentiments of future emotions. *Journal of Scientific Exploration*, 18(2), 253-273.
- Radin, D., & Borges, A. (2009). Intuition through time: What does the seer see? *Explore: The journal of science and healing*, 5(4), 200-211.
- Radin, D., & Lobach, E. (2007). Toward understanding the placebo effect: Investigating a possible retro-causal factor. *The Journal of Alternative and Complementary Medicine*, 13(7), 733-739.

- Radin, D., Vieten, C., Michel, L., & Delorme, A. (2011). Electrocortical activity prior to unpredictable stimuli in meditators and nonmeditators. *Explore: The Journal of Science and Healing*, 7(5), 286-299.
- Tressoldi, P., Martinelli, M., Semenzato, L., & Cappato, S. (2011). Let your eyes predict: Prediction accuracy of pupillary responses to random alerting and neutral sounds. *SAGE Open*, 1(2), 1-7.
- Wackermann, J. (1999). Towards a quantitative characterisation of functional states of the brain: From the non-linear methodology to the global linear description. *International Journal of Psychophysiology*, 34(1), 65-80. [https://doi.org/10.1016/S0167-8760\(99\)00038-0](https://doi.org/10.1016/S0167-8760(99)00038-0)
- Williams, B. J. (2011). Exploring the psychic brain: On neuroscience and psi phenomena. *Australian Journal of Parapsychology*, 11(2), 154-192.
- Williams, B. J. (2015). Psychic phenomena and the brain: Exploring the neuropsychology of psi. *Australian Institute of Parapsychological Research, Inc.*

Penrose's neo-platonic ontology as a foundation for a science of parapsychology

Thomas Brophy
Institute of Noetic Sciences, Petaluma CA, USA

Introduction: A large number of experimental results over many decades validate the existence of psi phenomena (Cardeña, 2018). And yet dominant materialist perspectives in science prohibit incorporating them into our theories of reality (as pointed out by Wahbeh et al., 2022). How can we situate the many decades of psi research results into a future ontology of science?

I propose that an existing theory of consciousness may be equipped to inform the required ontology. This perspective provides a way to address two hard problems of consciousness: *qualia*, the subjective experience of being, and *agency* or free will. To connect these properties with the physical world I propose the use of “quantum collapse.” The idea that quantum collapse could be microphysically relevant to conscious processes goes back to the founding of quantum mechanics and has been continually advocated in various ways since then, for example, by Werner Heisenberg (1959), John von Neuman in the 1950s, Roger Penrose (1989, 1994), and others (such as Brophy, 1998). This is an interesting approach because it is through quantum collapse processes that nonlocal consciousness phenomena, like psi, could happen (Rosenblum & Kuttner, 2006).

Quantum collapse (also called quantum state reduction) is a fundamentally mysterious process, even before we connect it with models of consciousness. It is the process by which quantum superpositions reduce (or “collapse”) to the classical physical world of everyday experience. Quantum collapse has been plausibly related to consciousness in two different ways:

- *Consciousness causes collapse* models: For example, Chalmers & McQueen (2021) have recently followed up von Neumann and Wigner’s ideas and advanced models in which consciousness disrupts quantum superposition, causing collapse.
- *Collapse generates consciousness* models: This is Roger Penrose’s approach, in which fluctuations

in quantum gravity causes collapse events that generate what they call proto-conscious experiences (Penrose, 1994). Stuart Hameroff supplied plausible microstructures in the brain, and in biology generally, that can supply a kind of scaffolding for Penrose-type quantum gravity collapse events that become “orchestrated” sequences of events that they propose is the biological experience of being (Hameroff & Penrose, 2014).

- In these models, the collapse events supply a noncomputable process that can supply a locus for connecting biophysics with nonphysical-metaphysical processes, such as Platonic Ideals, as Penrose suggests. This is a key point that negates, alleviates, or transcends the widely held belief that the physical universe must be causally closed. This notion of causal closure of the physical, the belief that anything and everything that ever happens in physical reality is absolutely and only caused by a preceding set of events in physical reality, is the primary reason why many scientists believe that parapsychological phenomena are impossible.

Proposed Ontology: The scientific “hard problems” of how conscious phenomenal experience is instantiated, and how agency occurs in the physical world, remain unsolved key aspects of reality. This presentation discusses an ongoing project to develop a meta-theory that can sustain the existence of conscious agency, called Actual-Theory (A-Theory). Steps in the development of A-theory include: 1) incorporate the non-causal-closure of the physical world established by modern physics, through quantum collapse; 2) connect macroscopic processes to the Born Rule (Born & Jordan, 1925) interpretation for the “collapse” process of the quantum wave function; 3) connect with esoteric metaphysical systems’ descriptions of conscious entities that act causally into the physical domain, and consciousness “unitive” stages as described by advanced meditators.

I situate the Hameroff & Penrose (2014) Orchestrated Objective Reduction (Orch-OR) model within the A-theory paradigm, and I examine Penrose’ (1994) model of three interactive reality domains (physical world, mental world, Platonic world). Presentations of the Orch-OR model have focused on connections of the physical world to the mental world. Penrose also explored correspondences between the mental and Platonic worlds. This presentation explores approaches to the Platonic, mental, and physical worlds by introducing a fundamental property of the phenomenal world that instantiates conscious experience of being and generates fields in the consciousness domain that can act causally with agency into the physical domain. This procedure is analogous to James Clerk Maxwell (1873) introducing the property of electric charge to explain electromagnetism. The new property could be called “noetic charge” and defined as an ontic property of matter that instantiates experience of being. I further explore the contemporary possibility of noetic charge and noetic field-based theory in the historical context of other new properties that have been successfully introduced to physics and a fundamental theory of reality.

Penrose’s inclusion of the Platonic, physical, and mental domains as three fundamental and irreducible ontological domains of reality that operate interactively to “tri-create” reality, is an alternate approach to addressing the “hard problem” of developing an ontology of consciousness. The traditional ontologies of materialism, idealism, and dualism are clearly differentiated from this proposal. This type of noetic-charge and noetic field-based theory moves us a step closer to a theory of reality that includes

mechanisms for how psi phenomena work. Then given this way to articulate mechanisms, experimental tests for it can be devised.

Idealism that eliminates the physical domain of reality and posits with fundamental existence only the consciousness domain of reality does not offer any way to advance our understanding of how psi phenomena happen, or any way to test its own foundations. A-Theory can be seen as consistent with dual aspect monism, in which the conscious-experience domain and the physical domain arise out of the Platonic domain. And A-Theory with the Platonic domain included offers a path toward developing testable theories of how psi works, whereas naked dual aspect monism offers only a mystery as to that which is beyond the physical and the experiential.

Summary: A tripartite ontology proposed as a possible model of consciousness can also accommodate psi phenomena. A scientifically complete description of this ontology will require the introduction of a new property or properties that operate in a domain of reality identified by Penrose as the Platonic World, which is a domain of reality that coexists with the physical domain, is not empirically manifest, is not subjectively manifest either (is not the locus of experience) but does interact causally with the physical and the conscious-experiential domains.

References

- Born, M. & Jordan, P. (1925). Zur quantenmechanik, *Zeitschrift fur Physik*, 34(1), 858–888.
- Brophy, T.G. (1998). The mechanism demands a mysticism: An exploration of spirit, matter and physics.
- Cardena, E. (2018). The experimental evidence for parapsychological phenomena: A review. *American Psychologist*, 73(5), 663–677. doi: 10.1037/amp0000236
- Chalmers, D.J. & McQueen, K.J. (2021). Consciousness and the collapse of the wave function: arXiv pre-print arXiv:2105.02314, 2021 - arxiv.org.
- Hameroff, S., & Penrose, R. (2014). Consciousness in the universe: A review of the 'Orch OR' theory. *Physics of Life Reviews*, 11(1), 39–78. doi: 10.1016/j.plrev.2013.08.002
- Heisenberg, W. (1959, Nov.) From Plato to Max Planck: The philosophical problems of atomic physics. *The Atlantic Magazine*.
- Maxwell, J.C. (1873). *A treatise on electricity and magnetism*. Clarendon Press.
- Penrose, R. (1989) *The emperor's new mind: Concerning computers, minds and the laws of physics*. Oxford University Press.
- Penrose, R. (1994) *Shadows of the mind: A search for the missing science of consciousness*. Oxford University Press.
- Rosenblum, B. & Kuttner, F. (2006). *Quantum enigma: Physics encounters consciousness*. Oxford University Press.
- Wahbeh, H., Radin, D., Cannard, C., & Delorme, A. (2022). What if consciousness is not an emergent property of the brain? Observational and empirical challenges to materialistic models. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.955594>

Using online tasks to test the robustness of intuitive abilities

Arnaud Delorme^{1,2}, Helané Wahbeh^{1,3,4}, Dean Radin^{1,3}

¹Institute of Noetic Sciences, Petaluma CA, USA

²SCCN, INC, University of California, San Diego, CA, USA

³California Institute of Integral Studies, San Francisco, CA, USA

⁴Oregon Health & Science University, Portland, OR, USA

Introduction: The first known use of computer networks to conduct psi experiments was in 1972 by Jacques Vallee (1977), an internet pioneer who conducted a remote viewing study using a forerunner of the Internet (the ARPAnet). In 1977, Dean Radin used the PLATO computer-based education network at the University of Illinois to provide public-access precognition tests (Johnson, 1977). Some twenty years later, other public-access web-based psi experiments were reported by Bierman (1995) and Rebman et al. (1996). Starting in 2000, Radin developed and launched a suite of web-based psi experiments dubbed “GotPsi.” By 2020, over 250 million individual trials were collected from more than 300,000 people around the world, yielding significant results for some of the tests (Radin, 2019). The GotPsi website and the other online experiments could have potentially been used to identify psi talents. However, they were not designed for that purpose, so contact information was not systematically collected, making it impossible to contact individuals who appeared to be performing well. The current project used modern online testing techniques to identify people with potential psi talent and to evaluate predictor variables associated with such individuals.

Methods: The tasks described involve a variety of experimental setups aimed at testing participants’ ability to predict or influence future events through tasks ranging from photo and card guessing to location identification and interacting with a digital environment to influence outcomes. Task 1 and Task 2 explore “remote viewing” abilities, with Task 1 requiring participants to guess which of five images will be shown next and Task 2 involving more complex predictions about unseen images using shapes, descriptors, and keywords, with performance assessed against a pre-established benchmark. Tasks 3, 4, and 5 are variations of card-guessing, focusing on the ability to predict the appearance of specific cards or images, with different approaches to measuring hit rates and calculating statistical significance through z-scores. Z-scores were used because they could easily be pooled across tasks using the Stouffer z method. Tasks 6 through 8 explore different phenomena: Task 6 tests the ability to guess a randomly selected location, Task 7 simulates a lottery to assess prediction accuracy, and Task 8 examines the potential for psychokinetic influence over digital bubble movement, with outcomes measured against chance expectations and statistical analysis providing feedback on performance. We tested the following predictors of psi performance: gender, meditation status (binary), paranormal belief and experience (2 items), personality (5 items), and self-transcendence (1 item). The other personality traits mentioned in the previous paragraph were not included in the pre-registration document, so they were not included in our tests. However, the data from these questionnaires may be used in future IONS Discovery Lab (IDL) publications.

The study had five specific aims: 1) develop and integrate various psi tasks into a single online platform; 2) develop methods to analyze the data to identify talented individuals among a large sample of volunteers ($n=1014$); 3) select 50 of the top-performing individuals (talents); 4) assess if above-chance performance was consistent in test-retest scores of talents; and 5) evaluate potential personality predictors (if any) of high performance (this uses the Big 5 personality questionnaire).

Results: In phase 1, we recruited 1014 participants over ten months. We tested again 50 of the best phase-1-participants in phase 2. The performance of two of the 8 tasks (remote viewing and psychokinetic) was above chance expectations in phase 2 (Table 1). However, it fell below the significance threshold after we corrected for the fact that multiple tasks were tested. Considering all the tasks and participants, we observed that personality conscientiousness was negatively correlated with increased performance, and agreeableness positively correlated with higher performance.

Discussion: This study marks a significant advancement in parapsychology through its innovative use of an online platform for large-scale participant data collection and a novel method to identify individuals with high initial psi task performance despite a potential methodology limitation of selection bias. The research suggests the need for larger sample sizes for a more comprehensive understanding of psychic phenomena, as the current sample of 1014 may not sufficiently represent the estimated prevalence of psychic talents in the general population, highlighting the importance of study replication with more participants for enhanced statistical power and generalizability.

	Phase 2			
	z	Conf. Interval	p-value	p-value Bonferroni
Remote_viewing	0.28	-0.01 to 0.58	0.0284	0.1704
Long remote viewing	-0.28	-0.52 to -0.03	0.9854	1
Location	0.16	-0.12 to 0.44	0.1272	0.7632
Bubbles	0.24	-0.02 to 0.51	0.0347	0.2082
Card	-0.03	-0.25 to 0.19	0.6439	1
Sequential Card	-0.07	-0.41 to 0.24	0.6542	1
Stouffer z selected	0.13	-0.18 to 0.42	0.2028	

Table 1. Performance during phase 2 of the top performing participants in phase 1 for 6 of the 8 tasks. Two of the tasks have significant results (p-value column), although these results do not resist correction for multiple comparisons (p-value Bonferroni column).

References

Bierman, D. J. (1995). A free response precognition experiment via the World Wide Web. *Proceedings of Presented Papers, Parapsychological Association Annual Convention*, 38 - 42.

- Johnson, D. (1977, Nov. 19). PLATonic parapsychology. *The Daily Illini*.
- Radin, D. (2019). Tricking the trickster: Evidence for predicted sequential Sstructure in a 19-year online psi experiment. *Journal of Scientific Exploration*, 33(4), 549–568.
- Rebman, J. M., Radin, D. I. & Stevens, P. R. (1996). A precognition experiment on the World Wide Web. *Proceedings of Presented Papers, Parapsychological Association Annual Convention*.
- Valle, J. (1977). The computer conference: An altered state of communication? *People's Computers*, 8 – 14.

Computer simulation of PK (psychokinesis): New experimental tool for Psi research

Simon X. Duan
Metacomputics Labs, London, UK

Introduction: Modelling reality is what we do as scientists. To facilitate our comprehension of the world, we build models based on conceptual metaphors that are familiar to us. In Newton's era, we imagined the universe as a clock. In Einstein's, we established the standard model of particle physics. Now that we are in the information age, we have new concepts available to us, such as the computer, information processing, simulation, and virtual reality. Unsurprisingly, these new concepts inspire us to build new models of the universe. One such model is the hypothesis that the perceived reality is rendered by the Platonic computer located in the realm of Forms.

According to Plato, physical existence is a shadow, or poor imitation, of the ideal realm of existence. Archetypes and symbols exist in the realm of Forms, which operates as the fundamental reality. Material objects in the physical reality resemble their perfect archetypes to varying degrees. For every material entity we perceive, there is a corresponding archetype in the realm of Forms. Based on such principle, we postulate that the everyday material computer made of silicon is only a poor imitation/simulation of the perfect abstract metaphysical computer that exists in the realm of Forms. We call this abstract metaphysical computer the "Platonic computer" (Duan, 2022). We hypothesize that it is the Platonic computation that is the real cause of all phenomena, including psi. The hypothesis postulates that the psychic agent's mental interaction with the Platonic computer causes PK phenomena by manipulating the data/parameter in the program of the Platonic computer. In this paper, we discuss how PK can be elucidated through the lens of the Platonic computation model. We also explore how the proposed hypothesis can be tested using computer simulation.

Methods: In modern science, simulation is used to imitate or represent real-world processes, systems, or phenomena using a mathematical model or computer program. It involves creating an artificial scenario that imitates the behavior of a natural or physical system to observe, analyze, and understand its dynamics. For example, a parabola printed on a piece of paper can be a simulation of the trajectory of a real-world projectile fired at an angle in a uniform gravity field. A hurricane rendered on the computer screen can be a simulation of a real-world hurricane. Although we will not get wet or blown away by the simulation of the hurricane on the computer screen, we can still gain insights into the dynamics of the hurricane so that weather forecasts can be made with a reasonable level of accuracy.

Computer simulation is now accepted as a type of experiment in mainstream science, although it differs from traditional physical experiments in some ways. While traditional experiments involve manipulating real-world objects and observing their reactions in a controlled environment, computer simulations involve creating a virtual environment and observing the digital entities within that environment.

Computer simulations are extensively used for studying complex systems that are difficult or impossible to replicate in a laboratory setting. They are recognized as a powerful tool that allows for a level of control and repeatability that might be costly, challenging, or even impossible to achieve in the real world. For instance, in astrophysics, computer simulations are employed to study the formation of galaxies, stars, and other celestial bodies. Hypotheses about the evolution of the universe, the structure of galaxies, and the behavior of black holes have been tested through computer simulations. Simulations in physics are used to test hypotheses about the behavior of particles and the properties of materials. Examples include simulations of particle collisions in accelerators or the behavior of materials under extreme conditions. In engineering, simulations are used to test hypotheses related to the performance of structures, fluids, and mechanical systems. This includes simulations of aerodynamics, structural integrity, and fluid dynamics.

In the parapsychological study of PK, we are not able to reproduce the results on demand. It is also challenging or even impossible to impose an appropriate level of control on the mental states of PK agents. We, therefore, propose to use computer simulation as a supplementary experimental tool to study PK. According to the Platonic computation model (illustrated in Figure 1), the physical computer is a poor imitation/simulation of the Platonic computer. The former renders the virtual reality, and the latter renders the physical reality. Thus, at one level, virtual reality can be manipulated by manipulating the physical computer. At another level, physical reality can be manipulated by manipulating the Platonic computer. The proposed methodology includes computer simulation of several aspects of psi. Firstly, the outward appearance of psi phenomena can be readily demonstrated on a computer screen by running a simulation. Secondly, we can demonstrate that manipulation of data/parameters in the program of the physical computer causes virtual Psi phenomena, this simulates how real-world psi phenomena are rendered by the Platonic computer. Thirdly, by manipulating the physical computer with verbal instruction, such as in the case of operating Open AI Sora, we can simulate how PK agents mentally interact with the Platonic computer.

Results: Computer simulations have been performed to illustrate that manipulating data/parameters in the program of the physical computer causes a range of virtual psi phenomena, including the following:

- Appearance and disappearance of virtual objects (simulation of real-world apports)
- Apparent spontaneous movement of virtual objects (simulation of real-world objects moving through space without interaction with physical contacts/forces)
- Changes in the solidity of the virtual objects (simulation of real-world objects passing through solid barriers)

Manipulation of data/parameters in the computer program that causes the above-described virtual psi phenomena is presented.

Discussion: Although we rely on models to describe perceived reality, we must also remember that models are not reality (Duan, 2024). There is no point in arguing if the universe is a clock, a set of particles, or an output of computation. All these models are tools to be deployed to deal with the unknown and to make discoveries. And the more tools we have, the more effective and insightful we can become.

The Platonic computation model offers a new perspective from which we will have a new understanding of the universe. We can explain many phenomena we could not explain before, including psi. According to the Platonic computation model, ESP can be understood as the result of psychic agents accessing the database of the Platonic computer. On the other hand, PK can be interpreted as the result of the psychic agent's manipulation of the data/parameter of the program in the Platonic computer.

All models are hypotheses that need to be tested, the Platonic computation model is no exception. Although we cannot access the Platonic computer by our normal senses, we have access to its poor imitation/simulation, the physical computer. By manipulating the physical computer to render virtual reality, we can simulate how the Platonic computer renders physical reality. It is well known that control and repeatability are major challenges in researching Psi phenomena in general and PK in particular. By adopting computer simulation as an experimental tool, we can gain insights into the mechanism of these psi phenomena under well-defined and controlled experimental conditions. Computer simulation can help us to study psi at multiple levels. At the phenomenological level, we can readily demonstrate the outward appearance of a psi effect on a computer screen to an observer. At the causation level, we can show what specific changes in data/parameters in the program can transform the rendered reality from normal phenomena that obey the classic laws of physics to paranormal phenomena that disobey the classic laws of physics. These changes in data/parameters in the program in the physical computer serve as a simulation of what occurs in the Platonic computer during real-world Psi events.

As computer simulation is now accepted as a legitimate experimental tool in mainstream science and engineering, it is time to introduce this powerful tool into parapsychology research. It can be envisaged that comparable to the effective use of computer simulation in other well-established science disciplines, incorporating computer simulation into the toolset of parapsychological research will also be a hugely rewarding exercise. The new tool will provide a new lens through which more discoveries will be made about psi. In doing so, we will greatly widen our horizons and broaden the scope of scientific inquiry.

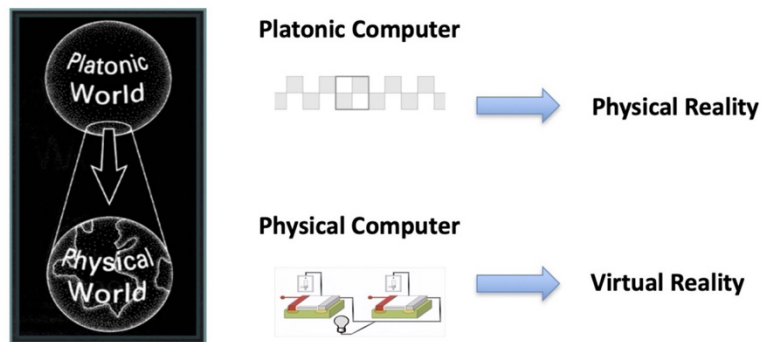


Fig. 1. Illustration of the Platonic computation model. The physical computer is a simulation of the Platonic computer. The former renders virtual reality, whereas the latter renders the physical reality.

References

- Duan, S. X. (2022). Platonic computer— the universal machine that bridges the “Inverse explanatory gap” in the philosophy of mind. *Filozofia i Nauka, Zeszyt specjalny*, (10), 285–302. <https://doi.org/10.37240/fin.2022.10.zs.14>
- Duan, S.X. (2024, Jan. 3). Stop asking if the universe is a computer simulation. *Scientific American*.

Beyond chance: Demonstration of a new mathematical estimator for Psi phenomena

Álex Escolà-Gascón

Comillas Pontifical University, Vatican City State

Introduction: The present report aims to review and justify the mathematical proposal for the use of a *three-parameter logistic model* (3PL) belonging to formal *item response theory* (IRT) in the measurement of *anomalous cognitions* (also called *psi* phenomena). Specifically, through demonstrations on how to estimate the α , b and c parameters of IRT, a new equation (called *c factor* or CF) is developed to measure the number of deviations of the probability associated with the level of aptitude (score θ_j) from the conditional probability of obtaining random hits $P_j(c_j)$ and the complementary probability $1-P_j(c_j)$ of making correct answers assuming that the assessed aptitude (in this context, the anomalous cognitions) intervenes. The new equation allows identification of when the presumed psychic ability or anomalous cognition may have occurred. This report offers the foundation on how to calculate CF mathematically and obtain it for its application, not only in anomalous cognition experiments, but also as a new innovative indicator that aims to foster advances in the measurement of any type of cognitive ability.

The development of a new statistical estimator for psi phenomena, particularly *anomalous cog-*

nitions (AC), aims to move beyond traditional reliance on chance-based thresholds. Supported by prior research, including Hyman (1985, 1996) and others (e.g., Houran et al., 2018), this initiative emphasizes the necessity for advanced statistical methods that better reflect reality and align with mathematical measurement theories.

The report proposes adopting a three-parameter logistic model (3PL) from *item response theory* (IRT; Embretson & Reise, 2000) as a novel method for measuring ACs, in contrast with *classical test theory* (CTT). IRT offers several advantages over CTT: (a) *invariance of parameters*—IRT assumes item parameters remain constant across different samples, providing stable and accurate scoring of individuals' true abilities, unlike CTT where trait levels might vary with the test items' characteristics; (b) *trait-dependent accuracy*—in IRT, the accuracy of responses correlates directly with an individual's trait level, allowing for more precise differentiation of abilities, a feature CTT lacks, particularly in cognitive assessments; and (c) *model fit indicators*—IRT includes indicators to assess data-model fit, enhancing model accuracy and applicability, compared to CTT's reliance on chance and frequentist probability, which often requires post-hoc adjustments. These features make IRT a more precise and reliable approach for assessing true abilities in behavioral sciences than CTT. This brief report introduces an innovative indicator designed to improve the statistical detection of ACs, referencing studies and historical contexts (Escolà-Gascón et al., 2023; Targ & Puthoff, 1974; Utts, 1996). The novel estimator is named the *c factor* (CF), providing its logical basis and mathematical proofs, marking a potentially significant advancement in psi research.

The *c factor* (CF)

At this point I want to demonstrate and rationally justify why $1-P_j(c_j)$ could be considered as the probability (or the level) at which the evaluated aptitude intervenes in the response that the subject decides to give. Some statisticians and mathematicians in IRT confuse $1-P_j(c_j)$ with $Q_j(c_j)$ (Q_j being the probability of error (E)). We should bear in mind that $P_j(c_j)$ is a conditional probability, whose interpretation can be summarized as follows (see **Table 1**):

Table 1

Logic and contingencies that allow us to prove that $1-P_j(c_j) \neq Q_j(c_j)$.

	Low θ scores ($\theta \downarrow$)	Non-low θ scores ($\theta \uparrow$) ^a
	<i>Pseudo-guessing answers</i>	<i>Pseudo-non-guessing answers</i>
Hits (A)	$P_j(c_j) = P_j(A_j \theta \downarrow)$	$1-P_j(c_j) = P_j(A_j \theta \uparrow)$
Misses (E)	$1-Q_j(c_j) = Q_j(E_j \theta \downarrow)$	$Q_j(c_j) = Q_j(E_j \theta \uparrow)$

^a non-low θ scores are not necessarily high scores. However, non-low scores imply sufficiently moderate or high θ scores to consider that the participant's cognitive ability has had to intervene in some way.

Therefore, we know that $1-P_j(c_j) \neq Q_j(c_j)$ because they are states (hit-miss) conditional on *pseudo-guessing answers* or on low θ scores. Understanding this point is crucial, because if $P_j(c_j)$ were a simple probability (i.e., unconditional represented as $P_j(A_j)$), then yes, it would hold that $1-P_j(c_j)=Q_j(c_j)$. However, this is not the scenario for the parameter c_j . This is explained to avoid confusion and to demonstrate that interpreting $1-P_j(c_j)$ as the probability of being right without the intervention of *pseudo-guessing answers* (i.e., assuming that the evaluated aptitude intervenes) is not an incorrect logic (a very different matter is whether this proposal represents the ideal estimation that would be expected in this type of study object). In practical terms, I propose to employ the three-parameter model, use the parameter c_j and employ its complementary probability $1-P_j(c_j)$ as a possible estimator of the probability (P) at which AC would be activated in the responder and intervene for each of the experimental trials executed in the remote viewing domain (which would be equivalent to the items of any cognitive test). Then, following the logic of **Table 1** and considering the parameter c_j (**with a negative sign**), we have mathematical reasons to propose the following formula for estimating the probability associated with the occurrences of the ACs $P(AC)$:

$$P_j(AC) = 1 - (e^{c_j}) = 1 - P_j(c_j)$$

This is because

$$1 - (e^{c_j}) = 1 - P_j(c_j) = P_j(A | \theta \uparrow)$$

and in the same way

$$P_j(c_j) = e^{c_j} = P_j(A | \theta \downarrow)$$

Therefore, it is possible to state that

$$P_j(AC) = P_j(A | \theta \uparrow)$$

Knowing this, I propose to obtain a quotient relating $P(AC)$ to the probability belonging to the trait level of the respondent, which can be represented as

$$P_i(\theta_i) = c_j + (1 - c_j) \cdot \frac{1}{1 + e^{-Da_j(\theta - b)}}$$

The subscript i refers to the respondent. Therefore, the quotient that I suggest would be represented as a factor (CF) that would allow us to know the number of decimal places and units that a subject would be distant from the probability of responding randomly ($P(c)$) to the test or from the probability of using the aptitude that the test examines ($1-P(c)$). If the CF is below 1 it will indicate that the respondent has not passed either of the above two probabilities. Conversely, if the score is greater than 1, it will mean that the respondent has obtained an aptitude level that exceeds the probabilities of ran-

domly answering and applying the aptitude being tested. In the case of $1-P(c)$, exceeding the threshold would imply increasing the certainty that the participant has used the tested skill. For instance, if the aptitude were an AC, then I could mathematically estimate by CF when ACs may or may not occur. The CF equation corresponds to the acronym *c factor* and can be calculated as follows:

We have for

$$P_j(c_j)$$

the following equation for each item (j):

$$CF_{01_j} = \frac{c_j + (1 - c_j) \cdot \frac{1}{1 + e^{-Da_j(\theta - b)}}}{e^{c_j}} = \frac{P_i(\theta_i)}{P_j(c_j)}$$

The above equation is applicable to each of the items, but we may obtain a general estimate for the whole test if we follow the logic and principles of geometrics:

$$CF_{01} = \frac{\sqrt[n]{\prod_{j=1}^n c_j + (1 - c_j) \cdot \frac{1}{1 + e^{-Da_j(\theta - b)}}}}{\sqrt[n]{\prod_{j=1}^n e^{c_j}}} = \frac{\hat{P}_{\Pi}(\theta_{\Pi})}{\hat{P}_{\Lambda}(c_{\Lambda})}$$

The denominator of the above equation is known as the geometric mean, and for

$$1 - P_j(c_j)$$

the following equation for each item j is stated as

$$CF_{10_j} = \frac{c_j + (1 - c_j) \cdot \frac{1}{1 + e^{-Da_j(\theta - b)}}}{1 - e^{c_j}} = \frac{P_i(\theta_i)}{1 - P_j(c_j)}$$

and the equation for the whole test is as follows:

$$CF_{10} = \frac{\sqrt[n]{\prod_{j=1}^n c_j + (1 - c_j) \cdot \frac{1}{1 + e^{-Da_j(\theta - b)}}}}{1 - \left(\sqrt[n]{\prod_{j=1}^n e^{c_j}} \right)} = \frac{\hat{P}_{\Pi}(\theta_{\Pi})}{1 - \hat{P}_{\Lambda}(c_{\Lambda})}$$

Where

$$\hat{P}_{\Pi}(\theta_{\Pi})$$

is the probability of the degree to which the respondent possesses the aptitude evaluated by the test,

$$\hat{P}_{\Lambda}(c_{\Lambda})$$

is the geometric average of the probability of performing the test correctly using *pseudo-guessing answers*, and

$$1 - \hat{P}_{\Lambda}(c_{\Lambda})$$

is the geometric average of the probability of performing the test correctly using the *assessed skill*. The notation Λ refers to the set of items, which is actually a linear average.

Both CF_{10} and CF_{01} have versions designed for application to individual cases, which transforms the equations into highly useful idiographic estimators. These estimators are used to assess the degree to which a specific skill or cognitive ability is present in an individual. The equation for CF_{01} was as follows:

$$CF_{01_i} = \frac{c_{i_j} + (1 - c_{i_j}) \frac{1}{1 + e^{-Da_{i_j}(\theta - b)}}}{\sqrt[n]{\prod_{j=1}^n e^{c_j}}} = \frac{P(\theta)}{\hat{P}_{\Lambda}(c_{\Lambda})}$$

The equation for CF_{10} is as follows:

$$CF_{10_i} = \frac{c_{i_j} + (1 - c_{i_j}) \frac{1}{1 + e^{-Da_{i_j}(\theta - b)}}}{1 - \left(\sqrt[n]{\prod_{j=1}^n e^{c_j}} \right)} = \frac{P(\theta)}{1 - \hat{P}_{\Lambda}(c_{\Lambda})}$$

The key difference with these last two equations compared to the others is that they aim to derive a new measure of θ to estimate the degree to which a particular cognitive process is present in an individual.

What the *c* factor provides and how to use it

The *c* factor is a theoretical proposal extending beyond ACs to serve as an indicator for conventional cognitive abilities assessed using a three-parameter IRT model. The CF_{01} and CF_{10} estimators employ the same mathematical principles, though CF_{01} aligns more closely with classical models. Specifically, a CF_{01} value greater than 1 suggests a higher probability than estimated, indicating a larger effect size and greater statistical certainty of the cognition occurring. Conversely, a CF_{10} value greater than 1 suggests that the respondent's psychic functioning surpasses not just the chance of correctness but the actual probability of the AC occurring.

The CF_{10} estimator measures the degree to which ACs are identified, assuming that high theta scores indicate likely anomalous reasoning. This estimator provides a confidence value on the occurrence of such cognitions—a feature not present in Bayesian models which often rely on arbitrary adjustments of prior distributions. Deviations greater than 1 in CF_{10} increase the certainty of ACs occurring, thus enhancing the potential for successful application in accessing distant information.

Finally, the CF_{10} estimator, which measures ACs, faces two primary challenges. *Firstly*, it relies on measuring “distances” to determine occurrences, necessitating future research to define appropriate thresholds for differentiating significant from minor events. *Secondly*, CF_{10} 's use is restricted to three-parameter logistic models in IRT, requiring strict adherence to IRT standards and model calibration, which complicates its application and the achievement of reliable parameter estimates.

References

- Embretson, S. E., & Reise, S. P. (2000). *Item response theory for psychologists*. LEA.
- Escolà Gascón, Á., Houran, J., Dagnall, N., Drinkwater, K., & Denovan, A. (2023). Follow up on the U.S. Central Intelligence Agency's (CIA) remote viewing experiments. *Brain and Behavior*, 13(6). <https://doi.org/10.1002/brb3.3026>
- Houran, J., Lange, R., & Hooper, D. (2018). Cross-examining the case for precognition: Comment on Mossbridge and Radin (2018). *Psychology of Consciousness: Theory, Research, and Practice*, 5(1), 98–109. <https://doi.org/10.1037/cns0000126>
- Hyman, R. (1985). The ganzfeld psi experiment: A critical appraisal. *Journal of Parapsychology*, 49(1), 3–49.
- Hyman, R. (1996). Evaluation of a program on anomalous mental phenomena. *Journal of Scientific Exploration*, 10(1), 31–58.
- Targ, R., & Puthoff, H. (1974). Information transmission under conditions of sensory shielding. *Nature*, 251(5476), 602–607. <https://doi.org/10.1038/251602a0>
- Utts, J. (1996). An assessment of the evidence for psychic functioning. *Journal of Scientific Exploration*, 10(1), 3–30.

Exceptional experiences and bonding styles: A pilot study

Wolfgang Fach

Institute for Frontier Areas of Psychology and Mental Health, Freiburg, Germany

Introduction: The Institute for Frontier Areas of Psychology and Mental Health (IGPP) offers free information and counseling, which is requested by several hundred people with exceptional experiences (ExE) every year (Bauer & Fach, 2020). The average age of clients is 43 years, and two-thirds of them are women. Most clients are burdened not only by ExE but two-thirds also by their general life circumstances. Around 40% had previously undergone psychotherapeutic or psychiatric treatment, and about 25% actually received psychotherapeutic care. Even though 50% of the clients show possible signs of mental disorders when contacting the IGPP, in the majority of cases, there is no direct link between the ExE reported in counseling and the problems that gave rise to psychotherapy. Analyses of around 2,400 counseling cases show that six ExE-patterns, which essentially make up the IGPP counseling volume, correlate significantly with characteristics of personal autonomy and social bonding (partnership, marital status, living situation, etc.). Furthermore, the biographical background of clients often indicates links between ExE and negative or traumatic bonding experiences in childhood (Fach, 2022). In this research brief, I will present an ongoing pilot study being conducted at IGPP to examine the relationships between the bonding styles of clients and their specific ExE-patterns.

Background: Inspired by Metzinger's (2003) theory of mental representations, Fach (2011) developed the *Model of Phenomenon Basic Classes* (MPBC). According to the MPBC, ExE can be classified as *internal phenomena* in the *self-model* or *external phenomena* in the *world-model* as components of an overall *phenomenal reality model*. Furthermore, phenomena can manifest as deviations from ordinary psycho-physical relationships between self and world, either as *coincidence phenomena* (e.g. extrasensory perceptions) or as *dissociation phenomena* (e.g. out-of-body experiences). Statistical and phenomenological analysis of 2381 counseling cases (Fach, 2022), documented between 1996 and 2014 with a classification system based on the MPBC, showed that six typical ExE-patterns cover more than 95% of the IGPP counseling requests and that they are highly significantly correlated with different characteristics of social bonding like partnership and marital status.

"Bonding" is a more general term than "attachment" and applies to all kinds of human and social relationships. Attachment research describes typical attachment patterns of infants (Ainsworth et al., 1978), which are the basis of bonding styles in adults. People with a *secure-autonomous* bonding style are most likely to have close and satisfying relationships that they characterize as trusting and intimate (Hazan & Shaver, 1987; Simpson, 1990). In samples of married couples and intact partnerships, often more than three-quarters of secure-autonomous bonding styles can be found (Crowell et al., 2002)). People with an *insecure-dismissing* bonding style tend to avoid close relationships and emotional dependency. For example, they strive for control in helper roles, both to satisfy their bonding needs and to protect their autonomy. Clients with an *insecure-enmeshed* bonding style have ambivalent attitudes toward their partners and are torn between demanding and submissive behavior. They avoid direct conflict and confrontation for fear of rejection and separation.

Assuming that people with insecure bonding styles are less likely to be in stable relationships, the data indicate an increased proportion of insecure bonding in the IGPP clientele compared to the general population. In Germany, about 55% of the adult population is married, and only 25% live alone (Statistische Ämter des Bundes und der Länder, 2015). In contrast, only 40% of the IGPP clients are married, and 46% live alone.

Autonomy and bonding are to be understood not only as basic human needs but, from a system-theoretical perspective, as general structural determinants of life. Organisms as autopoietic systems interact in structural coupling with their environment (Maturana & Varela, 1987)) and on the human level, autonomy and bonding manifest as self-determination and interpersonal relatedness (Ryan & Deci, 2017). Phenomenologically, the six ExE-patterns form a spectrum of two continuums, with increasing deviations from usual mental representations of autonomy in the self-model and bonding to the world-model (Fach, 2022). On an internal ExE-continuum of phenomena in the self-model, bonding to the world-model starts with *extrasensory perceptions* and then increases with *internal presence and influences* that threaten autonomy in the self-model. Clients experiencing the second ExE-pattern are generally characterized by a tendency toward social withdrawal. In typical cases, they have always been careful to keep a distance and avoid closeness, but an encounter or relationship with a person triggers extremely negative feelings of influence in them, which cannot be ended even by breaking off contact. With the ExE-pattern of *mediumship and automatisms*, clients feel possessed, and the autonomy of the self-model is displaced into the world-model through psychophysical dissociation phenomena.

Conversely, on an external continuum, autonomy manifests in the world-model with *meaningful coincidences*, which seem to be arranged and addressed to the self-model by a higher order. *Poltergeists and apparitions* that override lawful physical bonding represent further increased autonomy. Such external phenomena typically occur in social systems with a strong bonding component. Couples with young children under psychosocial pressure or families with adolescents in puberty are particularly prone to this ExE-pattern. It is possible, as a rule, to identify a family member whose striving for autonomy is blocked. With the ExE-pattern of *nightmares and sleep paralysis*, a loss of behavioral control is reached when the physical body is attacked by external entities and the self-model is psychophysically dissociated from the body.

Method: A pilot study will be conducted to investigate the still hypothesized relationships between ExE-patterns and bonding styles. The Adult Attachment Prototype Rating (AAPR; Pilkonis, 1988) will be used to assess the bonding styles of 30 IGPP clients, five of each representing one of the six ExE-patterns. The AAPR in the German translation (EBPR; Strauß & Lobo-Drost, 1999) is a standardized and proven interview procedure that has already been used in many studies. The information collected during the interview is intended to document a person's interpersonal behavior and "relationship history." The interview is semi-structured and focuses on early and current relationship experiences. It deals with bonding in the primary family as well as past and current relationships with other significant people, e.g., the partner. Despite its duration of approximately 1 ½ to 2 hours, it is a comparatively economical method that enables an assessment of the interviewee on the basis of a prototype rating. The categories "secure", "insecure-dismissing" and "insecure-enmeshed" are used to make an initial classification, which is then differentiated into seven more specific prototypical bonding styles. Four members of the

IGPP counseling team have completed certified training in conducting and evaluating EBPR interviews. Prior to the interviews, ExE, bonding styles, motivational aspects, basic need satisfaction, and personality traits are recorded using various questionnaires in order to investigate correlations between the various constructs.

Outlook: The presented study belongs in the context of a still-developing clinical parapsychology (Belz & Fach, 2015; Kramer et al., 2012), which deals with people with distressing ExE. The observation that avoided autonomy is represented by phenomena in the world-model and blocked bonding by phenomena in the self-model points to self-organizing principles at the level of organismic and psychophysical wholeness.

If counseling helps clients recognize and understand that recurrent and distressing ExE are rooted in their life history and bonding style, it can serve as a bridge and motivate them to engage in psychotherapy. Therapy here does not mean treating ExE as a mental disorder; rather, it means supporting people in appropriately perceiving, fulfilling, and protecting their basic needs.

If the results of the pilot study confirm the expected correlations between ExE and bonding styles, this could provide the basis for a better understanding of ExE and become the starting point for a new research paradigm with larger projects and collaborations.

References

- Ainsworth, M. D., Blehar, M. C., Waters, E. & Wall, S. (1978). *Patterns of attachment: A psychological study of the strange situation*. Erlbaum.
- Bauer, E. & Fach, W. (2020). Beratungspsychologie am IGPP. In D. Vaitl (Hrsg.), *An den Grenzen unseres Wissens: Von der Faszination des Paranormalen* (pp. 393–419). Herder.
- Belz, M. & Fach, W. (2015). Exceptional experiences (ExE) in clinical psychology. In E. Cardena, J. Palmer & D. Marcusson-Clavertz (Hrsg.), *Parapsychology: A handbook for the 21st century* (pp. 364–379). McFarland.
- Crowell, J. A., Treboux, D. & Waters, E. (2002). Stability of attachment representations: The transition to marriage. *Developmental Psychology*, 38(4), 467–479. <https://doi.org/10.1037//0012-1649.38.4.467>
- Fach, W. (2011). Phenomenological aspects of complementarity and entanglement in exceptional human experiences (ExE). *Axiomathes*, 21(2), 233–247. <https://doi.org/10.1007/s10516-010-9143-7>
- Fach, W. (2022). Exceptional Experiences (ExE) and bonding styles: Autonomy and bonding as basic human needs and as structural determinants of ExE. *Psychotherapy Section Review*, 67, 12–41. <https://doi.org/10.53841/bpspsr.2022.1.67.12>
- Hazan, C. & Shaver, P. (1987). Romantic love conceptualized as an attachment process. *Journal of Personality and Social Psychology*, 52(3), 511–524. <https://doi.org/10.1037/0022-3514.52.3.511>
- Kramer, W. H., Bauer, E. & Hövelmann, G. H. (Hrsg.). (2012). *Perspectives of clinical parapsychology*. Stichting Het Johan Borgman Fonds.
- Maturana, H. R. & Varela, F. J. (1987). *The tree of knowledge: The biological roots of human understanding*. Shambhala.
- Metzinger, T. (2003). *Being no one: The self-model theory of subjectivity*. MIT.
- Pilkonis, P. A. (1988). Personality prototypes among depressives: Themes of dependency and autonomy. *Journal of personality disorders*, 2(2), 144–152. <https://doi.org/10.1521/pedi.1988.2.2.144>

- Ryan, R. M. & Deci, E. L. (2017). Self-determination theory: Basic psychological needs in motivation, development, and wellness. Guilford.
- Simpson, J. A. (1990). Influence of attachment styles on romantic relationships. *Journal of Personality and Social Psychology*, 59(5), 971–980. <https://doi.org/10.1037/0022-3514.59.5.971>
- Statistische Ämter des Bundes und der Länder. (2015). *Zensus 2011: Zensus Kompakt. Endgültige Ergebnisse*. Stuttgart. Statistisches Landesamt Baden-Württemberg.
- Strauß, B. & Lobo-Drost, A. (1999). Erwachsenen-Bindungsprototypen-Rating (EBPR). Eine Methode zur Erfassung von Bindungsqualitäten im Erwachsenenalter basierend auf dem Adult Attachment Prototype Rating von Pilkonis: Version 1.2 [Unveröffentlichtes Manuskript]. Jena/Hamburg.

Aphantasia, imagery vividness and exceptional experiences

John Kruth¹ & Christine Simmonds-Moore²

¹Rhine Research Center, Durham, NC

²University of West, Georgia, Carrollton, GA, USA

Introduction: Humans range in their capacity to voluntarily experience visual mental imagery. At one end of the continuum, some people experience a total lack of visual imagery, or “aphantasia”. At the opposite end of the continuum, others experience vivid, photographic-like visual imagery, or “hyperphantasia” (Zeman et al., 2020). Imaging ability is implicated in memory, daydreaming, dreaming and creativity (*cf.* Zeman et al., 2020) and may play a role in exceptional experiences (ExE), including extrasensory perception (ESP) (Hume & Lawrence, 2005). Research supports a role for strong imagery in peoples’ tendencies to report ExE (Hume & Lawrence, 2005). However, there are different ways of experiencing anomalies (Belz & Fach, 2015) and different types of ESP experience (L.E. Rhine, 2018) and not all ExE are visual in nature. According to Belz and Fach’s model (2015), although some experiences emerge as anomalies in the self-model (internal phenomena that occur in the mind’s eye), others emerge as anomalies in the world model (body-based anomalies and physical anomalies occurring out in the world), others relate to coincidence making, and others are dissociative. In terms of extrasensory perception experiences, L.E. Rhine (2018) found that some experiences involve realistic imagery, others involve symbolic imagery, others reflect intuitive experiences and a final group reflect hallucinatory phenomena. Rhine’s categories of ESP also interact with state of consciousness. The specific roles of imagery vividness (and a lack of imagery) in the etiology of different types of ExE is under-studied. This is a two-part investigation that explores the role of imagery vividness in different types of ExE, how synesthesia (the tendency for some people to experience an additional response to an inducing stimulus¹) interacts with imagery vividness in terms of ExE and what it is like to experience aphantasia. This will include an exploration of what ExE are like for a subset of aphantasic individuals who report them.

Methods: For the first phase of the investigation, an online survey (using Qualtrics) explored a battery of measures including imagery vividness (VIVIQ), synesthesia (via one question), ExE (the PExE-II, a recent development of the PAGE-R consisting of scales measuring external, internal, dissociative and coincidence phenomena), four questions asking about L.E. Rhine’s realistic, unrealistic, intuitive and

hallucinatory types of ESP and an open-ended question about ExE. Respondents were categorized into three groups of imager (aphantasia, mid imager, hyperphantasia) based on Zeman et al. (2020). A second phase of the study sought to identify ten aphantasic individuals from phase 1 (ideally five who do not experience ExE and five who do) and engage in interviews and qualitative analysis using Interpretative Phenomenological Analysis (IPA).

Results: The project is in progress. Preliminary analysis of the survey data found that hyperphantasic individuals scored significantly higher than aphantasics and mid imagers on external, internal, and coincidence phenomena. It was also found that hyperphantasics scored higher than mid imagers on dissociative phenomena. Aphantasics were no different to mid imagers on all 4 types of ExE. In terms of L.E. Rhine's four types of ESP, some aphantasics reported ESP experiences, while others reported none. Realistic, unrealistic, and intuitive ESP were associated with imagery vividness. Hallucinatory ESP was unrelated to vividness of imagery. Synesthesia was independently associated with ExE. Some aphantasics reported synesthesia. The research team is currently working to recruit ten people with aphantasia to participate in the interview study.

Discussion: Strong imagery vividness plays a role in the etiology of many forms of ExE. However, vividness plays a stronger role for some forms of experience compared to others. For example, hallucinatory ESP may have a different etiology that is independent of imagery vividness. Synesthesia plays an important role in the etiology of ExE. There are aphantasic individuals who report ExE and those who do not. Likewise, there are aphantasic individuals who report synesthesia. There is a need to explore the lived experience of aphantasic individuals to unpack these different ways of experiencing.

References

- Belz, M. & Fach, W. (2015). Exceptional experiences (ExE) in clinical psychology. In E. Cardeña, J. Palmer & D. Marcusson-Clavertz (Hrsg.), *Parapsychology: A handbook for the 21st century* (pp. 364–379). McFarland.
- Palmer, & D. Marcusson-Clavertz (Eds.). *Parapsychology: A handbook for the 21st century* (pp. 364–379). McFarland & Co.
- Hume, I. R., & Lawrence, T. R. (2005). Assessing the relationship between ESP task success and vividness of voluntarily generated mental imagery as measured by Betts' QMI: A Review. *European Journal of Parapsychology*, 20(2), 90–116.
- Rhine, L. E. (2018). Subjective forms of spontaneous psiexperiences. I, 82(Suppl), 54–86.
- Zeman, , Milton, F., Della Sala, S., Dewar, M., Frayling, T., Gaddum, J., Hattersley, A., Heuerman-Williamson, B., Jones, K., MacKisack, M., & Winlove, C. (2020). Phantasia—the psychological significance of lifelong visual imagery vividness extremes. *Cortex*, 130, 426–440. <https://doi.org/10.1016/j.cortex.2020.04.003>

German ghosthunters – Results of an online survey

Gerhard A. Mayer¹ & Sonja Nowara²

¹Institute for Frontier Areas of Psychology and Mental Health, Freiburg, Germany

²Independent Researcher, Bonndorf, Germany

Introduction: Ghosthunting (GH) is a leisure activity that has become increasingly popular in the first decade of the new millennium, first in the USA as a result of reality TV series such as *Most Haunted* (since 2002) and *Ghost Hunters* (since 2004), and then in Europe (Mayer, 2013; Mayer & Schetsche, 2019). Ghosthunters are people who get together in small groups and, in their free time, visit places that are supposedly haunted. Some groups also investigate poltergeist cases in private households in response to requests from those affected. The main objective of the activity is to detect and record alleged paranormal phenomena in the relevant locations using various technical devices such as audio and video recorders, EMF meters, and ambient temperature measurement devices. The recordings and measurements are analyzed in the follow-up, and the results are often made available to the public as research reports on their own websites or on Facebook. This applies above all to investigations in public spaces. In the case of investigations in private households, research reports are usually only published, if at all, with the consent of the persons involved.

Most of the studies published to date on the phenomenon of ghosthunting are based on the analysis of self-portrayals of ghosthunting groups, e.g., on websites (e.g., Hill, 2017; Mayer, 2013; Potts, 2004) and sometimes supplemented by interviews (Bartoschek & Waschkau, 2013; Mayer, 2010). To our knowledge, systematic surveys of personal motivations, beliefs, and other personal aspects of ghosthunters have not yet been conducted. The aim of this research project is to better understand the phenomenon of GH in Germany and the people who pursue this time-consuming and resource-intensive leisure activity. GH requires a great deal of commitment to pursue it. We would like to know what “type of people” are attracted to it and what the individual motives are for each ghost hunter. We also want to get information about what kind of extraordinary experiences dominate and how pronounced paranormal and supernatural beliefs are. Due to the lack of comparable studies, this study was purely exploratory and not hypothesis-testing.

Methods: One of the authors (S.N.) has excellent contacts in the German ghosthunting scene, which, in contrast to the American scene, is manageable due to a total number of less than 50 teams. As the scene is very fast-moving – some groups are founded and dissolve again within a short time – the number of groups is constantly changing. All 35 active German ghosthunting groups known to us were informed by email about the research project and encouraged to participate in two online surveys. Group leaders should forward the individual questionnaire to their members. The first questionnaire (not the subject of this presentation) was addressed to the entire team, was not anonymous, and asked about the location of the group, methods used in the investigations, handling of media (television, print media, social media), etc. The second was addressed to individuals and consisted of four parts. The first part included seven questions on sociodemographic data; the second part consisted of five questions about becoming a ghosthunter, about the role of paranormal experiences in this process, about the

fascination of ghosthunting, about individual explanation models and own skeptical attitude. The third part consisted of the *Fragebogen zur Phänomenologie außergewöhnlicher Erfahrungen* [Questionnaire on the Phenomenology of Exceptional Experiences, – ExEs] (PExE-II, Fach, 2018, in press) with 20 items to measure the extent to which people have had extraordinary experiences. The questionnaire measures the frequency of ExEs on a five-point scale from “never” to “often” on the dimensions “external” – “internal” and “coincidence” – “dissociation.” The last part included 44 items of the *Belief in the Supernatural Scale* (BitSS, Schofield et al., 2018). The data was collected anonymously between October and December 2023. We used the survey software LimeSurvey.

Results: We received 39 evaluable data sets. The response rate can only be estimated as we do not know how many members were forwarded the link to the questionnaire by the group leaders. It could be around a third, assuming an average size of three people in a group. The mean age of the participants was 45 Years (SD = 9,3; Median = 46). 56% were female, 44% male, none diverse. The majority (36%) felt they belonged to Christianity. However, there are also 21% atheists and 9% agnostics in the sample. 72% of the participants had a permanent life partner, and 90% were employed at the time of the survey. 61.5% of participants stated that previous paranormal or extraordinary experiences had played a central role in starting with ghosthunting. The most intriguing part of ghost hunting for almost everyone is the contact with the paranormal or supernatural (95%), followed by the specific history of the location where the investigation is conducted (74%). Almost 85% of participants consider the explanation that paranormal phenomena are to be understood as signs from the deceased, spirits, or other entities to be partially or completely correct, and almost 90% are convinced that the phenomena are connected with the history of the location. As expected, ghosthunters report more extraordinary experiences than a student sample (Fach, 2024, in press). Their average scores on the four PexE-II subscales are consistently higher. The same applies to all the subscales of the BitSS: The belief in the supernatural among the ghosthunters is higher than two samples ($N=382$; $N=318$) from a university setting used for the validation of the BitSS (Schofield, E-Mail from February 1, 2022).

Discussion: This study was purely exploratory, as to our knowledge there were no comparable studies with which the data could be compared and which would have allowed data-based hypotheses to be formed. The evaluation was descriptive due to the small size of the sample. Some of the results were expected, such as ghosthunters experiencing more ExEs on average than a student sample because they actively search for them. Others are rather unexpected, such as the fact that 85% believe in a connection between the suspected paranormal phenomena and the deceased or ghosts, while 30% describe themselves as atheists or agnostics. This speaks for a high acceptance of the survival hypothesis, which is apparently not tied to a belief in God or the divine.

References

- Bartoschek, S. J., & Waschkau, A. (2013). *Ghosthunting: Spurensuche im Jenseits* (1. ed.). Alibri.
- Fach, W. (2018). Fragebogen zur erfassung der phänomenologie außergewöhnlicher erfahrungen PAGE-R-II: 2. Revidierte und gekürzte Fassung. Unpublished manuscript.
- Fach, W. (in press). International studies with the PExE-II. Institut for Frontier Areas of Psychology and Mental Health (Ed.), *Biennial Report 2020–2021*. Institut for Frontier Areas of Psychology and Mental Health.

- Hill, S. A. (2017). *Scientifical Americans: The culture of amateur paranormal researchers*. McFarland & Company, Inc., Publishers.
- Mayer, G. (2010). Die Geisterjäger kommen: Phänomenologie der ghost hunting groups. *Zeitschrift für anomalistik*, 10(12), 17–48.
- Mayer, G. (2013). A sample phenomenology of the ghost hunting scene in the USA and in Germany. In O. Jenzen & S. R. Munt (eds.), *The Ashgate research companion to paranormal cultures* (pp. 363–376). Ashgate.
- Mayer, G., & Schetsche, M. (2019). RSPK investigations. In G. Mayer (Eds.), *N equals 1: Single case studies in anomalistics* (pp. 87–123). LIT.
- Potts, J. (2004). Ghost hunting in the twenty-first century. In J. Houran (ed.), *From shaman to scientist: Essays on humanity's search for spirits* (pp. 211–232). The Scarecrow Press.
- Schofield, M. B., Baker, I. S., Staples, P., & Sheffield, D. (2018). The creation and validation of the belief in the supernatural scale. *Journal of Parapsychology*, 82(1), 41–64.

Mediumship and mental boundaries with voice hearing phenomenon

Taylor N. Robinson
University of West Georgia, Carrollton, GA, USA

Introduction: The voice hearing phenomenon, as understood in the parapsychological discipline, involves accessing non-local information or communicating with entities beyond the physical realm, suggesting a broader understanding of perception and communication (Romme, 2000). This auditory experience, traditionally associated with mediums who exhibit control over their perceptions, is often stigmatized and can significantly impact individuals, leading to distress. In various cultures, voice hearing has historically been viewed as a gift or divine communication, often linked to deceased ancestors or spirits conveying messages (Mason, 2023). However, in Western societies influenced by the psychiatric medical model, voice hearing is often pathologized, leading to labels such as “mentally ill” or “crazy.”

This proposed study aims to expand the understanding of the voice hearing phenomenon within a Western society operating under the psychiatric medical model and fill in gaps in previous literature on voice hearing. It has the potential to uncover strategies used by mediums to maintain control, invite voices, or build mental boundaries to block out uninvited voices that may cause distress. This study will be a qualitative exploratory study using mediums as participants. The findings could be applied in therapeutic or clinical settings to provide other voice hearers, who have been stigmatized, with tools and techniques used by experienced mediums to improve their quality of life and reclaim control lost due to the pathologization of voice hearing experiences.

Methods: To answer the research question, “What is the experience of mediums with mental boundaries with invited and uninvited voice hearing phenomena?” I took into consideration advice on approaching parapsychological research from Dr. Chris Roe, who has many years of experience. Roe (2016) writes that parapsychological studies should ensure the design and methods used “reflect the cir-

cumstances under which psi will ordinarily appear in the natural world” (Roe, 2016). To adequately and authentically investigate the phenomena of voice hearing experiences of mediums, it is essential that participants feel they can be open and honest about their experiences. Laboratory settings can bring feelings of unease to participants whose experiences have been stigmatized and can hinder them from being completely honest due to fear of judgment.

To achieve this, five mediums who experience communications with spirits by means of voice hearing or clairaudience will serve as the participants. All mediums recruited will be required to have been verified through an organization, Very Soul, which connects evidentiary mediums through a rigorous testing process with clients seeking sessions with mediums. This site only allows their professional level mediums to connect with clients. According to their website and contacts associated with the organization, “Our professional level mediums have proven their abilities to consistently provide evidence and messages that are highly differentiating and recognizable by clients.” Within the recruitment email and flyer, there will be a link to a short survey to ensure the sample of participants meets the appropriate qualifications to answer the research question, including:

- What is the primary method of communication you use to receive messages from spirits?
- How long have you been experiencing mediumship phenomena?
- Approximately how often do you have communications with spirits?

Researchers will then recruit mediums based on their responses to this survey, who communicate through voice hearing and ideally experience communications multiple times a week. Participants will be instructed to carry a journal with them for the duration of three weeks and record a journal entry immediately following each occurrence of voice hearing. The prompt will be open-ended, asking participants to describe their experience and include components such as:

- Was the voice invited or uninvited?
- Describe the voice.
- How did the voice make you feel?
- Was there any distress experienced during the experience at any point?
- Describe the process of ending the communication.

Participants are also encouraged to include any additional information they feel is important for understanding their experience. Journal entries will be the method of data collection for this study as they provide participants with comfort to be most honest and reduce the possibility of forgetting details between the voice hearing event and when researchers can organize a follow-up about the experience. Once three weeks of journal entries have been recorded, the journals will be sent to the researcher, and entries will be transcribed.

After the participant's journal entries have been delivered to the researcher, a content or thematic analysis will be executed on the journal entries with the intention of identifying patterns and techniques used while engaging with disembodied voices. Thematic analysis, as the method of analysis, speaks to the research question through a contextualist framework meaning, "Reality is 'out there,'" but access to it is always mediated by socio-cultural meanings. People's words provide access to their particular version of reality; research produces interpretations of this reality" (Smith et al., 2015). Thematic analysis will provide researchers with insight into participants' experiences with voice hearing and how they make meaning of their experience.

Results: The findings will consist of significant patterns and recurring techniques used by mediums to build mental boundaries to reduce and manage distress caused by the voice hearing phenomenon. These findings could deepen our understanding of the voice hearing phenomenon within the mediumship community and provide potential techniques for psychiatric voice hearers to introduce into a clinical environment. Learning these techniques could not only reduce distress experienced because of voice hearing experiences but also provide an opportunity to reclaim control over the experiencer's choice to engage or not to engage with disembodied voices. When control is reclaimed, those afflicted may have a chance to improve their quality of life and reintegrate into society without stigma restricting them.

References

- Brewin, C. R., Phillips, K., Morton, J., Mason, A. J. C., Saunders, R., & Longden, E. (2022). Multiplicity in the experience of voice-hearing: A phenomenological inquiry. *Journal of Psychiatric Research*, 156, 564–569. <https://articles.westga.edu:2116/10.1016/j.jpsychires.2022.10.065>.
- Mason, John. (2023). The interpretation and treatment of: "hearing voices". Historical understandings from: Classical antiquity, lay/folk beliefs, Christian Church theology and the scientific era of psychiatry. DHMSA Lecture June 30th 2023 John P.Mason. 10.13140/RG.2.2.17644.13442
- Roe, C. A. (2016). As it occurred to me: Lessons learned in researching parapsychological claims. *Journal of Parapsychology*, 80(2), 144–155.
- Romme, M., & Escher, S. (2000). Making sense of voices: The mental health professional's guide to working with voice-hearers. Mind Publications.
- Roxburgh, E. C., & Roe, C. A. (2013). "Say from whence you owe this strange intelligence": Investigating explanatory systems of spiritualist mental mediumship using interpretative phenomenological analysis. *International Journal of Transpersonal Studies*, 32(1), 27–42. <https://doi.org/10.24972/ijts.2013.32.1.27>

Investigating the accuracy of perceptions during out-of-body experiences

Marina Weiler¹, Raphael Casseb², & David Acunzo¹

¹University of Virginia, Charlottesville, VA, United States

²University of Campinas, Campinas, SP, Brazil

Introduction: Humans typically perceive themselves as confined within the boundaries of their physical bodies, guided by the inputs acquired via the ordinary senses (vision, hearing, touch, taste, and smell), sensations of embodiment, self-location, and a subjective first-person perspective. However, there are instances where this typical experience can dissolve, resulting in disruptions to bodily self-awareness, such as Out-of-Body Experiences (OBEs). Notably, individuals who undergo an OBE frequently assert the ability to observe phenomena or events from perspectives beyond their physical bodies, offering unique insights. Therefore, validating the reported perceptions during an OBE can yield valuable understanding and insights into these extraordinary experiences. In a pilot project conducted in Brazil in 2023, three individuals claiming the ability to self-induce OBEs were recruited. The investigation aimed to assess their ability to induce OBEs reliably within a controlled laboratory environment and to verify psi processes during OBEs.

Methods: Participant 1: G.R., 31 years old, male, first OBE at the age of 16, 15 years of experience in inducing OBEs, reports self-inducing OBEs weekly. Participant 2: F.C., 44 years old, female, first OBE at approximately 7 years old, 9 years of experience in inducing OBEs, reports self-inducing OBEs weekly. Participant 3: N.A., 56 years old, female, first OBE at 7 years old, 6 years of experience in inducing OBEs, reports self-inducing OBEs daily. Our experiments were conducted at the Neuroimaging Laboratory located at the Hospital de Clínicas of the University of Campinas, SP, Brazil, over 2 days. The targets were randomly generated using a script developed in MATLAB (version 2019b, The MathWorks, Inc., Natick, Massachusetts, United States), completely blind to any of the researchers in a computer with no access to the internet. The first target consisted of a two-digit number, ranging from 00 to 99, while the second target was an image of an object chosen from a selection of 60 images sourced from the internet. Each target was displayed on a separate monitor, positioned side by side and facing the wall. Cameras (Webcam Full HD Logitech C920s, 1280 x 720 resolution, 24 fps) recorded both the monitors and the room of the Neuroimaging lab in which these monitors were situated, as well as the OBE room throughout the experiments. Targets were only accessed by researchers and participants at the end of the day when all experiments ended.

Results: *Day 1* - The first targets, generated during G.R.'s experiment, were the number 79 and an image of a pizza. The participant could not self-induce OBEs nor spot the target. For F.C., the number 84 and an image of a sun were generated. The participant reported having multiple OBEs but couldn't spot the target. Finally, for N.A., the number 74 and an image of a trophy were generated. She reported having an OBE and mentioned her perception of a book and the number 79. *Day 2* - The targets were randomly generated only once, the sun and the number 70, which were displayed on the monitor throughout the entire day, unbeknownst to the participants. G.R. was able to self-induce OBEs but with

some limitations and could not spot the target. F.C. was able to self-induce OBEs and reported seeing a circular and bright object, like a sun or a pinwheel. N.A. was also able to self-induce OBEs and reported the number 46.

Discussion: Encouraging evidence suggesting psi processes during OBEs emerged from target outcomes. Noteworthy instances include the accurate identification of the number displayed to another participant on the first day (potential displacement). More impressively, on the second day, another participant described the target as a “circular object, like a pinwheel or sun,” remarkably aligning with the designated target, which happened to be a sun. These instances provide indications of a potential correlation between OBEs and psi, emphasizing the need for further exploration and analysis in subsequent phases of our research.

ABSTRACT OF PRESIDENTIAL ADDRESS

Beyond the Fringe: Parapsychology's Contributions to Science and Contemporary Thought

Everton de Oliveira Maraldi^{1,2}

¹D'Or Institute for Research and Education (IDOR), Rio de Janeiro, Brazil

²Institute of Psychiatry, Faculty of Medicine, University of São Paulo, Brazil

This presentation delves into parapsychology's history, revealing its substantial but often overlooked impact on various scientific fields, both methodologically and theoretically. Early psychical researchers/parapsychologists laid foundational work for research in psychology, medicine, and social sciences, a legacy that continues to influence contemporary studies. Despite the challenges faced by parapsychological institutions and researchers to achieve wider academic acceptance, interest in research on “anomalous or exceptional experiences” and “non-ordinary states of consciousness or mental expressions” is growing and slowly gaining strength in academia. Various scholars are also beginning to acknowledge the importance of incorporating ontological discussions into their scientific fields. Frederic Myers's visionary predictions about spirituality's role in science and society are increasingly becoming a reality, with the subject enjoying growing interest among scholars and the public alike. Paradoxically, part of these achievements is occurring outside of our direct involvement. While parapsychology's contributions have helped shape developments in other disciplines, this has also led to a fragmentation and invisibility of our field's influence. Yet, researchers interested in the study of spirituality and non-ordinary experiences could greatly benefit from a deeper understanding of our history and lessons learned, both regarding the phenomenological and ontological aspects of these experiences. I will discuss how we

can benefit from such interdisciplinary exchanges and participate more effectively in the wider scientific movement that is taking shape. The full realization of Myers's vision requires a broader view of the field and our place within it. To reclaim our rightful place in the scientific landscape, we must transcend current terminological, disciplinary, and institutional barriers.

ABSTRACT OF INVITED ADDRESS

J.B. RHINE BANQUET ADDRESS INDIGENOUS PSYCHOLOGIES FROM *CEM ANAHUAC* (MESOAMERICA)

Nuria Ciofalo

Pacifica Graduate Institute, Carpinteria, CA, USA

Indigenous psychologies are informed by their cosmovisions, philosophies, religions, spiritual traditions, and onto-epistemologies. This presentation will address *Cem Anahuac* conceptions of consciousness and altered states of consciousness, psyche, spirit, and mental and physical health among the Nahua and Maya of Mexico. Their knowledge and praxes systems have resisted colonization and erasure of their rich legacies due to the imposition of the conquerors' only-one-world view still persisting in academic discourse. The rich Nahua and Maya cosmology, astrology, science, and mythology are preserved in texts written in the stones of their majestic archeological sites. Indigenous communities in this region continue to use sacred substances, such as medicinal plants, mushrooms, and some animals, that stimulate altered states of consciousness in rituals for holistic healing. The Western academy needs to learn from these knowledge and praxes systems, consciousness states, and spirituality to expand their hegemonic paradigm and promote decoloniality in the Euro-centric discipline of psychology.

SOCIETY FOR SCIENTIFIC EXPLORATION

A Great Shift, 2024 **A Note from the Program Chair**

Margaret Moga
Indiana University, Terre Haute, Indiana

The following abstracts were accepted for the 42nd Annual Conference of the Society for Scientific Exploration. The conference was held from September 27-29, 2024, in an online format hosted by Airmeet.com, and featured speakers from around the world. To combine the best aspects of virtual and live conferences, speakers were encouraged to provide a pre-recorded video and then to interact with attendees in a Live Question & Answer session immediately following the video presentation.

The abstracts that follow are presented in alphabetical order based on the family name of the first author. This is a summary of the presentations at this conference. References were retained within the abstracts when they were provided, but the bibliography for each presentation is not included.

Program Committee: Margaret Moga (Chair), Daqing Piao, Chantal Toporow, Arlene Hopkins, Leon D'Souza.

Convention Committee: Brian Laythe, Margaret Moga, Daqing Piao, Nancy Smoot Tramont

CONFERENCE ABSTRACTS

Successful Replication of Three of Nikola Tesla's Devices Today Regarded as Lost or "Impossible."

William J. Beaty

Department of Chemistry, University of Washington-Seattle, Seattle, Washington

The author shares a collection of results from years of private research on high voltage systems. 1) A fortuitous accident at a 1998 Seattle physics-hobbyist meeting provided the key to Tesla's so-called "Death Ray" device and explained some unexpected physics effects encountered earlier by the author in 1984. Simple versions of Tesla's hair-fine droplet-beams (one ATM, 5KV) are safe and almost trivial to demonstrate, while more powerful versions cut through thin glass plates. The microwatt version has been disclosed as an online hobby-project, while the proprietary high-power version has numerous industrial applications. 2) A local Seattle machinist at Boeing has built one of Tesla's Earthquake machines, and when operated, observed an unexpected effect possibly kept secret by Tesla, which seems to explain Tesla's unusual reports. This modern mechanical oscillator employs a tungsten piston rather than cast iron, with high-HP hydraulic or pneumatic drive, rather than steam-boilers. The "Tesla secret" leads to wide applications in the construction industry. 3) A high-voltage vacuum tube from Tesla's 1892 Royal Society lecture was recently built and proved to exhibit some very unexpected behavior. The physics behind this tube is somewhat obvious, but only in hindsight, and has been sitting in the literature for over 100 years. Some Tesla-style engineering applications are in use today, but are unrecognized as such, while others are yet to be explored.

The Psychosphere: Our Mental Atmosphere

Bernard Beitman

The Coincidence Project, Charlottesville, Virginia

The Psychosphere, our mental atmosphere, connects individuals including humans, plants, animals, fungi and Earth with each other. The psychosphere is the outermost layer of outer Earth's major constituents; water (hydrosphere), rocks (lithosphere), life (biosphere), and mind (psychosphere). It includes the noosphere. The psychosphere has been in the Western mind for more than a century. We share a psychic energy field with everyone on the planet, creating a framework that connects our individual thoughts and deeds to part of a larger whole. Our emotional and mental states dictate, and are shaped by, the psychosphere—we get out what we put in, and vice versa. The psychosphere offers a way to explain both telepathy and simultaneous independent discoveries. Historical depictions of the psychosphere describe its global scale—but can it also express itself locally? Do geographical areas provide ingredients for a pronounced regional flavor? Indeed, there are places you visit that seem to rejuvenate

our soul, and others that give you the creeps. The mountains can feel awe inspiring, while a dense forest might seem ominous or foreboding. Geography and the physical landscape subconsciously impact the emotional climate of the people living there—which contributes to the creation of a localized psychosphere—psychospheric bubbles. There's a scene in the first episode of the TV show *True Detective* that finds Matthew McConaughey's character describing the psychic atmosphere present in an area where brutal, occult-tinged murders have taken place: "I get a bad taste in my mouth out here. Aluminum. Ash. Like you can smell the psychosphere." The investigation ultimately leads to a group of elite occultists whose abhorrent ritualistic behavior seems to have generated a palpable dark energy in the region. The show insinuates that their actions and emotions directly feed into this invisible psychospheric bubble which is subconsciously perceived by the area's inhabitants. Cohesive groups of all kinds seem to share a group mind. Classrooms can share a group mind with the teacher sometimes picking up the feelings, thoughts and concerns of the students. Other situations that create localized psychospheres include families, groups, and dance, cities, and villages, geographical and historical influences.

Ethical Innovation: AI-Driven Solutions for Bridging the IRB Gap in Edge Science Research

Mark Boccuzzi

Windbridge Institute, Tucson, Arizona

Artificial intelligence (AI) could revolutionize research ethics, particularly for independent researchers in Edge Science fields such as parapsychology and UFO/UAP studies, who often lack institutional review board (IRB) access. The Human Participant Protection Program (HPPP) provides a crucial solution by offering an AI-driven, unbiased, ethical review system. This presentation will overview the HPPP, highlighting its role in bridging the IRB gap and showcasing case studies demonstrating its practical application in addressing ethical concerns. Additionally, the HPPP Preregistration Database will be introduced as a tool to enhance research transparency and accountability by enabling preregistration of ethics reviews. While AI systems offer streamlined evaluations of participant protection, consent, risk assessment, and data privacy, they also face challenges such as potential biases and complexities in ethical issues. Strategies to address these limitations, including human oversight and diverse training data, will be discussed. The future of research ethics will likely involve a combination of AI and human review, ensuring that innovative Edge Science research remains ethically rigorous and forward-thinking. As AI advances, its role in supporting ethical research practices will continue to grow.

Exploring How Our State of Consciousness Influences our Perception of Reality

Kathleen B. Covalt

Pure Energy Presentations & Intuitive Guidance, Skillman, New Jersey

Introduction: This presentation will explore how our perception of the nature of reality changes depending on our state of consciousness – and therefore, how our thinking and decision-making processes are influenced by our current emotional state. There is an insightful quote attributed to the Greek playwright Sophocles – “For the person who is afraid – everything rustles.” Each emotion has a distinct vibration. For example, when we are in a fearful state, it is as if we have moved our awareness to a distinct field of energy where all our memories and thoughts that also share that fearful vibration are readily accessible to us. We perceive the world through the filter of fear, and it is difficult to make good decisions because we don’t see all the options... we only see options that exist in our fearful world. We don’t fully hear what another person is saying because we interpret their meaning from our own limited perspective. We can learn to become aware of the various ways we tend to energetically and emotionally react to the people and events around us. How do we habitually respond when someone “pushes our buttons”? When we become upset, do we get into the same destructive patterns with our partner, family, friends, or co-workers and it seems as if nothing ever gets resolved? **Method:** In my personal experience and in working with my clients I have found the underlying insights discovered by Hal and Sidra Stone with their “Voice Dialogue” technique to be very helpful and healing. Voice Dialogue is a method developed in the 1970’s and 1980’s by the Stones to explore an individual’s energetic and emotional patterns which can vary from vague feelings to what they called fully developed “subpersonalities”. The Stones found that each subpersonality’s energy pattern animates the physical body in distinct ways. Each subpersonality tends to have a distinct facial expression, tone of voice, body movements and physical symptoms. In addition, each subpersonality carries with it certain memories (i.e., state-dependent memories). **Implications:** Especially now with communication breakdown and conflict continuing to escalate, understanding that we can become more aware of our own and other’s energetic shifts - and making an effort to find practices that help us consciously return to our calm, clear center where we can see more clearly, communicate more effectively and make better decisions – is vitally necessary to help move humanity successfully into the next phase of our evolutionary development.

The Great Shift: Potential Implications of Official UAP Disclosure

Tom Curren

Hawthorne Consultants, Boulder, Colorado

The research team for this study consisted of Tom Curren, M.B.A. (presenter), Sabina Spencer, Ph.D., and Roger Stack, B.S. **Introduction:** There has been increasing interest in the UFO phenomena ever

since the New York Times reported (December 16, 2017) the existence of a secret Pentagon program to study UFOs, concurrent with the release of three videos showing high-performing Unknown Aerial Phenomena (UAP) taken by Navy F-18's off the Pacific and Atlantic coasts. **Question:** What might be the potential implications of the United States president and other world leaders disclosing the existence of non-human intelligence (NHI) and technology on Earth? Our hypothesis is that there would be wide-ranging implications. Anticipating and discussing such events can be seen as a proactive strategy, akin to healthcare planning for future medical crises. **Methodology:** In June 2023, we conducted focus groups that generated 116 potential implications from UAP disclosure. We narrowed the implications to a list of 44 items covering science/technology, NHI engagement, government/military, and society/culture. Our next step was to conduct an on-line survey (August-September 2023) asking participants to assess each implication for likelihood (a 6-point Likert scale) and impact (very positive, positive, mixed, negative, very negative). Survey Monkey was our platform. We obtained an initial set of 900 responses via personal networks (200) and paid panel responses (700). After rigorous testing, we limited our data set to 434 valid responses. **Results:** The profile of our survey participants was as follows. • 47% male, 52% female, 1% non-binary • 52% Baby Boomer, 48% Gen X, Y, Z • 67% United States, 13% Mexico, 11% United Kingdom, 7% other. Respondents who claimed greater knowledge of UAP phenomena ("KNOW MORE", n=74) differed markedly from those with less knowledge ("KNOW LESS", n=73). Distribution of the Top 10 words based upon open text responses (descending order of frequency): •KNOW LESS group: uncertainty, fear, scary, chaos, hope, opportunity, caution, skepticism, disbelief, good. •KNOW MORE group: transformation, technology, hope, potential, enlightenment, uncertainty, shock, evolution, exciting, chaos. In addition, the KNOW MORE group viewed 18 implications positively and likely, compared to zero for the KNOW LESS group. Differences between KNOW LESS/KNOW MORE groups were more pronounced than differences by gender or generation. Key themes from KNOW MORE responses included: a) A shift in global awareness, b) Deeper engagement with NHI, c) Boost to science and technology, d) Expanded sensing and consciousness, and e) Many people remain disengaged others hostile. There were 3 critical sets of uncertainties: a) NHI intentions and capabilities remain uncertain, b) Not known if any secret agenda of the national security state will succeed, and c) Unknown social response. **Conclusion:** Greater knowledge of UFO phenomena correlates with more positivity and less uncertainty.

Birth of a New Humanity

Jerry Gin

Foundation for Mind-Being Research, Los Altos, California

The entire planet and humanity are being rewired. This is happening within us and within the planet. This is happening at the subtle vibrational level. Those who are sensitive to energies, especially healers and dowsers, feel the changes but do not know the cause of it. These changes do affect us and the world. The changes can be detected and measured with the tools of radiesthesia. The purpose of the talk is to inform you of the dramatic worldwide changes which we are detecting.

Virtually everything has subtle vibrational energies and can be detected in association with the

resonance of those energies with the basic known colors. The fundamentals of radiesthesia allow one to detect and measure those energies. In our research, we were mapping the subtle vibrational structure of the human body and biofield, according to the resonance with the basic colors. Our maps also included the subtle energy qualities of BG3 (BioGeometry) and 369 (torus). In May of 2023, dramatic changes in the subtle vibrational structure of the body and biofield occurred. The process of change was ongoing with new changes occurring daily and monthly. It was a progressive phenomenon.

A year has gone by, and the level of changes is monumental.

On the physical plane, we appear the same. Within our subtle energy self, we are very different. From an energetic perspective, things that were toxic for us may no longer be toxic; things which we required we may no longer require. We now radiate subtle colors. We now have a better idea as to the direction of change that is occurring, but we do not know when the changes will be complete and what that full completion of changes will be like nor how much longer will the changes occur. These changes have now been going on for a full year. Some of the changes may have stabilized.

While humanity was changing, the subtle vibrational energies of Earth were also changing. These changes became more evident at the beginning of 2024 and the changes are still occurring. We will talk about some of those changes during the talk.

Paranormal Folklore in Western Georgia: A Critical Narrative Analysis of Apparitions

Jacob W. Glazier¹ and David Mitchell²

¹Department of Psychology, University of West Georgia, Carrollton, Georgia; ²Department of Psychology, California Institute of Integral Studies, San Francisco, California

This study employs Critical Narrative Analysis (CNA) to explore paranormal folklore, specifically apparitional accounts, in Western Georgia in the United States. We began the study with the research question: "How do participants situate their paranormal experiences in relation to discourse?" The research examines local ghost stories through the lens of folklore studies, situating these narratives within a broader cultural and academic context. The methodological approach involves analyzing the interplay between individual narratives and dominant societal discourses. We collected, using an anonymous Qualtrics survey, and analyzed 10 accounts from individuals in the Western Georgia area. The analysis revealed four primary discourses: (1) psychological misperception, (2) scientism, (3) privileged access to subjectivity, and (4) prototypical paranormal explanations. These were countered by the participants in five significant ways: (1) the extension of consciousness across space and time, (2) lucid perceptual experience, (3) the presence of anomalous phenomena, (4) adjudication to story and hearsay, and (5) consensual or repeated verification. These counter-discourses challenge mainstream understandings of reality and push back against normative accounts while highlighting the critical potential of folklore. In addition, the study underscores the significance of local and geographic specificity in understanding these narratives by emphasizing how local discourses provide an experiential and historical grounding

that contrasts with broader scientific narratives. Through focusing on Western Georgia, the study sheds light on the unique cultural and historical factors that shape these narratives and contributes to a deeper understanding of how paranormal folklore persists and evolves. We recognize various limitations with our current research approach. Perhaps most saliently, we are limited by a regional and geographic area to discern what may count as either a dominant discourse or counter-narrative. In other words, the applicability of our findings should be limited and circumscribed therein. Conceivably, dominant discourses and the ways that they are countered are going to depend on the language community where they circulate. We did not frame our study nor examine the ways that paranormal or anomalous experiences may acquiesce or conform to these dominant discourses. That is to say, it is very likely the case that many people have ExEs, which then become assimilated into and adjudicated by these prevailing ways of understanding the world. Providing further question stems or follow-up questions (e.g., regarding participant positionality, etc.), or supplementing the questionnaire with participant interviews, to better ascertain the nature of experient meaning-making herein could therefore have been helpful. Such would constitute an additional and worthy future study.

Cranes Over the Western Mountains: An Introduction to Fa Qi Teaching in the West

Jeffrey S. Hardee

Independent researcher, Mesa, Arizona

Introduction: Fa Qi is the human practice of emitting bioelectric energy primarily for healing but has been used in martial arts and in religious activities. As an “inner door” teaching primarily in China from Taoist traditions (but also employed in Buddhist traditions), the techniques of Fa Qi have been increasingly taught to Western students since the mysterious “John Chang” of the Mo Pai lineage began teaching Westerners in the late 1980s. This short presentation will begin to trace the development of the teaching and consider the consequences this may have for modern science and the health care industry. **Hypothesis/Question:** As more Western students advance in the training to be able to Fa Qi independently, and as a number of those are TCM, acupuncture, or alternative health practitioners, how will the medical community incorporate positive case studies and scientific data which 1) confirms the existence of human bioelectric energy (qi) and a repeatable training method to produce it and 2) contributes significantly to positive health outcomes for conditions or diseases which have been difficult for current Western Medicine to effectively treat? Additionally, why is this practice increasingly being taught to Westerners? What are the political, social, religious, and/or economic drivers that open this previously closely guarded teaching outside of China? **Methods:** Participant observation studies are being conducted by the author within two Fa Qi lineages, Authentic Neigong (<https://authenticneigong.com>, taught primarily by Zhou Gan Sheng and Rudolf Coetzer) and Lotus Nei Gong International (<https://lotusneigong.com>, taught primarily by Damo Mitchell). This entails data collection through personal journals, online conversations, interviews, online live meetings, in-person treatments, in-person conferences, and in-person retreats. This data is compared with popular literature on the subject like “The

Magus of Java: Teachings of an Authentic Taoist Immortal” by Kosta Danaos and scholarly literature like “Dream Trippers: Global Daoism and the Predicament of Modern Spirituality” by David A. Palmer and Elijah Siegler. Scientific data gathered by sports medicine experts from Fa Qi demonstrations in Italy in October 2023 will also be incorporated if made available to the author. **Results:** Fa Qi is not a mythological story. The author has witnessed three practitioners emit qi from their bodies on multiple occasions and has video evidence of multiple training sessions where qi is used as a treatment modality to enhance neigong/neidan training by Westerners. In the author’s own training over a two year period, he has experienced body changes which are in line with older Taoist descriptions of development in this art, as in the Neijing Tu diagram, coincident with the theory espoused within Authentic Neigong and Lotus Nei Gong International. **Conclusion/Implication:** As more students of these Taoist/Buddhist lineages develop the skill of Fa Qi, there will be an increasing number of clinics opened in the West which utilize Fa Qi as a compliment to TCM healing practices. This will challenge the Western conception of medical treatment and open avenues for further scientific study on the development of and applications of Fa Qi in medical and consciousness studies.

Remote Viewing, the Aharonov-Bohm Effect, and Non-Local Communications: How Phase Singularities in the Brain May Enhance Human Capacity for Extended Sensory Perception

Simeon Hein
Institute for Resonance, Boulder, Colorado

The exploration of quantum phenomena has led to profound insights into the nature of reality, challenging classical notions of space, time, and causality. This presentation delves into the intriguing intersections between remote viewing, the Aharonov-Bohm effect, and non-local communications. Remote viewing, the ability to perceive distant or unseen targets, suggests the existence of non-local interactions beyond conventional sensory channels. The Aharonov-Bohm effect, demonstrating that electromagnetic potentials can influence particles in regions without classical forces, provides a quantum mechanical basis for such non-local interactions through geometric phase rather than the more common idea of quantum entanglement. Recent research in fMRI (functional Magnetic Resonance Imaging) shows the existence of vortex-like phase singularities in the cerebral cortex, which are sufficient to cancel ordinary EM fields and support the Aharonov-Bohm effect. This effect may be one mechanism by which humans can acquire non-local information during RV sessions. The findings could have profound implications for developing novel communication technologies, psychokinesis (PK), and our comprehension of consciousness and exotic states of matter.

Human Emotions and Randomness: How Intense Feelings Affect Physical Random Number Generation

Ulf Holmberg

Independent researcher, Stockholm, Sweden

This study explores the influence of human activity and emotional states on the quality of random numbers generated by a TrueRNG v3. Data was collected over two years in a domestic setting, focusing on morning routines (07:30-08:15 am). Statistical analyses of nearly 48 million observations revealed significant anomalies during periods of high human activity, particularly during the morning departure time between 07:55 and 08:10 am, suggesting that emotional states may influence the random number generation process. The observed deviations, with odds against chance of 1 in 641,359, suggest a need for further research.

Eros and Thanatos - Measurable Vibrations in the Field of Consciousness

Wolfhardt Janu

Wyrd Technologies, Skipton, Yorkshire, United Kingdom

In our presentation, we will introduce a new approach to detecting non-local effects of psychologically or emotionally significant events on random data streams. The 'oREGano approach', which is the predecessor of the 'Wyrdoscope' (a dual REG device of our design), uses a pair of random event generators located in close physical proximity to events that hold a high degree of significance for a person or group of people engaged in an experience. The data streams recorded during these events are then automatically searched by a specially devised algorithm, for anomalous ordered structures and those are then compared with the protocol of observed events, in real time as they occurred. In several of our series of experiments conducted either during Tantra seminars or in connection with the dying process, we found highly significant correlations in the temporal course of psychologically/emotionally intense events and ordered structures in two random data series, recorded by the dual REGs. In many cases, the data suggest that the detected synchronous data structures map on to psychologically and/or emotionally significant moments, experiences or changes in real time. In our presentation, we will introduce the technical aspects of the Wyrdoscope, present the results of these experiments, and discuss the concept of the field of consciousness.

Towards a Quantum Informational Model of Consciousness

Ed Lantz

Independent researcher, Los Angeles, California

The possible relationship between quantum processes and human consciousness is a topic of ongoing debate and research in the greater scientific community. An established connection between nonlocal quantum informational processes in nature and human consciousness could explain a host of documented informational anomalies including telepathy, precognition, remote viewing and reincarnation memories. Yet there remains a large explanatory gap between microscopic quantum phenomena observed under carefully controlled laboratory conditions and quantum informational processes in the natural world. Quantum information science (QIS) is a rapidly advancing field primarily fueled by quantum computing research that is yielding new theoretical frameworks, research methods and instrumentation. Parapsychological research utilizing random event generators (REGs) assumes that quantum randomness can be influenced by human consciousness. Indeed, one of the mysteries of quantum physics is the “quantum foam” that pervades the universe, including the vacuum of space, which includes “virtual particles” of all types popping in and out of existence, entangling with matter and exchanging information. Researchers use REGs to demonstrate anomalous spatiotemporal correlations between mind and matter. However, these research methods have advanced little in recent years and, despite numerous studies, measured effect sizes over many trials are only slightly above chance expectations. It is posited that quantum randomness reflects a superposition of underlying quantum informational/computational processes that are accessible to, or even fundamental to, human consciousness, yet – taken as a whole and averaged over time – should indeed appear purely random. QIS would suggest that probing the underlying quantum information itself holds the key to a more robust measurement of anomalous informational correlations. A generalized quantum informational hypothesis is suggested to guide future research into informational anomalies through the lens of QIS. New experimental designs inspired by QIS to increase the detection sensitivity of anomalous correlations are suggested including the use of maximum length codes, correlation matrices, quantum tomography, AI and more. New topics for theoretical QIS research to explore the quantum information hypothesis are also suggested. As with REG research, QIS methods bypass the need to fully understand the specific neurological mechanisms involved in mind-matter correlations. Finally, a multidisciplinary colloquium including researchers in QIS, consciousness, neuroscience and parapsychology is proposed to study how informational anomalies, long researched by parapsychologists, might open the door to a wide spectrum of new discoveries in consciousness science, neuroscience and the fundamental nature of reality.

Life Energy: Phantom Limbs, Team Chemistry, and Crop Circles

Eric Leskowitz

Retired, Harvard University, Boston, Massachusetts

This presentation will be an overview of the crucial role that life energy could be playing in Western medicine, and Western civilization, were it not for long-standing prejudices that work against a needed paradigm shift. Subtle energy's role in biofield healing, in group interactions and in global consciousness will be highlighted.

The Western medical establishment has resisted the idea of energy medicine for 250 years, from Franz Mesmer in 1780's Paris (Animal Magnetism) to Wilhelm Reich in 1950 (the orgone box) to the on-line de-platforming of holistic doctors today. But the human body is not a machine – the heart is more than a pump and the brain is more than a computer. Energy is the missing ingredient that animates and interconnects all the parts, from cells to organs to the mind itself, and enables homeostasis and self-healing to occur.

Phantom limb pain is a strange condition that provides direct proof for the existence of a biofield – the phantom can be directly perceived by skilled energy practitioners, the patient can sense when his phantom is being “touched”, and the pain can be relieved by energy-based therapies that heal the underlying emotional trauma and subsequent energetic blockages of the amputation. More than “mal-adaptive neuroplasticity” is involved in phantom pain – it is the biofield in action.

Personal energy alignment can bring about a state of spiritual awakening, even in the world of competitive sports. This altered state of consciousness is known as the Zone or the flow state, and well-known athletes have described parapsychological abilities, an exact parallel to the yoga siddhis described by Michael Murphy in *The Zone: Transcendent Experience in Sports*.

Biofield interactions lead to such experiences as team chemistry and fan energy in music and sports, all of which can be measured in the lab and at the ballpark. Heart rate variability assessment (heart coherence) and random number generator (RNG) monitoring have reliably detected the impact of human attention and intention locally and at a distance.

If all living beings have subtle energy systems, then what of Mother Earth? Gaia, too, is alive, and her energy also flows along meridians (“ley lines”) and gathers at focal points (sacred sites). Indigenous peoples have long known this, and megalithic structures like Stonehenge were built in alignment with these energy pathways. They may have served as transducers of earth energies and human ceremonial energies via piezoelectric and magnetic field resonance.

The “crop circles” found near these sacred sites in the wheat fields of England are of uncertain origin, but they are clearly not man-made hoaxes, and they may reflect our planet's state of energy evolution. As high-frequency energetic imprints, they can spur our collective evolution, a process that

is facilitated by a global consciousness stemming from a field of energy interconnections. One hopes that this interconnectedness will help us transcend our current state of crisis in the realms of medicine, religion and politics, and lead to an awareness of our true unity as human stewards of our planet.

The Fourth Turning is Here: The Correlation between Major Social and Political Upheavals and Planets

Robert Marks

Independent researcher, New York City, New York

In the late 1990's, Neil Howe and the late William Strauss wrote "The Fourth Turning" where they demonstrated a cycle of social change involving four "turnings" during which society undergoes major changes. The most dramatic of these was the Fourth Turning during which society goes through a major upheaval. Neil Howe has written a sequel, "The Fourth Turning is Here" where he claims that the next upheaval is starting. The books mention two cycles. First there is a 'Generation Cycle' that marks off the difference between generations. This cycle lasts about 20 years. Then there is the Big Cycle of the Turnings. This takes about 80 to 100 years. The first thing I noticed was that the Generational Cycles of 20 years corresponds exactly to the 20-year cycle of conjunction between Jupiter and Saturn. The long cycle of 80 to 100 years corresponds to the 84-year cycle of Uranus. Howe traced this cycle back to the War of the Roses in the 15th century. He claims that the only exception was the U.S. Civil War. By contrast, the 84-year cycle of the planet Uranus predicts it exactly. Uranus "returned" to the exact place it occupied at the signing of the Declaration of Independence in November 1860, just when the Southern states started to leave the Union. The next time Uranus was at that point was 1944 during WWII. There are many other points as well. It goes without saying that Correlation is not PROOF of Causation. But Correlation over the course of several centuries may be an indication that something other than mere coincidence is going on.

Using Tuning Forks and Sound Healing to Reduce Anxiety

Eileen Day McKusick

Biosona, LLC, Colchester, Vermont

Objectives: This study examined the feasibility and effectiveness of a virtually delivered, bio-field-based sound healing treatment to reduce anxiety for individuals meeting criteria for Generalized Anxiety Disorder.

Design: This one-group, mixed-method feasibility study was conducted virtually via Zoom during

the SARS-CoV-2 Pandemic. Fifteen participants with moderate to high levels of anxiety as determined by the Generalized Anxiety Disorder-7 (≥ 10), were enrolled.

Intervention: Five certified Biofield Tuning Practitioners performed the interventions. Participants were given three weekly, hour-long sound healing treatments virtually, over a month's period.

Outcome Measures: Attrition rates and reports on feasibility of intervention delivery and outcomes assessment were obtained by participants. Data on anxiety, positive and negative affect, spiritual experience, perceived stress, and quality of life were obtained via validated surveys and analyzed via repeated-measures analysis of variance with intention-to-treat. Linguistic inquiry and word count was utilized to assess changes in affective processing as reflected in participants' spoken words over the course of the intervention. Qualitative interviews were conducted to further determine tolerability and experiences with receiving BT that may not have been captured by survey and language data.

Results: Attrition rates were 13.3%, with two participants dropping out of the study after one session. The remaining participants reported acceptability of the data collection process and intervention delivery. Intention to treat analyses revealed statistically significant reductions in anxiety (State-Trait Anxiety Inventory), negative affect (Positive and Negative Affect Scale), and perceived stress (Perceived Stress Scale) ($p < .001$ in all cases). Linguistic and word count analysis revealed a significant linear decrease ($p = .01$) of participants' use of negative affect words over the course of the intervention. Qualitative data results are reported in another paper.

Conclusions: Results indicate that BT delivered virtually is feasible and amenable to study, and that the impact of BT may be substantial in reducing anxiety and improving mental health. This is the first study of its kind to report clinically significant reductions in anxiety levels in response to a virtually delivered, biofield-based sound therapy. The data will be used to power a randomized controlled trial to more deeply examine the effects of BT on whole-person healing for those suffering from anxiety.

Unreliability of the Gas Discharge Visualization (GDV) Device and the Bio-Well for Biofield Science: Kirlian Photography Revisited and Investigated

Federico E. Miraglia
California Institute for Human Science

This research work was aimed at studying the reliability of the Gas Discharge Visualization (GDV) device and the Bio-Well. These biofield machines, which are based on the Kirlian effect, were put to test in a Pranic Healing experiment. Pranic Healing has been practiced in Ayurveda for millennia to restore and promote health, by manipulating the flow of subtle energy Prana throughout the human organism. Kirlian photography has been used for decades to measure the human energy field, to assess its bioenergetic condition and potential, as well as validate a variety of therapeutic modalities. While the literature abounds with publications claiming the usefulness of these devices in biofield science, previous studies

on the reliability and utility of Kirlian photography returned negative results. Given the controversy, the aim of this research was to advance our understanding of the Kirlian technique and evaluate its use in biofield science. In this experiment, the measurement variability and working of these technologies was investigated, evaluating their capacity to assess the energetic status of human beings and water. The experiment involved 40 participants: 20 Pranic healers and 20 non-healers. Healers performed a treatment on water, while non-healers simulated it; both groups were measured repeatedly before and after their real or sham performance; their water was measured as well and compared with controls. In the analysis, it was evaluated whether these Kirlian photography devices could return accurate, repeatable, and consistent information about the participants' and water energy fields and detect potential subtle energy changes in the healer group compared to the non-healer one. The GDV-device and Bio-Well parameters showed large measurement variability and/or poor informative value and were inconsistent at detecting possible subtle energy variations in human beings and water. The findings of this research indicate that the GDV device and the Bio-Well may not be reliable tools for biofield science and suggest that the literature related to these technologies should be revised and questioned.

The Yuga Cycle, the Earth's Precession Cycle and the AGN Cycle of the Central Black Hole

Bibhu Dev Misra
Independent researcher, Kolkata, India

Most ancient cultures believed that human civilization and consciousness moves in grand cycles, alternating between "Golden Ages" of illumination and harmony and "Dark Ages" of ignorance and discord. In India, this cycle was called the Yuga Cycle, while the Greeks knew it as the Great Year. Unfortunately, many essential details about this cycle were lost or got distorted over time. In the book, *Yuga Shift*, I have reconstructed the original formulation of the Yuga Cycle, by delineating the common threads that run through similar doctrines of different cultures, and by identifying scientific evidence in favor of this cycle. My research shows that the Yuga Cycle is a valid scientific doctrine, and it is perfectly aligned with the earth's precession cycle of 25,800 years. The cyclical framework explains why the archaeological records reveal a periodic collapse and re-emergence of civilizations every 3000-odd years, and why our physical size and cranial volume have been steadily declining over the Holocene period. A closer exploration of the phenomenon of the precession of the equinoxes reveals that it is probably due to the rotation of the Solar System on its axis as it revolves around the Galactic Center; while the sinusoidal fluctuation of human consciousness, physical size, health and environmental factors in course of the Yuga Cycle appears to be regulated by the AGN Cycle of the central black hole (Sgr A*) of the Milky Way. Since the Kali Yuga ends in 2025, our civilization appears to be headed towards a turbulent period of transformation.

Conscious Experience and the Transformation of Black and White into Color: The Benham Top

Peter Moddel

Independent researcher, Gruyere, Switzerland

The black and white arc segments on a spinning top, known as the Benham top, appear as colored circles. Until today no conclusive explanation of this phenomenon exists. We can find an explanation starting with the fact that three sets of cone cells with different sensitivities register the light reaching our eye. One set has greater sensitivity to longer wavelengths, another to mid wavelengths, and the third to shorter wavelengths. Each set forms an image of what is seen and these three views, when integrated, produce what we see. The process of image formation proceeds slower in longer wavelengths than in shorter wavelengths. From this we can deduce that any change in luminance as the top spins will generate contradictory views in the cone sets. The set of cells with a longer response time will register an earlier view that is not the same as the view produced by the set with a more rapid response time. Recognizing this leads to the conclusion that entry into a black arc segment from a light background – just as exit from that arc segment – will produce contradictory views in the three cone sets. I show that the contradictions in luminance in this situation are identical to the contradictions present wherever we observe color. Such contradiction, and not the wavelengths, generate the colors we see. The principle for the formation of color on the spinning Benham top is the following: Entry from light background into the black arc segment yields colors from the blue half of the spectrum; exit from the black arc into a light background yields colors from the red-yellow half of the spectrum. The formation of green is generated when the two tendencies are in balance. As these effects on the spinning top are extremely short-lived and as there can be significant variation in the response time of different individuals, a tendency, only, to see certain colors can be described. There is room for a large variation between individual viewers. This explanation becomes possible when we release the assumption that color is formed in the brain in response to a coded sequence of light and dark flashes. Although the Benham top produces the changes between light and dark, these are not coded sequences that the brain decodes. As in all cases where we see color, contradictory images are formed, and these obstruct the process of vision. Some cone cells register as bright what other cone cells register as dark. This is the ground state for the production of color. At this point, the creative intelligence of the viewer comes to play and generates the specific color that resolves the impasse. A conscious being produces the color it sees. A coherent understanding of color formation is found in *The Unified Principle of Colour*, a book I published recently that contains a description of how and at what moment color appears on the Benham Top.

Multiscale Resonances in Cosmic and Neural Systems: A Framework for Global Consciousness

Igor Nazarov

MIG-Tech Lab, Eagle Point, Oregon

This research examines parallels between quantum entanglement, cosmic synchronization, and human consciousness, proposing a framework for Global Consciousness through multiscale resonances. We compare light's travel time from the Sun to Earth (~8-10 min) with the estimated time for quantum entanglement effects to traverse the observable Universe (7-11 min), as proposed by Persinger (2013). At the hypothesized entanglement speed (10^{23} m/s), the Milky Way galaxy could theoretically synchronize in approximately 0.03 seconds. These cosmic timescales are connected to neural processing speeds (1-100 milliseconds), with basic cognitive operations taking 50-200 milliseconds. The second harmonic of the Schumann resonance (14 Hz), identified by Minakov et al. (1993) as a potential amplification region for gravitational-electromagnetic interactions, aligns with lower beta brain waves (13-30 Hz). The fundamental Schumann resonance (7.83 Hz) corresponds to alpha brain waves (8-12 Hz), suggesting a potential coupling between global electromagnetic phenomena and human neural activity. We evaluate synchronizations from quantum to universal scales, noting parallels between the Platonic year, light travel time to the galactic center (both are ~26,000 years), and the galactic year (~250 million years). We also explore correlations with Brahma Day/Night cycles in Hindu cosmology. The Day of Brahma (4.32 billion years) is within orders of magnitude of the Universal Reset cycle proposed in some Big Bounce models ($\sim 10^{12}$ years). This study proposes that human consciousness may function as an intermediate phenomenon integrating information across varied scales. By examining these multiscale resonances, we aim to bridge ancient cosmological concepts and modern scientific understanding, potentially offering new perspectives on consciousness and its role in the universe.

Anomalous MetaPhotonic Neutrino Light

Debra D. Overberg

Independent researcher, Boulder, Colorado

The dark Kali Yuga cycle will usher in increasing manifestations of a higher Light in the next Yuga cycles. Denoted with a capital L, Light is a non-photonic anomalous phenomenon revered in all cultures throughout time. While rarely scientifically differentiated from well-known light of the electromagnetic spectrum, anomalous Light has at least nine unique properties not associated with photons. Yet they're often correlated. Better understanding of the anomalous aspects will help distinguish Light from photons, leading to better experimental designs. One of Light's highest aspects was described by Bibhu Dev Misra's Vedic interpretation of "the 'Great Central Sun' ... the Supreme Creative Principle, and the light it radiates is intellectual knowledge" (p. 215), perhaps located at the galactic center. The Sun might

also source Light. Wisdom, creativity, truth, and compassion correlate with Light as referenced in ancient texts of Tibetan, Greek, Chinese, Mid-Eastern, and Egyptian traditions. Light is described as Clear Light, Transcendent Light, Amitabha Light, Dao Light Treasure, Luminous Mind, Entire Light, and Noetic Light: The Infinite Brightness of Being. It is often accompanied by tales of superhuman powers, healing, unconditional love, miracles, the Rainbow Body, and prophecies. Depicted in historical artwork, once-noted halos and auras “represent crowns or confer authority” are now re-interpreted to suggest they are indeed a phenomenon exhibited by saints and sages who have mastered this Light. Is Light the same light James Clerk Maxwell described in his famous equations on its wave nature? Do those equations contain the above-mentioned creative, intelligent knowledge hidden in their variable? Are superhuman powers carried electromagnetically like our internet information is carried on a fiber optic line? Are scalar electric potentials, integrals of those equations, wise and creative? Could Light be a greater non-dual phenomenon that then manifests as physical photons? Schrodinger’s equation invokes an observer which, along with Bell’s Theorem, quantum entanglement, and superposition, allow for Consciousness to be present. Many thoughtful experiments have shown quantum, scalar, photonic, and electromagnetic activity associated with Light Phenomena during healing or psi, for example. How does Consciousness, creativity, and intelligent Light become measurable? Before those complex questions can be answered, anomalous Light needs to be examined in more depth. Of the 9 unique properties, most significant is the fact that anomalous Light quite often is not seen by everyone yet is said to be as bright as ten thousand Suns! People might learn to see it by affecting their subtle anatomy, chakras, and biofield, rather than by alteration of their physical eyes. In fact, once-secret paintings of techniques to master subtle anatomy functioning are depicted on the walls of the Dalai Lama’s Potala Palace in Tibet. Today, anomalous Light phenomena is also documented in many Near-Death Experiences, UAPs, sacred locations and ceremonies, spiritual apparitions, miraculous healings, and spiritual awakening. Anomalous Light holds creative wisdom not found in the limited subset of Maxwell’s equations. May we welcome in the next Yuga cycle illuminated by a better understanding of this non-photonic Light phenomenon and its interplay with photons.

After-Death Communication with Cell Phones: Relationship with Psychological Measures

Elena Padilla and Imants Baruss

King’s University College, University of Western Ontario, London, Ontario, Canada

The integration of technology within After-Death Communication (ADC) and anomalous research is crucial for the advancement of the field of study. The current study aimed to investigate ADCs with cell phones and examine their relationship with psychological well-being factors and the Big Five personality traits. It was predicted that participants would score higher than norms on the personal growth measure of the psychological well-being scale and higher than norms on the openness/intellect measure of the personality scale. 118 participants were recruited using a snowballing method. Survey advertisements were shared with personal contacts and in groups including the Forever Family Foundation

and Instrumental Transcommunication Collective. Participants were asked to complete a questionnaire, which detailed their ADC with a cell phone, spiritual beliefs, psychological well-being, and personality. Results revealed that 56 out of 118 participants reported experiencing an ADC with a cell phone. These ADC experiences were not correlated with any psychological traits. However, participants scored higher than norms on personal growth and openness/intellect measures, thereby supporting the hypotheses. Participants regarded their ADC experiences as real and meaningful connections with the deceased. Furthermore, these experiences emphasized a continued bond, which positively affected their grief. Future studies should explore the relationship between the types of grief experienced and ADCs with cell phones.

Physician Barriers to Acknowledging Near-Death Experiences: Can We Make Progress?

Marieta Pehlivanova

Division of Perceptual Studies, University of Virginia School of Medicine, Charlottesville, Virginia

Introduction: Abundant research has documented the near-death experience (NDE) as a phenomenon with consistent characteristics and aftereffects, which are demonstrably different from hallucinations, dreams, or mental illness. Near-death experiencers sometimes disclose their NDEs to healthcare providers, including physicians. The early period right after the NDE can be accompanied by emotional distress and shock, making support and validation especially important during this time. Research shows that about a third of disclosures happen within a day or less of the NDE and that early disclosures to medical professionals are much more common than to other professionals. NDE researchers and clinicians have presented specific recommendations for adequate and supportive interactions with NDE patients, including “normalizing” the experience and its aftereffects. However, these guidelines are yet to be integrated into medical curricula through education and evidence-based practices. Barriers to the integration of NDE knowledge into clinical practice remain strong but have not been characterized thus far.

Methods: We conducted a research survey with N=211 attending physicians at the University of Virginia regarding their attitudes toward NDEs. We inquired about specific barriers to acknowledging these experiences in clinical practice and providing support to patients who report them.

Results: Barriers related to a lack of knowledge regarding NDEs were endorsed at a higher rate than barriers related to pathologizing the experience. Prior NDE education or training was associated with higher perceived competence in providing support, lower knowledge barriers, and higher self-rated knowledge of NDEs.

Implications/Discussion: Understanding the specific barriers that prevent physicians from acknowledging NDEs in clinical practice will facilitate concrete steps to disseminate knowledge about the phenomenon among the medical community with the hope of improving patient care for experiencers.

De-randomization of the traces of cursor propagation derived from two RNGs preliminarily suggests age-dependency in mind-matter interaction

Daqing Piao

Department of Electrical and Computer Engineering, Oklahoma State University, Stillwater, Oklahoma

Introduction: Psi manifested with a random-number-generator (RNG) is known to occur, but it is unknown how RNG-manifested psi operates. Identifying the specific factors that may enhance or inhibit RNG-manifested psi becomes critical to understanding psi conditioning. For example, healing was found correlating with anomalous RNG output [Shimizu, 2014], and frontal lesions induced temporally by rTMS were shown to enhance psi performance [Freedman et al, 2023]. These reports allow hypothesizing that the perturbation to RNG output by mind-matter interaction relates to neuro-physiologically abnormal or neuro-pathological states. Examining the hypothesis may require differential comparison between two channels of RNGs of identical performances when exposed to differential intentional faculty.

Objective: The objective of this research is to devise a game encompassing two channels of RNGs to test if a specific difference in human parameters results in a measurable difference in the randomness of RNG-derived events.

Methods: Two identical RNGs (TrueRNG3) were interfaced with a Raspberry pi to drive the movements of two cursors on two half sides of a computer screen. The position of one cursor is derived from one RNG-output. The RNG output was split between the odd and even samples to be set as respectively the abscissa and ordinate of the next position of the cursor on the designated one-half screen. A gamer would designate a quadrant of the half-space of the screen as the target area, and the game was to drive the cursor to that target area, played by one person against machine or competed between two people. The number of times the cursor appeared in the target area, within a total of 30 trials were registered as the score of the game. The rudimentary model of the set developed in one-semester by a 3-member Capstone Design team of an ABET accredited Electrical and Computer Engineering program was demonstrated during the Design Demo Day. The visitors, including college students, K-12 students, parents, and grand-parents of the K-12 students who played the computer game voluntarily hand-registered the score earned to be kept for record. The ages of the game-players were estimated a posteriori to be in the following ranges: <18 years (group 1), 18-25 years (group 2), and >25 years (group 3), based on their biological appearances.

Results: The scores of group-2 (score: 8.6 ± 3.3) having a sample size of 14 and group-3 (score: 8.3 ± 3.5) having a sample size of 3 are near the values (7.5) expected by chance (VEC). In comparison, the score of group-1 (15.7 ± 3.8) having a sample size of 3 is significantly greater than the VEC, and the difference has $p=0.013$ according to one-way ANOVA. The statistical power presented at the small sample size suggests that the difference in the scoring among the three groups cannot rule out the age as the differentiating parameter.

Implications: This very preliminary study that needs improvement in machine calibration and sub-

ject control sheds light on developing differential approaches to discover parameters affecting the outcomes of mind-matter interaction.

SIGIL: Scientific Investigation of Gazing with Intention at Light

Dean Radin
Institute of Noetic Sciences, Novato, California

I will present the results of a preregistered photon interference experiment designed to investigate the role of consciousness in the “collapse” of the quantum wavefunction.

Wild Randomness: Of Black Swans and White Crows

Douglas Richards
Atlantic University, Virginia Beach, Virginia

In anomalistics, from parapsychology to cosmology, statistical models are used to evaluate empirical data, and to identify anomalous outliers. The concept of randomness plays a key role, but there may be a need for a “great shift” in how we approach randomness itself. Typical models assume the presence of a “normal” or “Gaussian” distribution (or related distributions), that can be characterized by parameters such as the mean and standard deviation. The randomness in these distributions is concentrated near the mean, and outliers in the tails are relatively rare. Gathering more data results in smaller error bars, as the average converges to the expected value. The mathematician Benoit Mandelbrot called this “mild” randomness. But he also identified several levels of “wild” randomness, distributions with “fat tails” which may not even have a defined mean or standard deviation. These may be very common in real-world phenomena; use of models based on the “normal” distribution can lead to dramatically wrong conclusions. Nassim Nicholas Taleb has applied this reasoning to economics, showing that catastrophic “Black Swan” events are far more common than traditional models predict. Philosopher/psychologist William James spoke of “White Crows,” anomalous events that can lead to major changes in paradigms.

Distributions are described by their “moments,” summary values such as the mean and variance. Mildly random distributions can be characterized by additional moments, e.g., kurtosis as a measure of the fatness of the tails. But Mandelbrot describes seven levels of wild randomness, where for the highest level all the moments are infinite. A single observation in the tails can have a very disproportionate effect. An example of a model of slightly wild randomness is the Cauchy distribution, mentioned in statistics books as a “pathological” distribution because it has no defined mean and variance. It is a superficially bell-shaped curve, but with enormous weight in the tails. The consequence is that accumulation of more data does not result in convergence to an expected value. A simple physical demonstration of such a distribution can be found in “Gull’s Lighthouse Problem,” which involves locating a lighthouse

which flashes in random directions. Wild randomness may be far more characteristic of many physical and cultural (e.g., economic) systems than mild randomness. Because the interesting anomalies are out in the tails, it requires a lot of data to even make a guess as to what sort of randomness is occurring. My presentation will show how this expanded view of randomness is relevant to the study of scientific anomalies.

5G Wireless Communication Radiation and Our Health

Beverly Rubik

Institute for Frontier Science, Emeryville, California

The 5th generation of wireless communication radiation for cell phones, Wi-Fi, and the “Internet of Things”, known as “5G,” is upon us. More wireless infrastructure—cell towers and antennas—is under construction in residential neighborhoods, and near schools and businesses. Approximately 40,000 satellites are being launched into orbit to deliver the new higher frequency bands of 5G worldwide, including gigahertz millimeter waves previously used for military radar and weaponry, promising a worldwide wireless web accessible virtually everywhere. In addition, 5G involves the “densification” of 4G, requiring more 4G infrastructure as well. In the US, the telecommunication industry is under wireless exposure guidelines set by the Federal Communications Commission (FCC) back in 1996, considered outdated by many. One scientific controversy is whether detrimental bioeffects involve only “tissue heating,” which occur at higher power densities than telecommunications, as claimed by the industry and the FCC, despite over 2,000 scientific research reports from independent scientists documenting adverse bioeffects from exposure to low-level nonthermal microwave signals. There are numerous concerns about this technology and its potential impact on health and the environment. These include: (1) lack of clear safety standards for exposure; (2) electro-sensitivity syndrome, which includes common as well as some debilitating symptoms, which is escalating; (3) microwave exposure as a causal factor in cancer; (4) increasing exposure of vulnerable populations—both children and pregnant women; (5) lack of accessible instrumentation for the public to monitor their 5G exposure; and (6) use of similar microwave signals in energy-directed military weapons. Although various local communities have tried to stop the 5G rollout, more recently, many governments worldwide have mandated its rollout. This presentation will discuss the science underlying microwave communication signals; summarize the main biological effects reported in the scientific literature; discuss safety concerns, including the arguments of the industry as well as concerned scientists. A pilot study on 10 adults exposed to 4G cellphones performed by Rubik will be discussed. How best to mitigate our exposure to wireless radiation in daily life will be briefly addressed. Finally, a possible role of 5G in the Covid-19 pandemic as an environmental co-factor will be summarized. The evidence includes the geographical overlap of 5G deployment and the early spread of Covid, as well as a substantial overlap in the biopathology of Covid to the detrimental effects of 5G exposure.

References

- Rubik B. (2014). Does short-term exposure to cell phone radiation affect the blood? *Wise Traditions in Food, Farming, and the Healing Arts*, Vol 15(4), pp 19-28. <http://www.westonaprice.org/modern-diseases/does-short-term-exposure-to-cell-phone-radiation-affect-the-blood/>
- Rubik B and Brown RR (2021) Evidence for a connection between COVID-19 and exposure to radiofrequency radiation from wireless communications including 5G. *Journal of Clinical and Translational Research* 7(5), pp. 666-681. https://www.jctres.com/media/downloads/jctres07202105007/%5B5%5D%20JCTR_v7i5_007_20211025_V3.pdf

Biofield Therapy for the Treatment of Covid and Influenza

Kostyantyn Savchenko
Independent researcher, Kharkiv, Ukraine

The biofield therapy method for deactivating covid or influenza viruses consists in neutralizing the subtle energies of infections with human biofield energy. The necessary condition for the success of a treatment session is a significantly high level of the therapist's subtle energies. To increase the subtle energy of the body we use techniques for collecting and accumulating the subtle energy developed by the "Wu-Wei" School of Parapsychology (<https://yan.org.ua>, Ukraine) before the therapy session is carried out. In biofield therapy, an objective indicator of improvement in the patient's health is a sharp weakening of the disease symptoms during the session. The earlier a person seeks help, the more completely and quickly the symptoms weaken because of the session. Over four years we have helped more than 30 people, some of whom were treated several times. We have also carried out successful sessions for ourselves more than 10 times. And with influenza we have had about 20 successful sessions. After biofield therapy, conventional wellness methods were used for health recovery. After our session patients did not need to have Covid tests because they immediately felt better. Usually, patients recovered during the next several days. But if the virus had been in the body for a long time, more than 7 days, then the patient's health required special individual recovery methods. If the viruses were neutralized no later than 1-2 days from the start of its activity, then all symptoms disappeared a day after one session. The advantages of the method are its simplicity, relatively short session time, the possibility of treatment at a distance, without the use of drugs. The method has no contraindications and only one session is needed for the treatment. We also have two positive results in neutralization of tuberculosis bacillus with the help of our method. Those were cases of tuberculosis of the spine and lungs. The authors invite everyone interested not to hesitate to contact us to test our ability to neutralize viruses, bacteria, fungus and any other disease-causing infections in the human body.

Attitude Change in Response to an Anomalous Mass Sighting Event: The Phoenix Lights

Russell Scalpone¹, Lynne D. Kitei² and Brad Evans³

¹Organization for Paranormal Understanding & Support, St. Louis, Missouri

²Independent researcher, Paradise Valley, Arizona

³Independent researcher, Phoenix, Arizona

Solar Outbursts and the Demise of an Early Cycle of Civilization, circa 9700 BCE: Ramifications for Today

Robert M. Schoch

Institute for the Study of the Origins of Civilization, Boston University, Boston, Massachusetts

Academic scholars have typically dated the origins of civilization to the period of circa 4000 to 3000 BCE. However, the latest archaeological and geological evidence supports the reality of the existence of true civilization at least six millennia earlier. Such evidence prominently includes the re-dating of the origins of the Great Sphinx in Egypt (based on the extreme rain-weathering of the monument despite the hyper-arid conditions of its Sahara location during the last 5000 years and other lines of corroborative evidence; note that the head is a dynastic re-carving) and the 12,000-year-old sophisticated megalithic complex of Göbekli Tepe in Turkey. This early cycle of civilization, which has been termed the Urian (R. Schoch, "Forgotten Civilization", 2021, p. 307), was dealt a mighty setback with the world-wide catastrophe that brought the last ice age to a close, circa 9700 BCE. Based on geological, climatic, isotopic, astrophysical, and other data, the ice age ended due to an immense solar outburst from our unstable Sun (a type of outburst that may be characterized as a "micronova"). A Solar-Induced Dark Age (SIDA) lasting some six millennia followed and a new cycle of civilization (the Neo civilizations) emerged six to five thousand years ago in Egypt, Mesopotamia, and elsewhere. Our Sun remains active and is currently entering a period of renewed instability; indeed, our Sun may undergo periodic major outbursts unlike any experienced in recent history. We had best learn from the past.

Scopaesthesia and The Nature of Visual Perception

Rupert Sheldrake

Institute of Noetic Sciences, Novato, California; Temenos Academy, London, United Kingdom

The sense of being stared at, or scopaesthesia, is well known; surveys show that up to 95% of people have experienced it. It is also common in animals. Numerous randomized tests have shown that people can detect when they are being stared at from behind. Not surprisingly, some people are better at this than others, and children under the age of 9 seem more sensitive than adults. This sensitivity can be trained, as in martial arts programs, and a new app enables anyone interested to try and improve their own abilities. Recent studies have shown that scopaesthesia is usually directional; the person or animal stared at turns around and looks directly at the starrer. It also seems to work much better when coupled to direct vision than when people's images are looked at on screens and in mirrors. Scopaesthesia implies that influences move outward from the eyes of the looker and are somehow detected by the person or animal looked at, but no one yet knows how this happens. This familiar phenomenon has profound implications for our understanding of the nature of vision and of extended minds

What Does the Knowledge of Subtle Energy Add to Our Life?

Olga Strashun

Strashun Institute, Toronto, Ontario, Canada

What does the knowledge of Subtle Energy add to our life? Everything functions under two sets of Laws of Nature. One is for the world that we see with our eyes. And another for the deepest level of reality with the vibrational world of SE functioning under Laws that are different from anything we studied at school. Learning to blend both worlds, understanding that it is one, makes us able to do things that would never even come to our mind otherwise. What is not possible in the world of solidity of things, is possible in the world of SE. I want to illustrate this statement with an innovative system, based on 30 years of assembling information already known with personal observation, experimentation and practical application of how SE works in every aspect of our life. Everything in the world of SE requires training - to sense subtle vibrations, understand what they mean, and develop tools to function there. On the deepest level of reality, we are all made from the same matter and interconnected. With training we can sense how things are connected, if they are compatible or not. It has very big practical applications: from which supplements, medications can be taken together, and which cannot; to analyzing the compatibility of individuals in the working environment and families without even knowing the people that are involved. SE is not electromagnetic in nature. This energy is everywhere without the property of location and direction, where distance is not impeding its action. We can use this energy without being mentally blocked by geographical limitations. Thoughts are Energy and affect matter. This realization changes our attitude as to how we think and what we think. Everything is vibrating. How things vibrate is important

information. Creating our own data bank on what these vibrations represent, we develop extra tools to get information. Vibrations are forming auras around the objects reflecting their quality and the bigger the aura, the better. Trained how to measure them we can make better choices. Vibrations from the past, present and future never disappear, they also go into the Cosmic Hologram where they are stored in inactive form until our thoughts like a laser beam go into resonance with related vibrations, turning them into holographic images for our inner eyes. When we know about this property of the deepest level of reality, we can start to make holograms on demand from vibrations stored in the Cosmic Hologram to get any needed information, or working with them like with real objects, because what is happening on the energy level of hologram, the same is happening with the object itself. Holograms are an incredible model to use, available anytime and anyplace, we just need a couple pieces of information to have them automatically completed, making them any size and shape for our convenience. We can use them in distant healing, predictive analyses of businesses, to understand the nature of people without meeting, to buy the best second-hand cars, etc. The possibilities are endless with the innovative system of Subtle Energy Profiling.

Healing 'Irreversible' Blindness Leads to a Visionary Clinical Theory of Everything

Glen Swartwout

Independent researcher, Hilo, Hawaii

Every quantum that makes up the bio-body suit is a field that extends asymptotically to infinity. To the outside observer, this appears as a probability field, because the control of its action within that field is inscrutable. To the sovereign governance over that field, it is a field of potential which extends asymptotically not only in 3-dimensions of space, but also in the 3-dimensions of time. This affirms that we are truly cells in God's body: universal co-creators if we so choose. The Egyptians thought that we see our past clearly because the spirit comes from the future. If we are indeed immortal beings embodied in a single cell in the electromagnetic flash of conception, and then growing and developing progressively throughout this life on Earth, a womb of Heaven, then truly our future self is always the greater part of us. The future is a wave function, like the non-ordinary matter of the spirit body itself, not quantized until it is chosen and observed in the universal passage of time. Its 2 dimensionality allows the degrees of freedom essential for our navigation by free will. A modern confirmation of this view is that the electrical brain wave associated with an act of the will precedes the conscious experience of making the choice. This is conventionally taken as confirmation that consciousness is a mere brain activity. The true causality, however, occurs in reverse time, initiated by activity in the sentient, immortal spirit body which is made of ORMEs patented by David Hudson, and akin to BECs confirmed by research leading to the 2001 Nobel Prize in Physics. This retrocausality mediated by the spirit body is confirmed by studies of autonomic reaction to visual imagery. The adaptive value of such a process is unquestionable. What is the fundamental anatomy and physiology of this process in the spirit body? That is the topic of this presentation. What are the practical applications of this integrative model of Body, Mind, and Spirit?

We can communicate with the innate intelligence of the biofield, which is a function of the spirit, to identify the pattern of active stress responses, and the causal relationships within this set of stresses. We can then identify the stimuli which restore coherence to the biofield, nullifying the stress sources, with cascading syntropic effects on downstream stress patterns often associated with symptom patterns. In one month of this process, which we call Accelerated Self-Healing, we typically observe about one year of reversal of accumulated effects of aging and degeneration. We have seen restoration of structure and function described as irreversible in the medical literature. Our primary focus is on reversal of the effects of blinding eye diseases.

Reports of Non-Physical Beings Assisting in Reiki Sessions

Helane Wahbeh

Institute of Noetic Sciences, Novato, California

Background: Across diverse cultures, the belief in non-physical beings playing crucial roles in both illness and healing is widespread. Our previous study found reports of the presence of apparent non-physical during energy medicine sessions.

Objective: To evaluate the perceived presence and characteristics of non-physical beings mentioned during Reiki sessions.

Methods: Six seers observed 40 Reiki sessions, and quantitative and qualitative data were collected from the seers, participants, and Reiki practitioners. The presence and function of the non-physical beings during the sessions and the correspondence between quantitative and qualitative data types were evaluated.

Results: All sessions had reports of apparent non-physical beings, with angels, spirit guides, and possession/spirit attachments being the most noted. The reported entities mainly aided the healing process, but some are also linked to pathology.

Conclusions: The findings highlight the potential importance of ostensible non-physical entities in Reiki, warranting further investigation.

Psychic Hacking: Using Remote Viewing to Steal Computer Data

Scotch Wichmann

Independent researcher, Los Angeles, California

Scientists in the U.S. Government's Star Gate Project demonstrated over countless peer-reviewed experiments during the 1970s and 1980s that clairvoyance is real. Declassified documents recount Remote Viewers who accurately described foreign military installations, missile silos, lost aircraft, planetary features not yet discovered by NASA, and locations of people from thousands of miles away. Some of this intelligence was even used in actual military, covert, and law enforcement operations successfully. One question went unanswered, however: could Remote Viewing also be used to steal data from supposedly secure computers? In this talk, I'll present exploratory experiment results demonstrating that "psychic hacking" is possible.

Following established Star Gate research protocols described by Puthoff, Targ, and others, I led a double-blind experiment hosted on the Internet over a 2-week period that allowed participants to try using their psychic powers to describe picture, video, ATM PIN, and passphrase targets stored on laptop computers located in Los Angeles. The laptops were standalone without networking, configured with randomly selected targets nightly, hardened against traditional hacking attacks, and covered with shields to prevent peeking. 146 remote participants from 10 countries generated 584 experiment rounds. Each round was scored by 3 independent judges chosen randomly from a pool of 6 judges. Judging was by rank-order scoring, and by counting target details matched, using methods described in literature by May, Hansen, and Utts. Successful participants bypassed security defenses to describe many unique details about the targets from miles away. Some psychics also described details that were tangentially related to targets, even when those tangents weren't physically present on the target computers. Participants who believed they might be psychic were 21.8 times more accurate than non-believers. Psychics operating between 12:45 and 14:15 in Local Sidereal Time (LST) demonstrated higher accuracy than average, as predicted by Spottiswoode. Opportunities for collusion among participants were also detected. Statistically significant results ($\alpha=0.05$) were observed for picture rounds ($p=0.000597$, $ES=1.075$) and video rounds ($p=0.000911$, $ES=1.131$). ATM PIN results were significant for 3 digits in any order ($p=4.118 \times 10^{-6}$, $ES=0.788$) and 2 digits in any order ($p=7.84 \times 10^{-6}$, $ES=0.763$).

The security implications of this experiment are far-reaching, since physical distance, attenuating structures, visual shielding, network air gaps, data obfuscation, strict file permissions, and password protection failed to prevent data theft. A nation's digital secrets -- even if stored in a secure facility -- might be susceptible to psychic hacking from a distance, as might tangentially related information stored elsewhere. Even more insidious is the prospect of a psychic hacker gaining access to a person's mind via increasingly popular mind-machine interfaces. Potential defenses worthy of future research will also be discussed, including forms of encryption, quantum computing, and psychic hacking detection.

SOCIETY FOR PSYCHICAL RESEARCH 47TH SPR INTERNATIONAL ANNUAL CONFERENCE

**November 8 - 10, 2024
Mickleover, Derby
UK**

ABSTRACTS OF PRESENTED PAPERS

Introduction From the Programme Chair

Welcome to the 47th Annual International Conference of the Society for Psychical Research. This year we are based in the East Midlands, at the Derby Mickelover Hotel. We hope you find it comfortable and relaxing, with all the facilities you require under one roof. It seems some time ago now that we would regularly use universities for conferences, and perhaps we will return to some in the future.

However, hotels with conferences facilities bring immediate convenience and less walking from halls of residence to the lecture rooms for presentations. This year, we are also very close to the University of Derby (UOD); colleagues from the parapsychology team there are attending. One of the invited speakers and our guest after-dinner speaker are also from the UOD. At the last count, there are more than a dozen UK universities offering taught modules of parapsychology within degree programmes, which bodes well for the SPR.

We had more abstract submissions than we could fit in this year. Alongside the invited speakers and, of course, a guest after-dinner speaker, narrowing down such abstracts and the work people have put into preparing them is no easy task, when even in a strict packed schedule we can only accept two-thirds of them in the time available. We have invited those not included in the programme to share a poster to discuss with all the delegates face-to-face at the event. We will cover a wide range of topics from history and legacy to the latest laboratory research, experiences surrounding death, and much more. We encourage all contributors to take feedback from their talks and consider writing for the SPR Journal and/or the Magazine and share the data and ideas much further to our worldwide membership.

I extend my heartfelt thanks to the Conference Programme Committee for their useful feedback on the abstracts submitted, which helped in the selection process. Thanks also, to our current president, Prof. Adrian Parker, for exploring invited speakers. And to our Secretary, Peter Johnson – for all his work on this event. He once again has been the backbone of helping make the conference possible and piecing together the fine details. Everyone's hard work has been with the aim of making sure you get access to the latest research and ideas, and above all, have an enjoyable and memorable time at the SPR conference.

I look forward to welcoming you all, both familiar and new faces!

Dr Cal Cooper,
Programme Chair

Setting the camera traps - what it may take to capture the divine

Christof King
christof.king@yahoo.co.uk

Proponents of parapsychological naturalism [1] believe that the best way to observe the paranormal is in 'wild' spontaneous events. But if the work of the Amazonian zoologist is difficult, we must expect this expedition to be nearly impossible: as individuals with 'small c' consciousness, we must be prepared for 'Big C' to put on the mask of Pan in a game of hide and seek! But mythology aside, how should we approach this?

Mediumship comes in many forms, from seance phenomena and automatic writing to other 'inspiration' [2]. One thing these manifestations have in common is a suppression of the conscious mind. In the seance room, researchers are more interested in phenomena developed under trance – what could be called the product of the subliminal mind (which William James also felt could be the door to the divine [3]) - rather than the conscious personality of the medium.

If we accept that all people are subject to inspiration from the subliminal then we may be able to communicate with this mind by manipulating an individual's environment using sensory deprivation to reduce conscious influence. This parapsychological naturalistic approach may be appropriate to a socially isolated individual immersed in externally manipulated electronic media. Extreme caution would be needed to select a mentally tough but 'sensitive' participant and continual psychological support must be offered from afar. To maintain the illusion, a participant must never be offered direct human feedback and any patterns developing within their life should be continuously monitored by those able to conduct extensive surveillance.

If the work was carried out correctly, the subject, while immersed in their wider environment, may feel that they were the recipient of messages from a non-human consciousness. By utilising patterns of these 'signs,' it may be possible to generate further novel effects, such as natural synchronicities and other paranormal phenomena, like those of Batcheldor [4] and Owen [5].

References

- Braude, S.E. (1986). *The Limits of Influence: Psychokinesis and the Philosophy of Science*. London: Routledge.
- James, W. (1890). *Mediumships or Possessions. Principles of Psychology*. New York: Henry Holt (2 vols.), 393-400.
- James, W. (1902/2018). *The Varieties of Religious Experience*. Musaicum Books.
- Batcheldor, K.J. (1984). Contributions to the theory of PK induction from sitter-group work. *Journal of the American Society for Psychical Research*, 78, 105-122.
- Owen, I.M. and Sparrow, M. (1976). *Conjuring up Philip: An Adventure in Psychokinesis*. New York: Harper & Row.

Visualising Exceptional Human Experiences through Photographic Art

Corrine Gretton-West, Callum E. Cooper, Haley Morris-Cafiero & Jose Neves

Exceptional Experiences and Consciousness Studies, University of Northampton, UK
 corrine.gretton-west@northampton.ac.uk

This presentation examines historical spirit photography and the environmental context of ghost sightings, offering a contemporary reinterpretation of these phenomena through experimental photographic techniques.

My PhD research explores the origins and evolution of spirit photography, a practice that emerged in the late 19th century, aiming to capture the presence of spirits through photographic means. Therefore, this was of direct interest to psychical research and survival, particularly for figures like Sir William Crookes (Crookes 1874). By analysing these historical images, my work seeks to uncover the cultural, technological, and psychological factors that contributed to the widespread belief in their authenticity and the fascination with ghostly imagery. Part of that exploration includes examining those images not so easily explained and replication attempts.

In addition to this historical analysis, my research explores the significant role of place in the occurrence and perception of ghost sightings. I investigate how specific locations influence the likelihood of reported ghostly encounters. This includes a study of how environmental factors—such as architecture, light, and atmosphere—contribute to the creation of these experiences, shaping both the individual and collective perception of haunted spaces (Jawer et al. 2020).

Through my participatory research, I employ experimental photographic methods to create visual representations of ghost-sighting experiences. These methods include the Wet Plate Collodion

process; the process used by many spirit photographers in the 1800's, and emulsion lifts; a process whereby you extract the emulsion from a Polaroid film, and place it onto another surface.

The resulting images aim to bridge the gap between historical and contemporary understandings of ghosts, offering viewers a visual narrative that resonates with both past traditions and modern sensibilities.

This research contributes to the field of psychical research by recontextualizing historical spirit photography within the framework of contemporary artistic practice and environmental psychology. It provides a deeper understanding of how place and perception interact in the creation of ghost sightings.

References

- Alvarado, C. S. (2018). 'William Crookes'. *Psi Encyclopedia*. London: The Society for Psychical Research. Retrieved 31 August 2024.
- Crookes, W. (1874). The last of "Katie King:" The photographing of "Katie King" by the aid of the electric light. *Spiritualist Newspaper*, June 5, 270–271.
- Doyle, A.C. (1922) 'THE CASE FOR SPIRIT PHOTOGRAPHY', p. 146.
- Glaw, X. et al. (2017) 'Visual Methodologies in Qualitative Research: Autophotography and Photo Elicitation Applied to Mental Health Research', *International Journal of Qualitative Methods*. Available at: <https://doi.org/10.1177/1609406917748215>
- Jawer, M Massullo B, Laythe B, Houran J. (2020) 'ENVIRONMENTAL "GESTALT INFLUENCES" PERTINENT TO STUDIES OF HAUNTED HOUSES', *Journal of the Society for Psychical Research*, 84, pp. 65–92. Web links
- 'The Crisis of Faith in Victorian England – Monsters & Madness' (2016). Available at: <https://blogs.dickinson.edu/secretlives/2016/03/26/the-crisis-of-faith-in-victorian-england/> (Accessed: 27 November 2022).
- The Rise of Spiritualism in 19th Century America (2021) *History is Now Magazine, Podcasts, Blog and Books* | Modern International and American history. Available at: <http://www.historyisnowmagazine.com/blog/2021/10/18/the-rise-of-spiritualism-in-19th-century-america> (Accessed: 26 July 2023).

Experimenting with Ghosts: Empiricism, Stone Tapes, & Encounters; Lessons from My Early Ghost Adventures

Ciaran Farrell BSc GRSC

Independent Psychical Researcher
ciaran.farrell@consultant.com

Ghosts & spirits were well known in the ancient world and were associated with myth, legend, magic, superstition, and religions in early Mesopotamia, Egypt and Christianity (1,2). They were perceived as supernatural guides, helpers, magical beings, or as bad, evil or demonic entities to be controlled by those with specialist skill and knowledge (3). Western traditions feature troubled and troublesome earthbound spirits doomed by lack of resolution of unfinished business (4). This implies enough of their personality survives in order to do so, which may explain intelligent hauntings (5).

Non intelligent hauntings may be explicable through stone tape theory (6). Apparitions may be either (7).

Psychical researchers and paranormal investigators need an empirical guide to ascertain which side of the line a case falls to determine how to classify, document and handle such cases. The author will present an empirical means of doing so involving the parameters of contact, triggers, intentionality, mentation, and sense impression data, which will be put forward to form the basis of a new empirical ghostology.

References

- Budge, Wallis E A, Sir (1899, 1987). Egyptian Religion: Egyptian Ideas of The Future Life. Arkana.
Hutton, Ronald, Gresham College lecture; The Western Magical Tradition - Ronald Hutton (youtube.com)
Levi, Eliphas (1913). The History of Magic. Reprinted by The Lost Library, Glastonbury, England.
Young, Francis (2016). A History of Exorcism in Catholic Christianity. Palgrave Macmillan.
Myers, Frederick (1903). Human personality and its survival of bodily death. Longmans.
Lethbridge, T. C. (1961). Ghost and Ghou. London: RKP.
Tyrrell, G. N. M. (1943). Apparitions. London: Gerald Duckworth and Co. Ltd.

INVITED SPEAKER

Fifty Years Among the RNGs, and why we know they are not consciousness detectors

Richard Broughton
richard@intuitionlabs.com

The author will use his half-century of involvement with RNG research to review the key findings and controversies emerging from the use of this psi research tool. The story begins with Helmut Schmidt's foundational discoveries in the 1970s that PK and precognition were indistinguishable in RNG tests, the complexity of the RNG did not matter, and psi effects could be time independent. In those early days the influential Observational Theories and disturbing evidence that the experimenter's own psi abilities could determine results solidified a view that RNGs were revealing psi to be essentially a goal-oriented process.

In the ensuing years the micro-PK, or 'influence' interpretation came to dominate the experimental scene, but in 1995 the debate between precognition and PK interpretations was sharply focused by Ed May et al.'s Decision Augmentation Theory that showed all micro-PK research conformed to a data-selection or precognition model. Princeton's PEAR lab, one of the largest producers of PK research, countered that their data (at least) fit a force-like, influence model. About the same time some researchers began claiming that they were detecting 'field-effects' or 'implicit physical psi' that were said to be connected to small or large groups of people collectively experiencing strong emotions. Some

saw this shift from individual intentional influence to collective, unintentional and uninvolved influence as reinforcement for an influence interpretation of micro-PK, while others saw it as a perfect vehicle for experimenter effects.

In 1998, drawing on the emerging field-RNG research Roger Nelson began creating a global network of RNGs for the purpose of detecting field-RNG effects on a global scale. Its aim was to see if great emotional disturbances (positive, like celebrations, or negative, such as terrorist attacks) might register on these RNGs. Using a carefully specified protocol for identifying events and analysing data the Global Consciousness Project (GCP) amassed 500 formal event trials yielding massively significant evidence for Global Consciousness. The project of course drew criticism, much of which could be countered, and the inevitable suspicions of experimenter psi in action, but in 2017 Peter Bancel published an extremely thorough analysis of the GCP that left no room for anything but a goal oriented (GO), experimenter effect interpretation. Bancel's analysis, which will be reviewed in this presentation, revisits earlier technical criticisms but more importantly develops a model of GO effects that he tests against the GCP data. All of the tests favour the GO model. Nelson has attempted to mitigate these conclusions, but Bancel has left no room for manoeuvre.

The GCP did not have to end this way. If Nelson had taken this author's advice back in 1998 the GCP would have developed very differently. That same advice remains absolutely essential for anyone who still wishes to try to detect consciousness fields.

Testing the theory of 'First Sight' using a Retroactive priming task, Experiment 2: Situational factors

Deborah Patton¹, Matthew Hopkins¹, David Vernon² & Chris A. Roe¹

¹Exceptional Experiences & Consciousness Studies Research Group, University of Northampton, UK

²Christ Church Canterbury University, UK

We have previously reported on research at Northampton that is intended to replicate and extend the experimental work reported by Bem (2011) which was claimed to demonstrate precognition-like experiences under controlled laboratory conditions. Bem's experimental findings were surprisingly consistent, and despite some high-profile failures to replicate them, the general pattern from this database is that the effects can be reproduced in the laboratory to the same extent and with similar effect sizes as other, more mundane, psychological effects (Bem, Tressoldi, Rabeyron, & Duggan, 2016; see Roe 2022a, 2022b for general introductions). However, the experiments described by Bem (2011) represent an assortment of designs that seem to reflect practical expediency rather than any overarching theoretical perspective. Similarly, despite some honourable exceptions (e.g., Savva, Roe & Smith, 2005, Vernon, 2017) the majority of replication attempts have consisted of straight reproductions of those original experiments, intended to confirm basic effects rather than test particular hypotheses. This paradigm

therefore seems an ideal candidate for more theory-led research that could test the predictions made by theories of consciousness that incorporate psi.

We therefore planned a series of experiments that would use one of Bem's experimental protocols (focusing on priming effects) to help evaluate Carpenter's (2012) First Sight Theory (FST). FST represents a model of consciousness that incorporates psi phenomena as a fundamental feature of its *modus operandi*. It not only attempts to account for observations concerning conventional processes of memory and perception, but also the patterns of performance observed in research on ESP. It makes a series of explicit, testable hypotheses about who should perform well and under what circumstances (for more detail, see Roe 2019a, 2019b). We reported in 2023 on the first experiment in this series (Roe, et al., 2023), which focused on personality and individual difference variables that might moderate performance on the precognition task. In this presentation we will recap on the rationale for the research design and findings from experiment 1 before going on to describe experiment 2, which focuses on situational factors that are manipulated in accordance with FST.

References

- Bem, D.J. (2011). Feeling the Future: Experimental Evidence for Anomalous Retroactive Influences on Cognition and Affect. *Journal of Personality and Social Psychology* 100, 407-25.
- Bem, D.J., Tressoldi, P.E., Rabeyron, T., & Duggan, M. (2016). Feeling the Future: A Meta-Analysis of 90 Experiments on the Anomalous Anticipation of Random Future Events. *F1000Research*, doi: 10.12688/f1000research.7177.2
- Carpenter, J. (2012). *First sight: ESP and parapsychology in everyday life*. Rowman & Littlefield.
- Roe, C.A. (2019a). *Psychological theory in parapsychology: PMIR & First Sight. Bridging the gaps: Building the Science*, Belambra Hotel, Paris July 2-3, 2019.
- Roe, C.A. (2019b). Space for psi from Psychology. Invited address, *Study Day: Making space for psi*. Society for Psychical Research, London, 16 Nov 2019.
- Roe, C.A. (2022a). Feeling the future (Precognition Experiments). *Psi Encyclopedia (online)*. <https://psi-encyclopedia.spr.ac.uk/articles/feeling-future-precognition-experiments>, January 26, 2022.
- Roe, C.A. (2022b). Remembering the future: Facilitating the recall of future events. Invited talk, *13th Symposium of the BIAL Foundation, "Behind and Beyond the Brain": The mystery of time*. Casa do Medico, Porto, 6-9 April, 2022.
- Roe, C.A., Patton, D., Hopkins, M., & Vernon, D. (2023). Testing the theory of "first sight" using a retroactive priming task: Individual difference factors. Paper presented at the *Society for Psychical Research, International Conference*, Woodland Grange, 10-12 Nov 2023.
- Savva, L., Roe, C. A., & Smith, M.D. (2005). Further testing of the precognitive habituation effect using spider stimuli. *Proceedings of Presented Papers: The Parapsychological Association 48th Annual Convention*, 163-170.
- Vernon, D. (2017). Exploring the effect of a contingent cash-based reward on the precall of arousing images. *Proceedings of the Parapsychological Association 60th Annual Convention*, July 20-23, Athens, Greece.

Quantitative Language Analysis of Psi Ganzfeld Mentations

Abby L. Pooley

Koestler Parapsychology Unit, Psychology Department, University of Edinburgh, Edinburgh, UK
apooley@exseed.ed.ac.uk

Introduction. In psi ganzfeld experiments, participants verbalise and describe their experiences, feelings, and sensations during the experiment. This verbal report, known as the mentation, primarily serves as an aide-mémoire for participants during the judging phase, helping with their assessment of the target clips. However, mentations are recognised as a potentially more sensitive indicator of psi information (Honorton, 1972), serve as valuable introspective reports (Wooffitt et al., 2010) and provide understanding of the experience of consciousness (Cardeña & Pekala, 2014). Recently, there has been growing interest in analysing mentation content using language processing software (Cardeña, 2020; Stanford, 2020). This report presents a summary of a quantitative language analysis of mentations from two precognition studies conducted at the Koestler Parapsychology Unit (KPU), University of Edinburgh.

Method. Mentation audio files from KPU Study 1039 and 1074 were transcribed and analysed using Linguistic Inquiry and Word Count (LIWC) 2015 software (Pennebaker et al., 2015). This lexicon-based tool compares each word in the text to its internal dictionary, calculating the percentage of total words matching each dictionary category. A total of 251 mentations were transcribed from 300 sessions.

Results. Participants demonstrated moderate-to-high levels of analytical and logical thinking during ganzfeld stimulation, often speaking tentatively and without confidence. Verbal reports, however, showed high levels of honesty with indications of ambivalence, anxiety, and sadness. Simple linear regression models found no relationship between word count or emotional tone and session z- score.

Discussion. The high levels of honesty suggest ganzfeld mentations are valuable introspective reports, providing accurate depictions of the participant experience. On average, participants found the ganzfeld experience neutral-to-negative, perhaps due to its novelty. Elevated levels of analytical thinking and uncertainty may indicate participants feeling overwhelmed by the unfamiliar ganzfeld stimulation.

References

- Cardeña, E. (2020). Editorial: Pieces of the Psi Puzzle and a Recipe for Ganzfeld Success. *Journal of Parapsychology*, 84(1), 5–7.
- Cardeña, E., & Pekala, R. J. (2014). Researching states of consciousness and anomalous experience. In E. Cardeña, S. J. Lynn, & S. Krippner (Eds.), *Varieties of Anomalous Experience: Examining the Scientific Evidence* (Second, pp. 21–56). American Psychological Association.
- Honorton, C. (1972). Reported frequency of dream recall and ESP. *Journal of the American Society for Psychological Research*, 66(4), 369–374.

- Pennebaker, J. W., Booth, R. J., Boyd, R. L., & Francis, M. E. (2015). *Linguistic Inquiry and Word Count: LIWC2015 [Operator's Manual]*. Pennebaker Conglomerates.
- Stanford, R. G. (2020). Ganzfeld-ESP: Pondering Three Reports and Looking Ahead. *Journal of Parapsychology*, 84(1), 14–20.
- Watt, C., Dawson, E., Tullo, A., Pooley, A., & Rice, H. (2020). Testing Precognition and an Altered State of Consciousness with Selected Participants in the Ganzfeld. *Journal of Parapsychology*, 84(1), 21–37. <https://doi.org/10.30891/jopar.2020.01.05>
- Wooffitt, R., Holt, N., & Allistone, S. (2010). Introspection as institutional practice: Reflections on the attempt to capture conscious experience in a parapsychology experiment. *Qualitative Research in Psychology*, 7(1), 5–20.

Published as Watt et al. (2020)

Conducted with the support of the BIAL Foundation, grant number 190/18

Clarifying the solution... Phase 1 data update of an experiment involving sensory isolation in floatation tanks as a method of promoting psi phenomena

Kirsty L. Allan, Callum E. Cooper, Glenn Hitchman & Chris A. Roe

Exceptional Experiences and Consciousness Studies, University of Northampton, UK
kirsty.allan@northampton.ac.uk

Inspired by the insights and recommendation of John Lilly (1969), inventor and pioneer of the floatation tank as a means of inducing altered states of consciousness (by vastly reducing environmental stimuli), Cooper, Saunders and Hitchman (2020) conducted a pilot study exploring the utility of floatation in a psi task, funded by the SPR. This presentation will offer an update on a subsequent extended replication undertaken by the current team. Furthermore, we explore any significance of both the experiential qualities and contents of consciousness e.g., visual imagery, sense of time and also, any correlations with individual differences of participants i.e., transliminality creativity and sensory processing sensitivity (Hitchman, Rock & Roe, 2023).

Participants are enclosed in a 'tank' in which they lie on a body of Epsom salt solution, so dense it is buoyant enough to support them physically without any effort or technique. They are thus, suspended in a dark, quiet, 'weightless' condition that is also warmed to body temperature, encouraging the 'floatee' to relax deeply (Lilly, 1969; 1972). Consequently, participants may also experience a loss of environmental sensory influence, bodily orientation - and in some cases, their sense of Self completely. It is hypothesised that floatation as a Noise Reduction Model (Honorton, 1977) will eliminate external influences ('noise'), allowing the person to become more aware of their inner experience ("inperience", Lilly, 1972), intuitive feelings and extra-sensory or 'psychic' materials. Participants are given the goal of having imagery that will help them to identify a precognitive target video.

Post-float, participants were shown four video clips, which they rank in terms of similarity (or felt familiarity) to their float experience. After they had made their judgement, a random number generator then selected which clip was the designated target for that trial. Therefore, this protocol should yield a 25% chance of correctly 'guessing' which clip will become the target, by chance alone, a '1 in 4' chance.

In this presentation we will summarise the quantitative and qualitative outcomes from this experiment and reflect on their implications for further work.

References

- Cooper, C. E., Saunders, D., & Hitchman, G. (2020). Reconsidering sensory isolation in floatation tanks as a method of promoting psi-conductive imagery. *Journal of the Society for Psychical Research*, 84, 1-19.
- Hitchman, G., Rock, A., & Roe, C.A. (2023). Individual difference factors affecting ESP performance following ganzfeld stimulation: A meta-analysis. *Abstracts of presented papers: Parapsychological Association 65th Annual Convention, Oslo, Norway, August 3-6, 2023*. (pp. 31-34).
- Honorton, C. (1977). Psi and internal attention states. In B. B. Wolman (Ed.), *Handbook of Parapsychology* (pp. 435-472). Van Nostrand Reinhold.
- Lilly, J. C. (1969). Inner space and parapsychology. *Proceedings of the Parapsychological Association*, 6, 71-79.
- Lilly, J. C. (1972). *The centre of the cyclone*. Palladin.

We would like to acknowledge the generous support of the Bial Foundation (186/20) and the Perrott-Warrick Fund, who have enabled us to conduct this research project.

Are There Different Paranormal & Anomalous Experiences in Individuals with Epilepsy and Which Ones Do They Report?

Spiers*, L.N., Roe*, C.A., Hopkins*, M., Jolivald**, M., Evrard**, R.

*University of Northampton, UK, ** University of Lorraine, France

Corresponding author: Louise.Spiers@northampton.ac.uk

Research into paranormal experiences in individuals with epilepsy has been narrow, considering only temporal lobe epilepsy (TLE) in relation to anomalous experiences (Persinger, 1984), diagnosed as pathological hallucinations and delusions (Devinsky & Lai, 2008). Consequently, these paranormal experiences are seen as undesirable, bad for well-being and in need of treatment.

Individuals do not discuss them, for fear that their experiences will be pathologized (Spiers, 2022). This study, supported by Epilepsy Action, UK and Epilepsy Ireland, provided a proof-of-concept for a more discriminating categorisation than has previously been undertaken. The research aims were to:

- a) Distinguish between types of epilepsy and explore if/how they give rise to different anoma-

lous experiences; b) Understand whether participants regard their experiences as spiritual, mystical or exceptional, or as a function of their condition; c) ascertain whether participants share these experiences with different groups of people and determine which factors influence that decision to disclose; d) Identify any additional anomalous experiences not previously listed. An English and French online questionnaire was distributed combining established measures that identify a range of paranormal and anomalous experiences (Fach, 2013; Greyson, 1983; Neppe, 1983) and attitudes towards sharing these experiences with others and the impact they have on an individual's life (Spiers, unpublished). Data collection is now complete (n=108) and has been analysed using a range of statistical approaches. In the presentation, we intend to share summarised findings supported by some qualitative comments, implications for the understanding of these experiences, and areas for future research.

References:

- Devinsky, O., & Lai, G. (2008). Spirituality and religion in epilepsy. *Epilepsy & Behavior*, 12(4), 636-643. <https://doi.org/10.1016/j.yebeh.2007.11.011>.
- Fach, W. (2011). Phenomenological aspects of complementarity and entanglement in exceptional human experiences (ExE). *Axiomathes*, 21, 233-247.
- Greyson, B. (1983). The near-death experience scale: Construction, reliability, and validity. *The Journal of nervous and mental disease*, 171(6), 369-375.
- Neppe, V.M. (1983). Temporal Lobe Symptomatology in Subjective Paranormal Experiments, *Journal of the American Society for Psychical Research*, 77(1), 1-29.
- Neppe, V.M. (1983). Temporal Lobe Symptomatology in Subjective Paranormal Experiments, *Journal of the American Society for Psychical Research*, 77(1), 1-29. Retrieved from <https://psycnet.apa.org/record/1984-08273-001>.
- Persinger, M. (1984). Propensity to report paranormal experiences is correlated with temporal lobe signs. *Perceptual and Motor Skills*, 59(2), 583-586. <https://doi.org/10.2466/pms.1984.59.2.583>.
- Spiers, L.N. (2022). *A transpersonal exploration of spiritual experiences in epilepsy*. [Unpublished doctoral thesis]. University of Northampton.

Computer Simulation of PK (Psychokinesis): New Experimental Tool for Psi Research

Simon X. Duan

Metacomputics Labs, London, UK
simon.x.duan@live.com

In modern science, computer simulation is accepted as a type of experiment and is extensively used for studying complex systems that are difficult or impossible to replicate in a laboratory setting. They are recognized as a powerful tool that allows for a level of control and repeatability that might be costly, challenging, or even impossible to achieve in the real world. For instance, in astrophysics, computer simulations are employed to study the formation of galaxies, stars, and other celestial bodies. Hypotheses about the evolution of the universe, the structure of galaxies, and the behavior of black holes

have been tested through computer simulations. Simulations in physics are used to test hypotheses about the behavior of particles and the properties of materials.

In the parapsychological study of PK, we are not able to reproduce the results on demand. It is also challenging or even impossible to impose an appropriate level of control on the mental states of PK agents. We, therefore, propose to use computer simulation as a supplementary experimental tool to study PK.

We will use computer simulation to test the hypothesis that PK is the processing output of the Platonic computer. The hypothesis describes a 2-stage causal chain of PK:

1. PK agent interacting with the Platonic computer causing parameter changes in the Platonic program.
2. Manipulating parameters in the Platonic program renders phenomena of PK.

We will report the work that simulate PK agent interacting with the Platonic computer, as well as manipulating parameters in the Platonic program causing a range of phenomena including levitation, apports, solid object passing through solid barriers, etc.

The talk demonstrates that comparable to the effective use of computer simulation in other well-established science disciplines, incorporating computer simulation into the toolset of parapsychological research will also be a hugely rewarding exercise.

Positive Possession States in Religious and Therapeutic Practitioners

TyLean Tuijl
tyleantuijl@gmail.com

Possession is a phenomenon that is nearly universal across human cultures and recorded history (Bourguignon & Ucko, 1969; McNamara, 2011). According to Cohen (2008), possession experience appears in two categories: positive possession and negative possession. Negative possession is a poorly researched and understood phenomenon, yet positive possession has received even less research, despite being more accessible to capture in a research setting.

Positive possession is explicitly employed as a method of counteracting negative possession by shamanic practitioners (Winkelman, 2018); however, spirit release therapists and religious leaders use comparable techniques (Hickman, 1994; McNamara, 2011).

The aim of this research was to determine if most of the participants described an experience of altered states of consciousness, dissociative and/or trance states during their practice and what meaning they placed on these experiences. In this qualitative study, three shamanic practitioners, three spirit release therapists and three religious leaders with experience of exorcism and deliverance ministry were

interviewed. Participants were recruited through internet searches to find their professional websites, word of mouth and snowballing.

Research is ongoing with the results being analysed using Interpretative Phenomenological Analysis (IPA). By investigating positive possession practices in shamanic practitioners, spirit release therapists and religious leaders, inferences can be made about negative possession states and how to counteract them.

References

- Bourguignon, E., & Ucko, L. (1969). Cross-cultural study of dissociational states. The Ohio State University Research Foundation with National Institute of Mental Health.
- Cohen, E. (2008). What is spirit possession? Defining, comparing, and explaining two possession forms. *Ethnos*, 73(1), 101–126. <https://doi.org/10.1080/00141840801927558>
- Hickman, I. (1994). *Remote Depossession* (1st ed.). Hickman Systems.
- McNamara, P. (2011). *Spirit Possession and Exorcism: History, Psychology, and Neurobiology*. Praeger.
- Winkelman, M. (2018). Shamanism and Possession. In *The International Encyclopedia of Anthropology* (pp. 1–12). Wiley. <https://doi.org/10.1002/9781118924396.wbiea1651>

How Exposure to Death and Dying Impacts Beliefs about Death

Kelly A. Curtis

Manchester Metropolitan University
kelly.a.curtis@stu.mmu.ac.uk

Everyone is going to die. This amount of exposure to death and dying (ED&D) raises the question of how this exposure affects individuals, particularly in regard to belief systems about death, and how different types of exposure may impact people differently. While there has been some exploration into the psychological effects ED&D has on individuals, there was previously not a measure that adequately encompasses ED&D, greatly narrowing the breadth of research in this area. Accordingly, this study developed a new measure, the Exposure to Death and Dying Scale (ED&DS) and investigated how different types of exposure to death and dying, such as exposure in the professional sphere, in personal relationships, and with one's own death, were related to views and beliefs about death. While there are nuanced differences with how different types of exposure relate to views on death and dying, in general, the more exposure one has, the lower death anxiety, increased neutral views regarding death, and less fear about others' and one's own death and dying. Currently, this research is exploring additional beliefs such as religiosity, paranormal belief, and afterlife expectations, which will provide further insight into how various exposures shape beliefs surrounding death and will be completed prior to the conference. Additionally, interviews with those experiencing high exposure on the job, such as first responders, hospice workers, medical personnel, morticians, etc., are currently being conducted in order to examine the

impacts ED&D has in formulating and upholding belief systems when the exposure is repetitive and less emotionally tethered. Having a better understanding of the effects that ED&D has on those experiencing these exposures at high levels can inform mental health services for these individuals, how and when paranormal experiences occur, and when these experiences transform into paranormal belief.

Anomalous Experiences in the Funeral Industry

Natalia Lavin, Callum E. Cooper and Chris A. Roe

Exceptional Experiences and Consciousness Studies Research Group
University of Northampton, UK
talialavin@hotmail.co.uk

An anomalous experience is “an experience that is uncommon or deviates from ordinary experience and traditionally accepted explanations of reality” (Cardeña et al, 2014) and, according to literature, occur in a large number of the population (Pechey and Halligan, 2012). Existing research reports ostensibly anomalous experiences occurring in funeral settings (Wooffitt, 1991; Glazier et al., 2015; Cooper, 2017) but much of this focuses on funeral attendees rather than staff. When looking at staff perspectives, studies have been conducted to involve medical practitioners working in palliative care settings (Fenwick et al., 2007) as well as exploring the experiences of patients themselves who are in end-of-life care (Nosek et al., 2015). Given that a common feature of anomalous experiences is their connection to death and dying, the funeral industry provides an opportunity to explore the experiences of those working closely with the deceased. McMahon’s (1987) doctoral thesis is currently the only known research that has explored this. The data collection for the thesis takes place in the USA and involves 50 participants with the results of this research finding that 80% of the participants reported possible psi phenomena.

It is clear to see from the existing research that there is little academic information available in this area of research, giving space for the current project to be discussed. This presentation will consider existing academic literature in addition to anecdotal evidence in order to provide a rationale for the current project, alongside the onward plan for data collection. At present, the plan for data collection is split into two phases: an initial quantitative survey to establish prevalence, types of phenomena and demographic information, and a qualitative phase conducting interviews focusing on the individual’s direct experiences. It is hoped that, as the project progresses, new information regarding the prevalence and classification of anomalous experiences encountered by funeral industry personnel (and related staff) is established in a UK sample.

References

Cardeña, E., Lynn, S. J., and Krippner, S. (2014). *Varieties of Anomalous Experience: Examining the Scientific Evidence*, 2nd ed. Washington: American Psychological Association.

- Cooper, C. E. (2017). Considering anomalous events during bereavement as evidence for survival. In *Continuing Bonds in Bereavement* (pp. 201-213). Routledge.
- Fenwick, P., Lovelace, H., & Brayne, S. (2007). End of life experiences and their implications for palliative care. *International Journal of Environmental Studies*, 64(3), 315-323.
- Glazier, J. W., Beck, T., & Simmonds-Moore, C. (2015). A phenomenological analysis of the relationship between grief, emotional stress and anomalous experiences. *Mortality*, 20(3), 248-262.
- McMahon, J. D. S. (1987). *Reported spontaneous psi experiences in the funeral industry* (Doctoral dissertation, Saybrook University).
- Nosek, C. L., Kerr, C. W., Woodworth, J., Wright, S. T., Grant, P. C., Kuszczak, S. M., ... & Depner, R. M. (2015). End-of-life dreams and visions: A qualitative perspective from hospice patients. *American Journal of Hospice and Palliative Medicine*, 32(3), 269-274.
- Pechey, R., & Halligan, P. (2012). Prevalence and correlates of anomalous experiences in a large non clinical sample. *Psychology and Psychotherapy: Theory, Research and Practice*, 85(2), 150-162.
- Wooffitt, R. (1991). 'I was just doing X ... when Y': Some inferential properties of a device in accounts of paranormal experiences. *Text - Interdisciplinary Journal for the Study of Discourse*, 11(2), 267-288.

Grave Matters: Usage of Burial Spaces by Paranormal Investigators

Dr. Kate Cherrell
burialsandbeyond@gmail.com

This paper presents an interdisciplinary view of the changing usage of burial sites in regard to the unsanctioned and increased presence of paranormal investigators and internet paranormal content creators.

Burial spaces, whether graveyards, cemeteries or other locations of ritual remembrance, are sites of varying usage, both sanctioned and unsanctioned. Many of these larger sites are wholly open to local communities and promote visitors to their location and on-site venues through public engagement events and private hire. However, many of these sites are ultimately becoming victims of their own promotion. Due to both advertising and open access routes, many hobbyists, including paranormal investigators, are viewing burial spaces as viable platforms for their activities, both spiritual and financial.

Many larger British cemeteries with on-site chapels and larger buildings regularly advertise and host events for the likes of photographers, exercise classes, local history groups, artists, and talks, all of which are intended to encourage visitors and revenue to the site via authorised means. Cemeteries such as Bristol's Arncliffe, York and London's famous 'Magnificent Seven' Victorian garden cemeteries all boast a diverse and dense programme of events and community engagement. The revenue generated from these paid events assists in the maintenance and insurance of these sites. However, one hobbyist group has dramatically increased its unauthorised usage of burial sites in recent years, namely paranormal investigators.

Following the UK Lockdown of 2020-2021, several cemeteries reported increased unsanctioned usage of their sites by investigators and paranormal events companies, seeking an open space for both investigation and self-promotion.

During this period of time, interest in paranormal entertainment saw a marked increase, as did the number of paranormal events companies registered at Companies House. As this hobbyist group grew in mainstream popularity, so did their use of burial sites, yet such usage continues to go unacknowledged by site managers, with no constructive dialogue between the two parties appearing imminent. With little public acknowledgement of activities and complicated legal issues of ownership and site usage, paranormal investigators and cemetery visitors view the burial space in different ways. While both may view the site as wholly publicly owned and not requiring of permission to visit, paranormal investigators may view the site on marketable aesthetics alone, and believe that prior permission for both investigation or recording was implicit or not required due to a perceived societal ownership.

This paper does not seek to vilify paranormal investigators or cemetery trusts, nor argue that one party should alter their action or inaction towards changing trends of site usage, but seeks to present an overview of cultural and societal developments, and offer an academic interrogation of cultural shifts.

This paper discusses changing views of 'respect', ethics and 'site suitability' within the paranormal investigative field, alongside the opinions of site organisations and visitors. Similarly, by addressing the importance of social media in the hosting, permeation and normalisation of ideas and activities, a hitherto unaddressed subculture is brought to the fore. This paper includes data obtained through active fieldwork, archival curation, and anonymous questionnaires completed by investigators and cemetery professionals. This paper discusses the motives and common threads within investigative groups, the prominence of social media in the business of private and public paranormal events and the lasting impact that such activities have on burial sites.

By presenting authentic voices and opinions of site usage and ethics, this paper speculates on the future of paranormal investigation in burial spaces, should the situation be left unaddressed.

INVITED SPEAKER

Consciousness, the brain and spiritual experience.

Prof Paul Gilbert. PhD, FBPsS, OBE

Centre for Compassion Research and Training
College of Health, Psychology and Social Care, University of Derby

The last 10 years has seen increasing interest in the ancient ideas that consciousness is the ground of all being from which the material universe emerges.

While there are of course debates about this it is also interesting to explore the implications if this were true, including for new forms of spirituality, and with compassion as a central dimension of consciousness.

Augustine's Skeptical View of Apparent Apparitions of the Dead

Michael Potts, Ph.D.

Methodist University North Carolina, USA
mpotts@methodist.edu

This paper explores Augustine of Hippo's views on apparent apparitions of the dead. In contrast to Gregory of Nyssa and (later) Gregory the Great, Augustine is skeptical of the view that putative apparitions of the dead literally are the souls of dead individuals. Exploring that Augustine holds this view involves the current situation in his diocese in North Africa, his Neo-Platonic metaphysics holding that the soul is entirely immaterial, and his views on the nature of dreams. His considered view is that apparent apparitions of the dead are dreams. In his view, this implies either that (1) the "apparition" is only a character in a dream, perhaps a vivid or lucid dream, but the cause remains in the mind of the dreamer, (2) angels or demons cause the dream through what today would be called psi processes. Augustine also accepts the possibility of out of body experiences (given God's permission). He believes that the apparent physicality of apparitions as well as in near-death experiences is due to the nature of dreams—that dream images of physical objects retain, from the point of view of the dreamer, properties characteristic of physical objects. Although he was far from being modern, Augustine's view on apparitions is more nuanced than his contemporaries because he associated belief in ghosts as the dead with the pagan cult of the dead that was reviving in North Africa, and which Augustine and the Catholics adamantly opposed. Augustine's skepticism does not stem from modern doubts about the preternatural, but from his philosophical and theological presuppositions. However, his argument on apparitions, dreams and what would be today called "the source of psi" problem sound surprisingly modern for their time.

The P.E.A.R. Legacy, the Technology and the Future of Syntropy

Wolfhardt Janu, Peter Merry & Kirsty L. Allan
Wyrd Research, gowyrd.org

We research mind-matter interaction and develop technology to support this exploration. Our project rests on the concept of 'Wyrd; the Anglo-Saxon word for 'fate' that best encapsulates the sentiment of fundamental interconnectedness. We operate within consciousness research with a multidisciplinary team sharing an ontological view of consciousness as a 'field' of interconnection, one that is not dependent on, nor emergent from, the material brain. The Wyrd project carries the legacy of the former Princeton Engineering Anomalies Research (P.E.A.R) laboratory which saw 28 years of research into micro-PK and remote viewing studies. We have since developed new REG technology to better suit modern research criteria which directly addresses the problems identified by critics. The 'Wyrdoscope' (our dual REG device) tracks data anomalies by analysing correlations between two data streams of Random Event Generators. This approach highlights synchronicities in the data itself and addresses the earlier REG critique of 'start point bias' and interpretation errors - because our whole system is fully automated, and the resulting data is rich in detail. Such anomalies cannot be caused by any known classical fields, so we posit that they come from a different source – which we propose as 'the field of consciousness', or as close to such an understanding as we might conceptualise. We would like to present an overview of the legacy of this research, the current technology and where we are taking it including with SPR support. As such, we are delighted to introduce an exciting study of ours, funded by SPR Survival Research Committee: A New Bridge between the Physical and the Psychical: Detecting synchronicity in the field of consciousness during physical mediumship. Our study is an explorative examination of subtle physical evidence detected during physical mediumship. We will compare dual data streams of random bits (1s and 0s) to identify any anomalous structures in that data (synchronicities) which will be synthesised with an audio timeline of the medium-spirit interaction.

We would like to acknowledge the support of IONS Lynda G O'Bryant prize which has supported our recent work and, the SPR Survival Research Committee for supporting an explorative study into mediumship.

INVITED PRESENTATION

**Interactions with Non-Worldly Beings
During Meditation-Induced Near-Death Experiences:
Insights, Challenges and Future Directions**

Dr William Van Gordon

University of Derby (UK)
w.vangordon@derby.ac.uk

Communication with non-worldly beings is a commonly reported feature of near-death experiences (NDEs) and can be life transformational for NDE survivors. However, because NDEs typically occur unexpectedly, research into the nature of such interactions - and the wider neuropsychological processes that occur during NDEs - is often limited due to being retrospective. One approach to overcome this has been to explore means by which states of consciousness appearing to resemble NDEs might be voluntarily induced in a safe and pre-planned manner. One such approach is the meditation-induced NDE (MI-NDE) into which I led a three-year mixed-method longitudinal investigation involving advanced Buddhist meditators.

This talk will begin by discussing the key findings of the study, which demonstrated that compared to control conditions, the MI-NDE prompted significantly greater increases in NDE profundity, mystical experiences, and non-attachment. Furthermore, MI-NDEs were found to share many of the experiential features of conventional NDEs, including wisdom acquired from encounters with non-worldly beings such as recently deceased beings, demonic beings, and enlightened beings. Moreover, the advanced meditator participants reported being able to maintain a degree of volitional control over these encounters, which helped to deepen the profundity of the interaction as well as their understanding of death and after-death processes.

The talk will then explore how, in combination with related studies I and others have conducted into advanced meditative states, findings augment understanding of why interactions with non-worldly beings appear to manifest with greater ease during both voluntarily induced and conventional forms of NDE.

Finally, the talk will discuss some of the design challenges of studying MI-NDEs as well as plans for forthcoming research that aims to systematically explore the medium, content, and underlying intent of communications instigated by non-worldly beings during MI-NDEs.

Terminal Lucidity in Adults: A New Case Collection

Chris A. Roe

Exceptional Experiences & Consciousness Studies Research Group
University of Northampton, UK
chris.roe@northampton.ac.uk

One of the ‘basic limiting principles’ identified by C.D. Broad (e.g., 1962) as a central tenet of the materialist scientific worldview is that human consciousness is associated with specific neural correlates in the brain, such that consciousness is only possible if certain minimal levels of functioning pertain.

However, a number of spontaneous clinical phenomena seem to challenge that assumption, including evidence from near-death experiences in which dysfunction may be temporary, and also hydrocephalus cases that involve longer term severe brain damage and dysfunction. In this presentation, I will consider a third example, terminal lucidity (TL) in patients who are experiencing cognitive decline as a symptom of a degenerative terminal illness that has typically left them drowsy, forgetful, and unresponsive to their surroundings or even their own biological needs. Nevertheless, some patients experience sudden enhanced thinking and mobility, recover access to lost memories so that they are able to recognise friends and family, and can sufficiently appreciate their circumstances to be able to say goodbye and put their affairs in order. Quite commonly, TL episodes are relatively brief, and the patient reverts to their former state, often dying within the next few days. Such lucid episodes are challenging to account for given that the neurological damage caused by their terminal illness is deemed to be irreversible.

Individual clinical cases have occasionally been published (Nahm & Greyson, 2009; Nahm et al., 2012), and have also been reported for terminally ill children who are less likely to have absorbed cultural expectations around death and dying (Woollacott et al., 2023). A weakness of such cases is that they represent an unsystematic collection that may be missing key pieces of information that could enable us to identify patterns in the circumstances, phenomenology, and impacts of TL that shed light on their putative mechanisms.

In this presentation I will describe the design and implementation of an online survey tool intended to capture a range of details about the subject who is believed to have experienced a TL episode, including their underlying medical condition, treatment regimen (including recent changes), and their physical and mental capacities immediately prior to the TL episode, as well as a detailed description of changes that occurred during the episode itself, and finally to gather information about how witnessing such an episode has affected caregivers and family members. I will present initial findings both in terms of quantitative analysis and by providing descriptions of the phenomenon drawn from witness accounts. If time allows, I will end by reflecting on the adequacy of existing explanations to accommodate the data I have presented.

References

- Broad, C.D. (1962). *Lectures in psychical research*. Routledge & Kegan Paul.
- Nahm, M., & Greyson, B. (2009). Terminal lucidity in patients with chronic schizophrenia and dementia: A survey of the literature. *Journal of Nervous and Mental Disease*, 197: 942–944.
- Nahm, M., Greyson, B., Kelly, EW., & Haraldsson, E. (2012). Terminal lucidity: A review and a case collection. *Archives of Gerontology & Geriatrics*, 55, 138–142.
- Woollacott, M., Greyson, B., Nahm, M., Roe, C.A., et al. (2023). Terminal lucidity in a pediatric oncology clinic. *Journal of Nervous and Mental Disease*, doi: 10.1097/NMD.0000000000001711

Lucid awareness in seemingly unconscious patients. A case report and its implications

Michael Nahm

Institute for Frontier Areas of Psychology and Mental Health, Freiburg, Germany nahm@igpp.de

It is generally assumed that nonresponsive people in comatose states are unconscious, especially when it is known that their neuronal circuits are not functioning normally, for example, due to severe anoxia and medically induced comas. Nevertheless, occasional reports suggest that sometimes, patients in such conditions can be fully aware of everything that happens around them.

In this presentation, I introduce a remarkable case of this kind. It concerns Gil Avni, a patient in Israel who was diagnosed with a cerebral oedema and suffered severe anoxic brain damage that had already affected his brain stem. He was put in an induced coma to minimize the brain's oxygen supply. Still, Gil was expected to die within hours. However, he recovered unexpectedly. It turned out he had been fully conscious throughout the 44 hours he was in this coma. As a result, Gil was able to describe in detail every occurrence and conversation that had been held at his bedside throughout this time. He was furthermore able to cognize occurrences happening outside of his room, apparently bypassing his biological senses.

The experience of being fully aware inside a non-responsive body had an utterly traumatic impact on the patient. As a result, guidelines for coma patient care have been adopted and improved in Israel.

Crucial elements of this case have already been described in a documentary film (Gross & Shamir, 2023). I am in contact with Gil, members of the medical team who cared for him, and the film producers. We are currently preparing a publication about this case in which we cover additional details of Gil's experience as well as the implications of such occurrences of "paradoxical consciousness" for coma patient care and for the advancement of our understanding of human consciousness.

References

- Gross, R., & Shamir, E.-H. (Producers). (2023). 44 Hours. Yes Docu; SWR (Co-Production); Arte (Co-Operation). Keren Makor Foundation.

Does Personality Survive Bodily Death? Identifying Best Practice in Investigating Claims of Reincarnation

Elaine Rycroft, Callum E. Cooper, Chris A. Roe
University of Northampton UK. elaine.rycroft@northampton.ac.uk

The Bigelow competition sought essay submissions presenting the best evidence supporting the premise that human consciousness survived beyond physical death. Michael Nahm's entry explored the merits of investigative sources of Survival evidence; and concluded that cases of the reincarnation type (CORT) were the most likely to produce supporting veridical data for Survival.

Building on this foundation, our four-phase research project aims to systematically review and critically analyse the investigative methodologies used in CORT. Our goal is to identify the most effective practices and develop a protocol incorporating modern technology and techniques to establish a standard for obtaining the strongest data.

The planned phases will consist of: -

- 1 - A systematic literature review using the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) method.
- 2 - Extrapolation and analysis of data garnered from the review. Formulating an up-to-date Standard Operating Procedure (SOP) for investigating CORT.
- 3 - Using the SOP to evaluate its efficacy against conventional methods when investigating new CORT.
- 4 - Peer review, revising and refining as necessary.

It is anticipated that resulting data will indicate several areas of improvement for CORT investigations including the use of social media and modern technology to source, collect and analyse the information.

The literature review so far has highlighted several areas that need careful consideration when planning a universal investigative framework. These include:

- New methods of sourcing cases due to the internet and the growth of social media and interest groups.
- The use of modern technology when gathering, researching and recording evidence and the supporting documentation and statements.
- Barriers to obtaining accurate information such as translation errors, religious and cultural bias, social construction, fraud and psychosocial factors.

- Contamination of evidence due to easy media, internet and literary access; whether conscious or subconscious.
- The interconnectedness of communities through modern travel and news channels, which can question the authenticity of cases.
- Ethical and safeguarding challenges encountered today.

These concerns underscore the complexities of researching CORT. The methodology devised by Stevenson for his extensive CORT research is regarded as the standard due to his meticulous and forensic approach. Updating his high standards of methodology is necessary for progress. In a world where information is easily accessed and CORT cases can be dismissed because of this, having an accessible SOP is essential to ensure the validity and reliability of findings.

We would like to acknowledge the generous support of the Society for Psychical Research who have enabled us to conduct this research project.

Psychic or Spirit: Learning to Discern

F. Kinnersley^a, Prof. C.A. Roe^a, Prof. G. Hitchman^b, Dr. L. Spiers^a

^aUniversity of Northampton, UK

^bHeriot-Watt University Malaysia
fil.kinnersley@northampton.ac.uk

One of the criticisms of mediumship as evidence for the survival hypothesis is the issue of the source of a medium's information: it is argued that the medium could be accessing psychic information from a living person (Braude, 2003; Gault, 1983).

Our qualitative longitudinal study into the experience and phenomenology of Spiritualist mediumship development shows that this is also a significant issue for novice Spiritualist mediums, in that their unfoldment process involves learning to discern between information that may be attributable to a discarnate source, and information that should be attributed to a psychic source.

This paper will summarise the research project and its aims, and present the results of the analysis. Initial results indicate that while the issues that the participants encountered were often similar, there was a notable degree of variation in both the process of learning to discern and the discernment strategies adopted by the participants.

Data and Methodology:

Data collection: A mediumship survey was used to recruit twelve participants who were in the process of developing as Spiritualist mediums; one dropped out after the first interview.

Data: A longitudinal series of semi-structured interviews was conducted with eleven participants, each of whom was interviewed three times over the course of eight months.

Method: Analysis using IPA (Interpretative Phenomenological Analysis, (Smith et al., 2022)), presented as a set of themes and sub-themes evidenced by quotations from the data set.

We are grateful for the support of the Society for Psychical Research (Survival Fund), and the John Bjorkhem Memorial Foundation for this project.

References

- Braude, S. E. (2003). *Immortal Remains*. Rowman and Littlefield. Gauld, A. (1983). *Mediumship and Survival* (2nd ed.). Flamingo.
- Smith, J. A., Flowers, P., & Larkin, M. (2022). *Interpretative Phenomenological Analysis: Theory, Method and Research* (2nd Edition). SAGE Publications Ltd.

The Truth in the Light: Conducting a systematic analysis of the Fenwick NDE CASE collection

Ashlee Lewis-Earl & Chris A. Roe

Exceptional Experiences & Consciousness Studies Research Group
University of Northampton, UK

We recently completed a project, kindly funded by the SPR Survival Committee, to systematically analyse letters submitted to Prof. Peter Fenwick in response to a BBC QED documentary about near-death experiences that aired in January 1988 (Roe & Lewis-Earl, 2024). When we began the project, we were disappointed to discover that over 60% of the collection (219 of 359 letters) did not actually describe experiences but represented other kinds of correspondence. This was unexpected in a collection that was actively curated by the documentary producer, Tony Edwards. Nevertheless, the remaining cases include some interesting and detailed accounts of NDEs that have never before appeared in the public domain. Our analysis enabled us to document some interesting variations in NDE features under different circumstances, but these warranted further consideration using a larger collection of NDE letters that would enormously increase the statistical power and/or resolution of analyses that can be conducted. In particular, it would allow a more forensic coding scheme that would be data-driven by applying more powerful cluster analyses.

Serendipitously, Peter and Elizabeth Fenwick donated to us a larger collection of letters, some of which were included in their 1997 book, *The Truth in the Light*. These letters were received by the Fenwicks and by David Lorimer, then chair of the International Association for Near-Death Studies UK, after various media appeals. We have permission from both parties to use the letters and make public any discoveries, subject to appropriate anonymisation. The new collection comprises 446 letters, which have been read independently by CR and ALE, and reviewed as eligible for inclusion in the analysis. Letters were excluded from further analysis due to: complete lack of detail of the experience; dubious provenance (very likely a dream, sleep paralysis, or a result of psychosis); or a focus on other phenomena such as alien visitations, ADCs, etc. This left a set of 315 letters that have been transcribed and analysed. Although some of this material is already in the public domain, there is scope to learn more from these accounts by using a more systematic analysis method such as content analysis, as argued for in our JSPR submission. In this presentation we will outline the research project and report on our preliminary findings.

References

- Fenwick, P., & Fenwick, E. (1997). *The truth in the light: An investigation of over 300 near-death experiences*. Berkley Books.
- Roe, C.A., & Lewis-Earl, A. (2024). Glimpses of death: Analysis of letters submitted in response to a BBC documentary on near-death experiences. *Journal of the Society for Psychical Research*, 88(1), 1-17.

To Believe or Not to Believe: The Role of Personal Experiences and Other Psycho-social Influences on Belief in the Paranormal

Dr Anusnigdha

Birmingham City University
anusnigdha@bcu.ac.uk

Over the past few decades, psychological research has explored a variety of factors in considering how they may play a role in developing and maintaining a belief in paranormal phenomena, including cognitive styles, personality types, education, somatic tendencies, psychopathological traits, and more recently, socio-cultural factors such as religion and spirituality. However, research in the field has primarily been quantitative in nature, with a focus on measuring the extent to which these factors influence paranormal (or sceptical) belief. As such, there has been little emphasis placed on exploring the meaning or phenomenology of the belief (or lack thereof) in paranormal phenomena for the individual. There is also minimal research on the dynamics of subjective internalisation of socio-cultural beliefs which may influence the type of paranormal phenomenon (if any) one may believe in. Thus, this research uses a psychoanalytic framework to further understand the unconscious dynamics involved in developing and maintaining a belief in the paranormal, how these may influence *what* paranormal phenomenon one

may believe in, and the meaning of such beliefs for one's identity. The semi-structured interviews with a global, cross-cultural sample are analysed using psychoanalytically informed thematic analysis. Thus, the analysis focuses on understanding the meaning of the paranormal belief for the individual, rather than seeking an explanation for paranormal phenomenon or the beliefs. Exploring the unconscious dynamics in this manner allows for the consideration of individual experience within the broader cultural and social psychodynamics. It is expected that variation in implicit cultural norms, socially acceptable coping strategies and defence mechanisms, family dynamics, and unconscious social anxieties will play an essential role (either through symbolic manifestations or projection) in conscious and unconscious belief in different aspects of the paranormal.

Paranormal Perspectives of People from British Minority Ethnic Backgrounds: An Interpretative Phenomenological Analysis

Sabrina Davis

University of Derby

Supervisors: Dr Malcolm Schofield, Dr Chris Howard
sabrina3615@sky.com

Paranormal beliefs and experiences are inherent to many people's cultural, religious and spiritual philosophies. In Western society paranormal beliefs and experiences are considered undesirable, indicating abnormality in the individual. Western philosophy may prevent people with paranormal beliefs or experiences from being open about them. This study aims to explore whether this is the case for individuals from minority ethnic backgrounds living the United Kingdom by (1) understanding paranormal beliefs and experiences of people from minority ethnic backgrounds, (2) exploring the role of paranormal phenomena on people's psychological wellbeing and how this impacts their daily functioning, and (3) whether people from minority ethnic backgrounds disclose their paranormal beliefs and experiences and how they interpret other people's reactions.

Seven participants took part in semi-structured interviews. Data was analysed using interpretative phenomenological analysis. The overarching theme was paranormal beliefs and experiences fill a gap in which the scientific-rational model fails to satisfactorily account for people's understanding of situations. Three themes emerged: engaging in the paranormal is dangerous - I need to protect myself; reincarnation is real - there is life beyond mortal death; and I cannot share my paranormal beliefs with others, unless they believe in the paranormal too.

Findings indicate participants found paranormal phenomena relating to witchcraft, spirit attachment and magic to be negative resulting in feelings of terror leading to avoidant behaviours. Belief in reincarnation was deemed positive which helped participants cope with grief, death anxiety, and facilitated meaningful life goals. Participants talked about the paranormal within family, friendship and religious circles which allowed them to be their authentic selves however they refrained from disclosing paranormal beliefs or experiences outside of their trusted circles due to fear of ostracism.

This study demonstrates the complexity and diversity of human belief and experience and how personally constructed paranormal narratives impact people's psychological functioning.

Is there any factor that indicates to us that the perception of certain anomalous inclusions goes beyond pareidolia?

Alvaro Alvarez & Vicente Salvador

Independent Researchers, Spain
alvvlaiba@gmail.com

Introduction: What factors can influence the perception of people who hear or see these types of recordings created by unconventional methods? Does the perception depend on some sociological or demographic factor that is decisive in its interpretation?

Methods: Two surveys were carried out, which were active for 15 days to collect data. In the case of the survey on the perception of psychoimages, it was designed by dividing it into two clearly differentiated parts: in the first part, demographic and sociological data of the person participating in it were collected in the second part of the survey, the psychoimage was shown and several questions were asked again: if they saw something recognizable, if so, to describe it.

Results: A decrease in quality is observed with the age of the interviewee. This fact may have a physiological explanation associated with the fact of presbycusis, or loss of hearing acuity associated with age. These results show that the perception of this type of recording has the same behaviour as a sound of non-anomalous origin.

Discussion: The importance of this finding is that this anomalous type of recording behaves in the same way as a non-anomalous recording: this decrease in the quality of the audio associated with age would not exist, and we could even say that it would have an effect opposite to that observed, since the component that we could call "internal imaginary" would be enhanced by the difficulty of hearing the recording: in the case of a pareidolic type of origin, we therefore think that this graph would have an inverse distribution to that shown in this study.

INTERNATIONAL REMOTE VIEWING ASSOCIATION'S 25TH YEAR ANNIVERSARY IN-PERSON CONFERENCE ON A CRUISE

**October 5 – 10, 2024
Held aboard the Mariner of the Seas cruise ship
operated by Royal Caribbean International**

ABSTRACTS

IRVA's International Committee and Community of Special Interest - Update 2024

Luciano Arruda

Overview of our organization, current assets and suggested roadmap for 2025.

Out boulder Experiment Exercise

Patty Gallagher

During this experiential workshop, a target will be presented in which a live out boulder travels to a location and the workshop attendees will do a remote viewing session to describe their location.

Traveling the Universe with Your Mind

Michelle Freed

Unlock the future of Remote Viewing by engaging more deeply with your body and senses, creating a path to self-discovery and awareness of your true capabilities. In this presentation, we will de-

mystify Trans-Dimensional Remote Viewing (TDRV), exploring how this practice can help us tap into the vast potential of human consciousness. By understanding and refining the connection between mind, body, and senses, you'll learn how TDRV opens new doors to personal growth and a deeper awareness of our abilities.

Remote Viewing Monitoring Workshop

Debra Lynne Katz, PhD

Description: Part of the secret to the success of the early U.S. government remote viewing programs, both research-based and the military unit, was that the viewers were almost always conducting session work with the aid of an "interviewer" or "monitor". Recent peer-reviewed studies have suggested that monitored sessions can produce better results. This research will be briefly presented and then participants will be divided into two groups – one who will serve as a monitor and the other the viewer. Spouses and domestic partners will be encouraged to work together (but not forced!). All others will be assigned a partner. The aim will not only be to get people used to practicing RV with a monitor and teaching those who are interested how to monitor one another but to create pairs that could potentially work together in the future.

During this practice hour, participants will all work on targets together and we will also explore the question of whether or not the

monitor needs to be/should be blind to the tasking. Monitors/Interviewers will have the option to be blind or not and then afterwards we will discuss the pros and cons of this. We will take advantage of being together to conduct this workshop as it would be harder to do as a group online.

A Remote Viewer's Journey

Carl Anthony McLelland

A brief talk about my early days through to the present, talking about my mistakes, methods, achievements & the importance of training & structure from my point of view.

Recent Developments in Artificial Intelligence and Potential RV Applications

Cindy Miller, PhD

The rapidly evolving field of Artificial Intelligence continues to open the door to more possibilities for practitioners and users of RV. This talk will review the latest developments in AI and explore with

the audience thoughts on potential applications and challenges to incorporating AI in RV practices. The audience is offered a practice target and the opportunity to submit a one-page summary on paper. I will analyze both the individual and collective results using AI to assess how well the target was met. A pre-recorded monitoring demonstration performed with the help of AI to help remote viewer and IRVA's president, Debra Katz, carry out a remote viewing session will be shared, demonstrating how AI can be trained and adapt to the needs of the viewer.

Intelligence: The Environment That Birthed Remote Viewing

Gregory C. Radabaugh

Description: Ever wondered what kind of environment gave rise to remote viewing? This presentation introduces the intelligence discipline and an overview of the intelligence community for those who have never worked in this world. You will discover the meanings behind intelligence jargon, the various data collection capabilities that feed intelligence analysis, and how remote viewing fits into this unique domain.

The rapidly evolving field of Artificial Intelligence continues to open the door to more possibilities for practitioners and users of RV. This talk will review the latest developments in AI and explore with the audience thoughts on potential applications and challenges to incorporating AI in RV practices. The audience is offered a practice target and the opportunity to submit a one-page summary on paper. I will analyze both the individual and collective results using AI to assess how well the target was met. Results are revealed in a second 15-30 minute presentation.

IRVA: 25 Years of Memories

Angela Thompson Smith, PhD

In the fall of 1998, Dr. Thompson Smith was approached by a colleague who asked me to take over the running of the American Association of Remote Viewers (AARV). She declined and discussed starting a new one with Paul Smith and one of Paul's colleagues who offered some financing. The plan was to hold a one-day meeting in March 1999 in Alamogordo, NM to discuss the formation of a new remote viewing Association. The one-day meeting would be followed by a two-day conference organized by Lyn Buchanan and PSI, at which some of the new IRVA members would give talks and presentations. 25 years later we can look back at this auspicious beginning and see the, sometime convoluted, path that the organization travelled. The talk will be illustrated by photographs and memorabilia taken from Angela's files.

25TH YEAR ANNIVERSARY INTERNATIONAL REMOTE VIEWING ASSOCIATION VIRTUAL CONFERENCE ABSTRACTS

**Held via Zoom
November 9-10, 2024**

ABSTRACTS

AI-RV: Automated Protocols for Remote Viewing Utilizing Artificial Intelligence

Damon Abraham, PhD

This presentation will explore my current research on whether artificial intelligence (AI) can exhibit psi functioning, specifically non-local perception, independently from human operators. Conducted under the auspices of the IRVA research grant, this study utilizes generative AI models and a random event generator (REG) to automate remote viewing (RV) tasks, creating images and text-based transcripts. This protocol leverages a normative image database, created in partnership with the Institute of Noetic Sciences (IONS) as an image target pool. Advanced text and image embedding techniques support automated judging procedures to evaluate the AI-generated viewing transcripts. These methods aim to reduce human biases and enhance the replicability of RV studies by providing objective, quantifiable measures of semantic and visual similarity between viewing transcripts and target images. I will discuss the promising applications of automated judging, which streamline the evaluation process and improve consistency across trials. Additionally, the research raises intriguing questions about the potential for psi functioning in non-biological systems, challenging traditional views in consciousness studies and AI research. I will delve into the implications of these findings for the future of AI-driven psi research and creative applications.

A neuro-phenomenological approach to studying remote viewing

David J. Acunzo, PhD

Research in remote viewing has mostly been evidence-based, strongly suggesting that anomalous processes are at play. However, little is known about the mechanisms involved in the generation of the recipient's impressions. Past process-oriented research has mostly focused on the nature of targets, with some neurophysiological experiments that have shed little light on the nature of the phenomenon.

After a quick review of past process-oriented research in remote viewing, we will present novel empirical approaches and explain their potential. First, we will explain how micro-phenomenology interviewing methods can gather additional information for both increasing the accuracy of the targets' descriptions and uncovering some of the processes at play while the percipient is getting their impressions. Second, we will talk about how pairing micro-phenomenology with neurophysiological recording has the potential to identify neural signatures associated with the various processes at play in remote viewing. We will illustrate our statements with preliminary data.

Putting remote viewing to work.

Lyn Buchanan

We practice, practice, practice to get good at remote viewing, but often find that once we "get there," there seem to be no opportunities to use it in the real world. Not so. The opportunities are there.

AI and remote viewing

Pam Coronado & Cindy Miller

Discover how AI can streamline your workflow, automate repetitive tasks, and boost creativity in remote viewing projects. See a demonstration of AI monitoring and how the AI monitor learns from the viewer what to do and not do.

Lost History Recovered: Combining Channeling with Remote Viewing

Don deCourcelle

An undocumented Historical Account was obtained through "Spirit Channeling"! To validate or dispute this information, a team of A+ Remote Viewers were involved, with surprising results.

German Panel Discussion

Organizer: Theo Fischer.

Panelists: Christian Wieser, Tobias Krieg, Marie Priebusch, Timo Féret Marcus Boldt, Henrike Herbold, Christian Wieser

In this presentation, we will explore the exciting development of remote viewing in Germany. From its origins and historical milestones to current trends and prospects, we will offer a comprehensive insight into the world of remote viewing in Germany.

We will look at the various techniques and methods that have shaped the German remote viewing community and highlight the key developments along the way to establishing this practice in Germany. By looking at the past, we can better understand how remote viewing in Germany has become what it is today and how it will evolve in the future.

In addition, we will explore the current trends and innovations in German remote viewing, including the latest methods and application areas. We will discuss the challenges and opportunities facing the remote viewing community in Germany and ways to promote and develop this fascinating practice.

(German- English Translation provided)

Taking Remote Viewing Off the Page and into the future

David Harker

What is Cowboy Remote Viewing? Where did it come from, and where is it going? Cowboy RV started as an experiment in breaking rules and discarding dogma, which was conceived to bring the esoteric underpinnings of remote viewing into modern practice while having a lot of fun. It has developed into an operationally useful tool which is in active use and is being incorporated by multiple RV trainers. In this session we'll look at what cowboy is, what it means and if there's time we'll all give it a try.

Remote Viewing, Aharonhov-Bohm Effect, and The Science of Non-Local Communications

Dr. Simeon Hein

The Aharonhov-Bohm Effect, discovered in the 1950s and experimentally verified in 1986, provides a scientific basis for non-local interactions between particles and fields via resonance rather than direct electromagnetic signals. The AB effect shows that distant objects can exchange information through subtle quantum mechanisms even without measurable electromagnetic waves. New research in brain physiology shows that the human cerebral cortex exhibits phase singularities, which cancel or-

dinary EM signals and thus create the conditions for the AB effect. Therefore, the AB effect may be the basis of non-local PSI effects like remote viewing, telepathy, and pre-cognition.

A Dozen Approaches to Reaching the Target, an Interactive Experience

Debra Lynne Katz, PhD

In this fast-paced, action-packed workshop, Katz, an experienced remote viewing instructor, combines approaches she has used, developed and discovered in remote viewing and in other clairvoyant modalities to establish better contact with a target and to start the flow of information in a session. These include clairvoyant visualizations that may lead to stronger visuals in a remote viewing session, and lead to greater focus and site contact. A few remote viewing targets will be accessed.

2024: Year of Uforia? RV and UFOs - Past and Present

Jon Knowles

The deep connections of Remote Viewing, UFOs and Non-Human Intelligence with updates on developments in 2024 will be discussed. The popularity of intentional communications with extraterrestrial Intelligence and the possible dangers involved, especially for the general public or newer viewers, will be discussed.

Awakening the Potential Within

David Morehouse, PhD

In this lecture, Dr. Morehouse will discuss the new alignment of RV (QMindRev™) with a redesigned version of NLP (UPGRD®) encompassing seven tiers of training with Dr. David Morehouse, augmented by strategic “accelerants” from William Lam. Now, these visionary leaders converge to deliver an unparalleled seminar experience, offering a fusion of knowledge and practical application like never before. This new vision and the reasons for it will be expressed in this lecture. Dr. Morehouse is committed to unlocking human potential through the transformative art and science of RV’s QMindRev™. William Lam’s UPGRD® stands at the forefront of self and professional enhancement, dedicated to ‘upgrading humanity’ through its avant-garde methodologies designed to the OS for the mind, prioritizing user-friendliness and efficacy in navigating the inner landscape. Join us in this lecture to learn about a transformation journey and empowerment for personal and professional growth!

On the susceptibility of matter to mind

Daqing (Daching) Piao

This talk hypothesizes to model mind-matter interaction by introducing a susceptibility property of a “matter” that responds to the degree-of-coherence of neuronal activities associated with a “mind”. The theory aims to propose what kind of neurophysiological markers could exist for correlating with the onset of anomalous information requisition.

German language Remote Viewing toolset as a problem-solving tool for future generations tasks

Gunther Rattay

Description: Everyday life in the realms of an extended reality – how body-mind-system is fitted to receive information and can transfer these ideas into everyday life results – how can the structure of concepts of actual technology be used to re-engineer structures of consciousness and how can RV help to fill in the gaps of knowledge.

(German Translation provided)

Brainwaves and Harmonics

David Sereda

David Sereda will elaborate on what brain waves synchronize with in the natural world. Including the heavens and the earth, the material and the spiritual, the macro and the micro, the cosmic and microscopic. Remote Viewing with frequencies of Cosmic Bodies, Latitude and Longitude for Earth. David Sereda has demonstrated the use of frequencies in pairs based on wavelengths of planets, stars, and the latitude and longitude of earth-based targets. These frequencies can be administered while the remote viewer is in session, allowing for a pure remote viewing environment.

The ART of Remote viewing & allowing RV to adapt from the classroom to applications

Daz Smith

I will discuss how RV taught in the classroom isn't the best tool for real world applications and why, and how to fix that – then I will discuss and show examples of how the ideogram process within methods based RV can be very visual, how it evolves as a visual language and I will also discuss and show

examples of how visuals in RV aren't always bad, how accurate visual information can be and all this with more examples from real world RV applications

Beyond Physical Senses: Remote Viewing and its Implications for Theories of Consciousness

Marina Weiler

Description: Remote viewing is a practice that involves attempting to gather information about distant or unseen subjects by using the mind's purported ability to sense and perceive such information. It suggests that human beings may possess the capacity to perceive imagery and obtain impressions of remote geographical locations without relying on their ordinary physical senses. Despite its controversial and often disregarded status, remote viewing has been the subject of extensive research dating back to the 1970s when the Stanford Research Institute (SRI) conducted a program sponsored by various government agencies, including the Central Intelligence Agency (CIA).

However, perhaps the most captivating aspect of remote viewing lies in the suggestion that our minds can access information and perceive imagery beyond the limitations of our physical senses, challenging the conventional understanding of human perception and raising profound questions about the nature of human consciousness. If remote viewing is indeed a genuine phenomenon, it implies that our consciousness may have the ability to perceive events beyond conventional sensory perception (i.e., consciousness is non-local). Consequently, this study is dedicated to conducting a comprehensive literature review on remote viewing research, exploring its historical roots, and engaging in speculative discourse regarding its implications for human consciousness. Furthermore, the study aspires to offer forward-looking perspectives to researchers in the field, envisioning a path where further exploration of remote viewing could yield valuable insights into the genuine nature of human consciousness and its yet-unexplored capabilities.

Information for Authors

Purview of the Journal

The *Journal of Parapsychology* (founded in 1937 at Duke University, and indexed in Crossref, Eb-sco, PsycInfo and Scopus) invites submissions relevant to parapsychology and related areas, including anomalous experiences, alterations of consciousness, and the nature of consciousness in general. All relevant disciplines, including psychology, physics, and biology, but also history, anthropology and other social sciences and the humanities are within the purview of the journal. Quality scholarly contributions, whether supporting the psi hypothesis or not, are welcome.

The Journal of Parapsychology (JP) publishes:

1. Empirical papers, presenting new data and/or analyses, and using quantitative, qualitative, or mixed methods. "Empirical" should be interpreted broadly to refer to systematic inquiry including experimental manipulation of variables as well as single case designs, analysis of collection of cases, phenomenological studies, historical analyses, systematic case studies, field research, and so on.
2. Theoretical papers, discussing new theories or novel implications of theories presented previously.
3. Methodological and analytical papers, offering new or alternative ways of conducting research and/or analyzing data.
4. Book reviews from the international literature, which will be assigned by the editor, John G. Kruth (john.kruth@rhine.org). *JP* will not consider unrequested reviews. If you are the author or publisher of a new book in the field contact the editor for information about potentially submitting it for a review as well as review guidelines.
5. Debates and letters about current issues in the field and papers recently published in the *JP*.

Submission

Manuscripts must be submitted to the *JP* electronically (as an e-mail attachment) in Word or compatible word processing program to: (interim editor) or (publisher, Parapsychology Press). All submissions must be single column, double-spaced, in Times New Roman size 12. Preparation of the manuscript in all respects must follow the guidelines described in the 7th edition of the Publication Manual of the American Psychological Association (APA style, of which there are various summaries on the Web) and must be written at a level commensurate with an academic publication in English. If the writing of the authors is not at this level, they should consider using a professional academic editor service before submission. There are various editing services, including John Palmer's, the former *JP* Editor (inquire). American English spelling must be used in the manuscript, other than in quotations. Some other style issues for the journal: a) use "volunteer", or "participant" instead of "subject", b) avoid sexist language, c)

use “masked” instead of “blind” conditions”, d) unless part of a quotation, do not use verb contractions (e.g., write “is not” instead of “isn’t”), e) include the appropriate diacritical marks in the case of foreign names and words.

Articles must not exceed 10,000 words, including references, unless previously authorized by the editor. They must include an abstract no longer than 200 words in a single paragraph, and up to 6 key-words. Do not include references in the abstract. Research studies must contain the following sections: Objective, Method, Results, and Conclusion. To facilitate the evaluation of research study conditions, the methods section must include, besides the usual information (e.g., participants, measures, procedure, analyses, ethical approval and related considerations such as consent form and what was conveyed to participants about the goals of the study), style of interaction with participants such as friendly, neutral, or peremptory; professional status, such as professor or head researcher, or research assistant), and researchers’ a-priori belief that the psi hypotheses in their study would be supported in their project using the following scale (5 -strong belief -, 4 -moderate belief-, 3 -neutral, 2 -moderate non-belief, 1 -strong non-belief). If authors have a reason to exclude any personal information, their submission should include a brief explanation for the exclusion. An institutional review board, when applicable, must have previously approved all research with human and other sentient beings, and research must be conducted according to generally accepted ethical guidelines. The manuscript must include information on funding and any potential conflict of interest.

Formatting

1. Endnotes are discouraged; use instead, if at all necessary, footnotes.
2. Formatting of references, quotations, tables, etc. must follow precisely APA (American Psychological Association) style. There are various pages online with examples of proper APA formatting. Manuscripts that do not follow this format will be returned without further review.
3. DOIs must be included for all references that have them by checking them through <https://doi.crossref.org/simpleTextQuery>
4. Before submission the authors must check that all items in the reference list have matching text entries and vice versa.
5. Quotations must be double-checked for accuracy and the page numbers cited in the text.
6. Tables and figures must have a title or caption, be numbered, and follow APA style. Figures and photos must be submitted electronically and they cannot be in color. Resolution should be a minimum of 300 dpi. Vector art (e.g., Adobe Illustrator, encapsulated postscript) is preferable to bitmaps.

Statistical Analyses

1. Statistical values must be checked multiple times for accuracy.
2. Descriptive statistics (e.g., means, standard deviations) must be reported in addition to inferential statistics (e.g., t tests, ANOVAs, non-parametric tests), which should also include the specific p value and measures of effect size (authors might consider consulting the “Statistical Guidelines

for Empirical Studies” by Tressoldi and Utts published in the *Parapsychology: A Handbook for the 21st Century* edited by Cardeña, Palmer, and Marcusson-Clavertz, 2015).

3. Following American Statistical Association Guidelines (Wasserstein, R. L. (2016). ASA statement on statistical significance and p-values. *The American Statistician*, 70, 131-133. doi.org/10.1080/00031305.2016.1154108), authors are *strongly* discouraged from using p values dichotomically to assess the “significance” and importance of their results. Instead, they should use various numerical and graphical data summaries, interpret results in context independently of the p value, and provide complete reporting of analyses carried out and discuss the logical and quantitative import of their results.
4. The paper must clearly state which hypotheses (and analyses) were confirmatory and which exploratory. Meta-analyses are encouraged when multiple studies have basically used the same variables and a similar design.
5. Although not mandatory, it is strongly recommended that all research, exploratory and even more so confirmatory, be preregistered, for instance through <https://koestlerunit.wordpress.com/study-registry> or a similar data registry, and that data be made available to other potential researchers through a depository such as psi <https://data.world> or open-data.spr.ac.uk.

Manuscripts will be refereed anonymously and the authors must mask their identities in the manuscript. They should include a page with all identifying information, and the ms without any of that information. Manuscripts accepted for publication are copyedited for grammar and style. Copyedited text will be submitted to the author(s) for any required changes and approval, and a prompt response is required. Substantive revisions are generally not allowed after the manuscript has been accepted.

Articles in the *Journal* must be original, which means that they cannot have been published previously, either in whole or in part (except for isolated paragraphs or earlier versions in conferences proceedings), in a journal, or the Web.

Copyright

As a condition for publication in the JP, authors of articles must assign copyright of the article to the Parapsychology Press. Permission must be obtained from the Editor before the article can be published or reproduced elsewhere, including on a personal website. However, the authors can retain copyright of their work by paying a fee, payable to Parapsychology Press of 1,400 (institutional) or 700 (personal, non-institutional) US\$. Only in exceptional circumstances might the fee be waived, for which authors will have to write a letter explaining why keeping their copyright is important and why they cannot afford the fee. The Editor will review that statement and determine whether the fee waiver can be granted before actual publication.

The Journal of Parapsychology is a publication of the Rhine Research Center and Parapsychology Press.