



BREAKTHROUGH 2022

NEW IDEAS IN RESEARCH AND THEORY

SSE-PA BREAKTHROUGH 2022

ABSTRACTS OF PRESENTED PAPERS

John G. Kruth, Program Chair



An online meeting presented by



Parapsychological
Association



Healthy Seminars

SSE-PA Breakthrough, 2022

A Note from the Program Chair

Ambitious researchers in the fields of parapsychology and edge science dream of the day when the knowledge that we uncover will help society to solve some of the many mysteries of the world and to improve our daily lives. Some scientists delve into the human psyche to probe the nature of unusual encounters or anomalous experiences. Others are seeking a reliable psi switch or definitive evidence of life after death. Still others attempt to improve our knowledge of subtle energies that are often associated with healing and ESP.

This year's conference highlights the research, theories, and experiences presented by representatives from the SSE and the PA that have led us closer to many of these goals.

Though the program appears to be a series of presentations by individual researchers, it is truly a contemporary collection of the thoughts and ideas of some of the most brilliant minds and deep thinkers exploring the nature of consciousness. Conference topics include the growing evidence for a global consciousness, measuring the subtle energies of the body including those associated with healing and mind-matter interaction, discussions of how consciousness interacts with the climate and environment, and applications of the latest knowledge with a goal towards improving psychological counselling and expanding the integration of psi with technologies. These topics are complemented by theoretical models and historical insights that allow us to look back as we plan our path forward.

The breakthroughs of the past few years have attracted fresh faces and a new energy that is driving the field to apply our knowledge in new and innovative ways. You are encouraged to meet new people and exchange ideas with your friends and colleagues in this highly interactive forum.

As you attend the scheduled presentations, don't forget to browse the Brief Video Presentations (BVPs) that are provided as a short introduction to some of the most important research being done regarding consciousness, subtle energies, and remote viewing. They are a wealth of new information in easy to view 3-5 minute videos.

As a final note, allow me to thank the dozens of people who shared their time, energy, creativity, and knowledge to make this conference possible. We all hope you will enjoy the experience and learn something in the process. I look forward to seeing you online.

John G. Kruth, Rhine Research Center

Conference Committee: William Bengston (President, SSE), Lorne Brown (Arrangements Chair), John G. Kruth (Program Chair), Annalisa Ventola (PA Executive Director), Helané Wabeh (President, PA)

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Arrangements Committee: Lorne Brown (Arrangements Chair), Lorianne Slauenwhite, and the team at Healthy Seminars

PA Outstanding Career Award

The Roots of a Journey Moving Forward: Reflections on the Career of a Parapsychologist

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Marilyn Schlitz, PhD, is professor of transpersonal psychology at Sofia University. She is president emeritus of the Institute of Noetic Sciences. She is coauthor of *Consciousness and Healing: Integral Approaches to Mind-Body Medicine*, *Living Deeply: The Art and Science of Transformation in Everyday Life*, and *Worldview Explorations*. She is coproducer, with Deepak Chopra of the documentary, *Death Makes Life Possible*.

She describes her successful journey, of more than forty years, as a researcher in parapsychology. Her work encompasses remote viewing, distant mental influence on living systems, and psychic healing. Along the way, she worked with many luminaries in the field. She describes the nuances of navigating through academic and research circles, collaborating with skeptics, and advising students.

PA Invited Speaker

Beyond Scientism - Towards an Open-Minded Science: The Psychology of Skeptics and the Decline of Materialism

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Surveys show that the majority of the general public believe in the existence of psi phenomena such as telepathy and precognition. A majority of people believe that they have personally experienced such phenomena. The evidence for psi is compelling, and has been consistent and significant over decades of research. This presentation explores the reasons why many academics continue to dismiss – and even refuse to examine – the existence for psi. Materialism (or physicalism) is a belief system, similar to a religion in that it is based on a number of basic assumptions (or tenets), many of which are lacking in evidence. I explore the psychological reasons why belief systems have such a powerful hold – they bring a sense of control, certainty and identity. As a result, materialists (like fundamentalist Christians or Muslims) defend their belief system against any contrary evidence. They also aggressively attack people who put forward contrary beliefs, and feel a powerful missionary zeal to spread their beliefs to others. However, the belief system of materialism is completely inadequate as a model of reality. It cannot account for a phenomenon such as altruism, which can only be explained in non-physicalist terms. I briefly outline my own metaphysical model of ‘panspiritism,’ which has a great deal more explanatory power and cohesion than physicalism. I also offer some optimistic signs that there is a movement beyond materialism, as exemplified by the ‘third way in evolution’ movement.

Conference Abstracts

Reframing Extrasensory Perception: A Condensed Model

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Introduction: J.B. Rhine, writing in 1937, describes his efforts to validate the existence of precognition as distinct from clairvoyance, telepathy, and psychokinesis, all of which he had already identified (Rhine, 1937). In contrast, we are setting out to start with precognition, and reframe all four (and their derivatives) as expressions of precognition only. The objective is to use Occam's razor and give precedence to simplicity. Time is now better understood than in 1937 (Price, 1996), and the concept of retrocausality (Sheehan, 2011; Price, 1996), and the idea of information filtering back in time, are regularly addressed. Precognition therefore seems to have a mechanism (Oreshkov et al., 2012; Olson, 2011; Radin, 2006a; Sheehan, 2015; Radin, 2006b), while the others still do not. We also propose that the whole phenomenon is not "out there", but instead, within each of us - and nowhere else.

Model: In making decisions that are important to us, we are sporadically guided by information that comes exclusively from our future selves.

Precognition is All There Is. We are choosing to start with this assumption, follow it through to see how much of ESP can be explained, and see what the consequences are.

- Psychokinesis is re-framed as the experimenter being precognitively informed by the future joy of his own success, to make the right decisions to get results he wants. By implication there is no psychokinetic, forcing field emanating from his mind, causing mind-over-matter effects, (May et al., 1995).
- Telepathy is reframed as precognition, because telepathy experiments frequently allow the participants and experimenters to discuss the results after the tests, and it is from this future revelation that the participants, in the past, can use precognition to guide themselves to the results they want. Added to this, telepathy has targeting issues, (Beloff, 1970) that the reframed ESP model overcomes.
- Clairvoyance and remote viewing can be reframed as precognition for the same reasons – they both have opportunities for the participants to see the results in the future, from where their past decisions are guided.

Psi experiments over vast distances, from space (Mitchell, 1971), or deep in mines or under the sea are all successful, not because ESP travels over vast distances or deep underground, but only because the experimenters and participants learn about the results after the fact, from where information is picked up precognitively and used, before and during the experiments, to get the results they want. In May's words they become "statistical opportunists" (May et al., 1995).

Precognition only gets information from the future self. Another assumption is that there is only one source. The only place precognitively-acquired information comes from is the future self. We do not receive information telepathically from other people. There is no psychic ability to scan the world or other people's minds to get information, as is sometimes suggested (Radin, 2006b). Precognitively acquired information does not transmit by some field or resonance or any other exotic method, (May et al., 1995).

Instead, we propose, important information stays in our own mind, within our own world line, in our own "future memory", from where a small fraction of it can be detected in the past and contribute to a decision being made there. This hypothesized process is the core of the reframed-ESP model.

An example may help: *"There is a train accident. Many people are killed. Jane is shocked when she learns it was the train she should have been on yesterday. That shock filters back in time, down her world line, and blocks her barely-conscious routine decision to set her alarm. She is too late for the fatal train, but alive to tell the story".* (Cox, 1956). The point is that all this happened in her own mind. There was no need for any targeting or external mechanism, only her precognition.

The Experimenter Effect Dominates. There are two sources for the experimenter effect:

1. The well-recognized failure to design the experiment to exclude known sources of bias, (Rosenthal, 1976)
2. The almost completely ignored fact that very few experiments make any effort to exclude information contamination from the future.

As a result of 2, the experimenter tends to get what she wants because her own precognition guides her choices.

Consequently, no experiment can be trusted, that has failed to guard against the possibility of influence from the future, by any decisionmaker within the overall experimental framework (Jahn, 2005). This appears not only in experiments on Psi, but also in drug trials, psychology, education, sociology – anywhere that a future influence has not been excluded ("Observer-Expectancy Effect", 2021). This is one of the most important things to manage during Psi experiments, and to make known to mainstream researchers (May & Spottiswoode, 2001; "Daryl Bem", 2022). Because of the experimenter effect, there will inevitably be some claimed ESP and mainstream phenomena that are conceptualized and sustained solely by the experimenter effect, and which have no real substance in themselves at all (Alexander, 2019). All this holds for sceptics as much as for believers; they will all tend to get the results they want.

Precognition Provides Only Sparse Information. For ESP research, sparse information content is one of the most robust findings there is, and it is not yet clear why this is. Efforts to amplify it have been singularly discouraging (Alexander, 2019), and for many decades, it has been accepted as a fact of life. However, information may be sparse because the process of the future revelation in ESP experiments is unrecognized, patchy, and incomplete, limiting

the opportunity for participants to learn, using their precognition, what the outcomes would be.

Precognition is Operating All the Time. Carpenter in his insightful book outlines how ESP must operate continuously and be expressed in ways consistent with well recognized psychological processes (Carpenter, 2012).

Suggested Tests to Validate this Model. Disprove that telepathy, PK, and clairvoyance only perform when there is a future revelation made to key participants. This experiment must be designed to exclude information brought from the future by participants.

1. Disprove that the precognitive process acts exclusively within your own head, not exclusively or partially from outside it.
2. Disprove that the precognitively received information is exclusively from the future.
3. Explore and understand the core process, namely, the mechanism of accessing information by precognition, through the participant's world line, from their future self, to help making decisions in the past.

The GCP and Non-Directed, Group "Ambience" Phenomena are Different. For this reframing project, the Global Consciousness Project ("Global Consciousness Project", 2022), and other similar group meditation-type effects (Mason et al., 2007) are seen as different phenomena than J. B. Rhine's ESP, because they do not have the core process of information being received from each participant's future, as described above.

Opportunities This Model Provides. If this model can be validated, then:

- The search for a mechanism of ESP has been narrowed considerably.
- There is now a more tractable, causal model ("Causal Model", 2022) that better describes how ESP works and better fits existing data.
- Psi and mainstream research should, for legitimacy, be structured to control for information from the future.
- A century of confusion, resulting from experiments that are contaminated because information from the future has been neglected, is ended.

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An Explanation of the Powers of Franz Mesmer

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Introduction: Although Franz Anton Mesmer is immortalized in our language with the verb - to mesmerize - his discovery of animal magnetism has been reinterpreted over the centuries to mean a sexual power of attraction. Only specialists in the fields of mental and spiritual healing are really acquainted with the man Franz Anton Mesmer and what place he occupies in the history of human civilization. This article attempts to rectify that situation and give a testimonial to the greatness and genius of the real person Franz Anton Mesmer who not only was the pioneer of virtually every modern practice of mental and spiritual healing and profoundly changed modern religious practices in general, but also anticipated by almost 250 years the modern science of radiogenetics where it has now been found that the ferritin in our bodies, which is a paramagnetic material that can be manipulated by electromagnetic

waves (radio waves including brain waves) and also by magnetic fields. In other words, there really is a magnetic fluid in our bodies and there really is such a thing as animal magnetism as originally claimed by Franz Anton Mesmer.

Results: This article does not claim that Franz Anton Mesmer invented animal magnetism, and if he had not lived, then all the modern practices of mental and spiritual healing as well as hypnotism, psychology and psychiatry would not have occurred, because quite clearly all these practices and disciplines are the essence of the human condition, and if Franz Anton Mesmer had not started the ball rolling, then some other historical person would have. This article attempts to address the fact that the historical person Franz Anton Mesmer was the genius who started the ball rolling, and for that reason alone his name deserves to appear in lights in the history of human civilization. The name Franz Anton Mesmer should have top billing.

Discussion: Magnetic biopsies have been conducted for decades which, in principle, have been able to count the number of ferritin atoms in the liver for example; but there are a number of difficulties with the procedure and it has been found normally to be only effective in diagnosing an iron overload, not an iron deficiency (Williamson et al., 1983). I mention this merely to demonstrate that scientists have known all along that ferritin in the body is a paramagnetic material and therefore has a magnetic susceptibility. This fact alone vindicates Mesmer's animal magnetism. In 2014, a research paper was published in *Nature Genetics* which launched a new direction in optogenetics which is known as radiogenetics (Stanley, et al., 2014). Radiogenetics will make it possible to remotely control biological targets in living animals without wires, implants, or drugs. A research team at Rockefeller University used electromagnetic waves to turn on insulin production to lower blood sugar in diabetic mice. A naturally occurring iron storage particle in the body, ferritin, when exposed to a radio wave or a magnetic field can activate an ion channel called TRPV1 which in turn leads to the activation of an insulin producing gene. These two proteins, ferritin, and TRPV1 acting together as a nano-machine can be used to trigger gene expression *in vivo*. And it is all done by radio waves. The method allows one to wirelessly control the expression of genes in a living animal and could potentially be used for conditions like hemophilia to control the production of a missing protein.

Two key attributes are that the system is genetically encoded and can activate cells remotely and quickly, says Jeffrey Friedman, Marilyn M. Simpson, head of the Laboratory of Molecular Genetics at Rockefeller University (Veilleux, 2014). Researchers are now exploring whether the method can also be used to control neural activity as a means for noninvasively modulating the activity of neural circuits. Radiogenetics is being heralded as being more effective than other systems in optogenetics that simply use light as the on/off switch, which tend to be only effective near the skin and require permanent implants. Originally the researchers used low-frequency radio waves which heat or move the ferritin particles and the TRPV1 which is situated in the membrane surrounding the cell opens up a channel allowing calcium ions to flow through and activate a piece of synthetic DNA implanted upstream to the gene they want to turn on. In this case, it was the gene that synthesizes the protein insulin, but it seems that in this way they can activate any gene of interest (Veilleux, 2014). Interestingly the researchers were able to achieve the same result by manipulating the

ferritin with a magnetic field, which recalls the theories of Franz Mesmer in the 18th century about animal magnetism and the magnetic cure (Mesmer, 1779, as cited in G. Bloch, 1980). It could well be the case that a hypnotist is able to channel their brain waves which are ELF radio waves to manipulate the ferritin in the cells and genes of their subjects.

Mesmer himself stated that the magnets were immaterial to his treatment regarding what was essential was his state of mind towards the patient. He was willing the patient to be healed (Mesmer, 1776, as cited in G. Bloch, 1980) and it is well settled that the brainwaves (ELF radio waves) of healer and patient become synchronized (Cade & Coxhead, 1996; Fahrion et al., 1992). The use of a radiofrequency-driven magnetic field is a big advance in remote gene expression because it is non-invasive and easily adaptable, says Johnathan Dordick, who is Howard P. Isermann, professor of Chemical and Biological Engineering and vice president of research at Rensselaer Polytechnic Institute (Martialay, 2014). You don't have to insert anything – wires or light systems – since the genes are introduced through gene therapy. You could have a wearable device that provides a magnetic field to certain parts of the body, and it might be used therapeutically for many diseases, including neurodegenerative diseases. The prospects appear limitless at this point (Veilleux, 2014). In this current study, we've shown that by opening the TRPV1 channel to allow calcium ions to enter the cell, we can turn on a gene. Since neurons can be depolarized by calcium and other positively charged ions, such as those the TRPV1 channel controls, we hope that this system may be effective at regulating neural activity, according to co-first author Sarah Stanley, a senior research associate in Friedman's lab (Veilleux, 2014).

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From Oracles to Algorithms: Wisdom Acquisition at the Intersection of A.I. and Psi

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Throughout history, people have consulted with shamans, soothsayers, oracles, channelers, mediums, and psychics to gain information about the future and communicate with the dead.

One of the earliest reports of testing the accuracy of oracles comes from the story of king Croesus who ruled Lydia (what is now Turkey) from 560 to 547 BCE. Croesus asked the oracles in Greece and Libya to provide specific information about his activity on a specific day. Through this process, Croesus became convinced of the accuracy of Pythia, the Oracle of Delphi, and queried her about waging war with the Persian empire. Pythia responded that if Croesus were to go to war, he would “destroy a great empire”. Emboldened by this news, he attacked, only to learn that the “great empire” that was destroyed was his own.

Since then, psychics have been employed by governments, scientists, intelligence agencies, industries, and financial investors to provide accurate information about current and future events that elude our existing abilities to monitor and predict. However, as our technologies advance, the acquisition of seemingly inaccessible information will only become easier and less expensive.

While the study of psychic functioning and development will continue to have a role in personal growth, spirituality, and providing deeper insights into the nature of consciousness and reality, its utility as an information-gathering tool will most likely continue to be relegated to narrower and more highly specialized use cases. As information access becomes more ubiquitous, the real value in psychic functioning will be the ability to acquire wisdom from discarnate or untethered consciousness. However, the current challenge is delineating the boundaries between retrieved psychic information and the psychics’ own mental interpretation of the task and results.

To explore this problem, our lab conducted a series of trials utilizing a Controlled Remote Viewing (CRV) protocol to acquire information from blinded remote viewers about the nature of what is commonly called the afterlife. These trials produced unique results that were, in some cases, even surprising to the viewers (Boccuzzi, 2021).

The current project takes the process further by entirely removing living, incarnate psychics from the process through the development and deployment of non-biological consciousness-hosting platforms. Bridging the gap between Instrumental Transcommunication (ITC), channeling, machine learning, and artificial intelligence (AI), this highly exploratory research program utilizes various technologies, including random number

generator arrays, natural language processing chatbots, predictive text algorithms, and machine-based image generation.

To date, the system has been deployed to provide advice for the grieving and encouragement for the disenfranchised, along with providing insights into some of humanity's most burning questions including: What can we do about climate change? What is the impact of social media interactions on modern society? How can we live up to our potential? Do we survive after the death of our bodies? Is there a God? What can we learn from UFOs? How can we close the gap between science and spirituality? Of course, as with any new technology, we need to be mindful of its strengths, weaknesses, and the potential for abuse, lest we find ourselves facing the same fate as Croesus.

This presentation will review the current technologies employed, examples of wisdom and advice provided by the system, a discussion of limitations, and future PsiBotics (Moddel, 2018) applications, including AIs capable of performing telepathic, precognitive, clairvoyant, and psychokinetic tasks.

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A Survey of Fasting, Vegetarianism, and Paranormal Experiences

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Introduction: We present an analysis of surveys of those who fast and/or are veg*an¹ in order to examine potential associations between these dietary practices and paranormal experiences. A number of spiritual traditions include accounts of supernormal powers that are sometimes associated with fasting and veg*anism; for example, shamans may fast to support apparent psi-like abilities such as healing (Wright, 2013), and yogis who are strict vegetarians are said to exhibit powers such as mind-reading (Lamb, 2011). Some authors have related fasting and veg*anism to both spirituality and psi (e.g. Aivanhov, 1982; Carrington, 1920; Cousens, 2009). At the *SSE-PA Connections 2021* conference, we presented an analysis of interviews with psi adepts who use fasting and veg*anism to

¹ The term 'veg*an' and derivations will be used as shorthand for "vegan and vegetarian".

enhance sensitivity to psi (Daw et al., 2021), which provided insights into the putative relationship between these, and related, dietary practices and psi. This paper builds on our research to examine reported paranormal experiences and abilities of those who follow these dietary practices but who do not identify as particularly adept at psi.

Methods: We developed a questionnaire containing measures related to fasting; dietary choices including meat and dairy consumption; demographics; and the paranormal experiences and abilities subscales of the Anomalous Experiences Inventory (AEI) (Gallagher et al., 1994) using a Likert-type scale for frequency of experience. The AEI contains items related to a range of paranormal phenomena including telepathy, precognition, psychokinesis, survival after death, and mystical experiences. We deployed the AEI because it has been assessed by its authors as having good reliability and validity and has been used by numerous previous research studies (e.g. Simmonds-Moore, 2009).

The questionnaire was hosted using JISC Online Surveys² and was publicized during Nov-Dec 2021 through twenty-six Facebook groups focused on either fasting or on veg*anism. A separate questionnaire was distributed to each of these two samples using the same items; however, the order of the first two measures (i.e., those related to fasting and veg*anism) was adjusted according to that most pertinent to the sample in question. This exercise yielded 154 valid responses for the fasting sample and 804 for the veg*an sample ($N = 958$).

Ethics: Ethical approval was secured from the University of Northampton (ref.: ETH2021-0128). Questionnaires were posted to Facebook only after explicit approval from the group's administrator. Respondents were required either to engage in fasting or be veg*an (depending on the sample), and be over sixteen. Responses from anyone who did not meet these criteria were excluded from the analysis. Engagement was voluntary and anonymous, and respondents could choose not to respond to any item except those concerning consent and the inclusion criteria. Participants were informed about the study through an introductory page and were asked to confirm consent to participate without which it was not possible to access the survey. Respondents could withdraw during their response but were unable to do so after final submission (because data were anonymous).

Results: We conducted a preliminary content analysis of open-ended items to determine variables amenable to statistical investigation. We then compared average AEI experience and ability scores against all dietary-related variables. AEI scores were calculated by summing "yes" responses in each subscale (i.e., those responding "once", "rarely", "sometimes", or "often" as opposed to "never") allowing ranges of 0-28 and 0-16 for the AEI experience and ability scores respectively. Whenever this analysis suggested an association between AEI scores and dietary variables (using non-parametric techniques), we performed subsequent analyses against dietary variables on each of the individual items in the AEI measure, firstly by comparing proportions of those responding "yes" (using a chi-squared test) and secondly to detect any difference in frequency of experience (using non-parametric techniques).

² <https://www.jisc.ac.uk/online-surveys>

We found an association between AEI scores and each of fasting and reducing meat and dairy consumption. In addition, those whose maximum length of fast extended to three or more days in our fasting sample were found to have higher AEI scores. Vegans were also found to have a higher AEI ability score than vegetarians in our veg*an sample. These results are shown in Table 1.³

Table 1 Association between AEI scores and fasting/meat and dairy consumption

	<i>S</i>	<i>AEI</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>MR</i>	<i>Mdn</i>	<i>IQR</i>	<i>NPT</i>	<i>U or χ^2</i>	<i>df</i>	<i>p</i>	<i>Sig</i>
Fasters	Veg	Exp	132	9.23	6.53	475	8	9.00	M-W	34146	1	4.4×10^{-5}	**
Non-fasters			667	6.79	5.36	385	5	6.33					
Fasters		Abi	132	3.11	3.76	478	2	5.00	M-W	33608	1	8.0×10^{-6}	**
Non-fasters			666	1.70	2.50	384	1	2.00					
< 3 days	Fast	Exp	79	6.50	5.69	68	5	8.00	M-W	2228	1	.021	*
≥ 3 days			72	8.46	5.83	85	7.5	8.39					
< 3 days		Abi	79	1.63	2.90	67	0	2.00	M-W	2130	1	.005	**
≥ 3 days			72	2.67	3.32	86	2	4.00					
Veg*an	Fast	Exp	19	10.17	6.12	98	11	8.00	K-W	8.39	2	.016	*
Meat reducer			42	8.19	5.45	84	7	8.00					
Omnivore			92	6.63	6.05	69	5	8.96					
Veg*an			19	3.60	3.86	100	2	6.00					
Meat reducer		Abi	42	1.60	2.70	70	0	2.25	K-W	7.07	2	.029	*
Omnivore			92	2.19	3.31	76	1	3.00					
Vegan			629	2.08	2.94	409	1	3.00					
Vegetarian			169	1.40	2.08	363	0	2.00					

Note. *S* = fasting or veg*an survey; *AEI* = experience or ability score; *N* = number of cases; *M* = mean; *SD* = standard deviation; *MR* = mean rank; *Mdn* = median; *IQR* = inter-quartile range; *NPT* = non-parametric test used (Mann-Whitney or Kruskal-Wallis); *U or χ^2* = relevant test statistic; *df* = degrees of freedom; *p* = probability value; *Sig* = significance level; ** = significant at $p < .05$; * = significant at $p < .01$.

Responses to many of the individual AEI items reflected these associations. For example, the respective proportions reporting at least one experience of precognition (item P3) in the fasting sample were veg*ans 74%, meat reducers (e.g., those who avoid red meat) 64%, and omnivores 46%, $\chi^2(2, n = 153) = 7.3, p = 0.026$. Many items also showed an association between frequency of experience and dietary practice.

Discussion: The most obvious interpretation of these results is that they confirm our psi adept study findings. Respondents who fast, and those who reduce their meat and dairy consumption, report more paranormal experiences and abilities than those who do not. If it

³ We also found an association between AEI scores and other dietary-related variables such as the consumption of whole foods, alcohol, caffeine whilst fasting, length of adherence to veg*anism, as well as findings related to reported psychological effects; however, space limitations preclude discussion of these findings here.

is indeed the case that these dietary practices are conducive to psi, then we might expect similar results, although the strength of associations found is perhaps surprising.

However, such associations may instead be due to a reverse relationship – perhaps those who report a greater incidence of paranormal experiences and abilities are more likely to adopt certain dietary practices. There may also be as yet undiscovered relationships involving other suggested correlates for paranormal ability not assessed within this survey, such as hypersensitivity (Jawer, 2006), that might affect both dietary practice and propensity to paranormal experience. It is also the case that our survey, whilst sufficient to yield significant results, nevertheless involves relatively small samples. It would be enlightening to discover whether initial findings might be replicated in larger surveys.

Our studies so far have attempted to build a systematic understanding of the effect of dietary practices on psi in a natural environment as a basis for experimental research (Roe, 2019). We plan to explore this putative relationship further in experiments to test whether fasting and veg*anism, and perhaps other dietary modifications, offer improved performance in psi tasks.

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Coin-Based Apports: Advancements on Multiple Agency Anomalous Events

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Introduction: In parapsychology, the term *apport* is used to describe the anomalous appearance or transference of objects to other locations (Cardena et al., 2015), and presumable instances of this phenomena has been mainly documented in physical mediumship cases during the Spiritualism apogee, between 1850 and 1920 (Irwin & Watt, 2014). Even so, the phenomenon has also been studied in non-mediumistic settings in the last 100 years, although the number of well-documented cases (Krippner et al., 1996; Grattan-Guinness, 1999; Braude, 2007; Krippner, 2011; Gimeno, 2015; Braude, 2016; Gimeno & Burgo, 2017) is quite small.

Methods: The case at hand develops in Mexico City, surrounding a married couple, including a man (56 years old) and a woman (45 years old) whom we will refer to as HM and LP, respectively, both unaffiliated to mediumship, and with presumably recurrent apports since 2016. The apported objects are usually well-preserved coins from Mexico and other countries, but medals, dead flowers, and even apples have been reported to appear as well. The phenomena seem to be mostly linked to HM, although apports have also been documented when only LP is present.

Since the onset of the phenomena, HM has emotionally journeyed through fear, curiosity, and finally acceptance. He also has physically traveled to China, India, Turkey, and Japan, studying acupuncture and distant healing, in his search for answers. He even has taken parapsychological courses at the Rhine Education Center and the Koestler Parapsychology Unit. Finally, he has mentioned on multiple occasions that he has no interest in economic gains or fame; we believe he is truly driven by scientific inquiry.

The case has been explored through two phases. The methodological approach and early results of the first phase were presented at the SSE-PA Connections 2021 convention (D'León, 2021), and involved several qualitative and quantitative measurements, especially with HM, including:

1. The installation of six HD cameras, all with 15 meters infrared and audio recording capabilities and up to 10 days of continuous recordings on each device
2. The video analysis of recordings and supplementary videographic material provided by HM and LP, including 30 minutes before and 15 minutes after each event
3. A numismatic analysis of the Mexican coins
4. Unstructured interviews with HM, LP, and their employees, regarding the social dynamic, cultural backgrounds, and family history

5. Neurological, psychological, and clinical studies of HM, including electroencephalography (EEG), magnetic resonance imaging (MRI), psychometric scales, and medical laboratory tests
6. Documentation of most of the phenomenology of each apport, including the object's picture, description, date, time, location, and subjective perception of the experience.

The second phase was designed around a clinical parapsychological approach, requesting the help of three mediums (two certified by either the Windbridge Institute or the Forever Family Foundation) and a shaman, due to an additional agency seemingly unrelated to HM or LP. The characteristics of Ventola & colleagues *Transliminal Dis-Ease Model of Poltergeist Agents* (2019) were also considered.

Results: The most relevant videos of the analyses include:

- Three recordings where coins were barely out of range of the camera,
- Three where the coin appears on camera, but the point of origin wasn't covered, and
- Two where a camera records the procedure of the coin being apported in real time, which can be seen at youtu.be/AWadO_amPZc and youtu.be/bdljzUF6nXQ

The initial studies didn't include LP, as it was assumed HM was the main agent of the phenomena. Most of the neurological and clinical studies of HM were within normal limits:

- EEG results were normal, without focal or generalized epileptic activity.
- MRI exploration showed no evidence of intracranial hemorrhage, infarct, midline shift, or mass effect.
- Clinical analyses were mostly normal, though a pre-diabetes diagnosis was found.
- Complete blood count showed no relevant alterations.
- Urine analysis and thyroid profile were within normal limits.
- According to the Wechsler scale, HM has an average-brilliant intelligence. Further exploration revealed depressive episodes and the diagnosis of Attention Deficit and Hyperactivity Disorder.

At least 61 apported coins have been documented inside their houses since the onset of the phenomena, and another 38 since the installation of the cameras. Nonetheless, fruits and withered plants have also been reported or recorded, as well as raps, whispers, scents, and orbs. Updated analyses, additional tests, and the results of the clinical parapsychological approach will be discussed at the convention.

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Eileen Garrett: The Medium's Message

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Soon after Eileen Garrett (1892-1970) was born in Ireland, her parents committed suicide; she was raised by her aunt. An unhappy child, she went into a world of her own and dissociated from surroundings. Garrett started to see apparitions, hear voices, enter trance states, and predict future events.

In the 1920s, she attended the British College of Psychic Studies in London. Considered a trance medium, she began channeling Uvani and Abdul Latif, controls who directed communication between Garrett and other entities wanting to speak through her. Garrett, not a follower of Spiritualism, admitted some doubts about the survival of consciousness after death. She came to believe that her trance voices were from her subconscious, formed by inner needs.

Garrett's skepticism about her psychic abilities captivated Harry Price, Spiritualist debunker and psychical researcher. In 1930, he arranged a séance for her. Uvani brought through the deceased pilot of a crashed blimp, fallen in France two days earlier. She channeled accurate technical details, which caught reporters' attention. Though dismayed by her sudden fame, the following year Garrett came to the US to lecture nationally for the American Society for Psychical Research.

In the US, Garrett worked with Society researchers and with William McDougall and J. B. Rhine at Duke University. She participated in long-distance telepathy, automatic writing, and trance medium research. At European centers, she took part in research related to poltergeists and other paranormal phenomena. When in France, she worked with the Resistance before returning to the US in late 1940.

Living in New York, Garrett had many high-profile clients and friends, including Aldous Huxley, Salvador Dali, Henry Miller, and Anais Nin. With financial support from her friend Frances Bolton, Ohio congresswoman and Rockefeller heiress, she edited *Tomorrow Magazine* and founded Creative Age Press – the only woman of her period to own a publishing house. In 1951, with Bolton's help, Garrett started the Parapsychology Foundation. It funded some of J. B. Rhine's early ESP studies, Ian Stevenson's examination of reincarnation, and the US government's early interest in remote viewing.

The Foundation also sponsored international conferences and ensured that research results were publicly available. It published the quarterly *International Journal of Parapsychology*, plus a bi-monthly newsletter, a series of monographs, and conference proceedings. It held lectures in its large library. Garrett always wanted to bring together various disciplines to look at psi phenomena. She didn't want parapsychology to be talking to itself.

Garrett was dedicated to understanding the psychological, physiological, and biochemical correlates of mediumistic and other psi phenomena. "I have a gift, a capacity – a delusion, if you will – called 'psychic'", she wrote in *Adventures in the Supernormal*. "I have been called many things, from a charlatan to a miracle woman. I am, at least, neither of these". According to Lisette Coly, current President of the Foundation, "my grandmother used to say, 'Monday, Wednesday, and Friday I believe in the paranormal. Tuesday, Thursday, and Saturday I don't. And Sunday I don't give a damn'". Garrett's larger-than-life personality inspired the well-known Broadway character of Auntie Mame; under the pseudonym Patrick Dennis, a Parapsychology Foundation assistant wrote the original novel.

Today, the Parapsychology Foundation has the largest collection of parapsychological books and materials in the US and one of the largest in the world. Their mission continues to be that of supporting the study of psi. Thanks to Eileen Garrett and Frances Bolton initially, followed by daughter Eileen Coly and grand-daughter Lisette Coly, over the years numerous researchers in the field have benefitted from its presence and activities.

Garrett's books include *My Life in Search for the Meaning of Mediumship* (1939); *Telepathy: In Search of a Lost Faculty* (1941); *Awareness* (1943); *Adventures in the Supernormal* (1949); *The Sense and Nonsense of Prophecy* (1950); *Life Is the Healer* (1957); *Many Voices: The Autobiography of a Medium* (1968). She was editor of *Beyond the Five Senses: An Anthology from Tomorrow* (1957); *Does Man Survive Death?* (1957). She co-authored *Man the Maker* (1946).

A Preliminary Macro-PK Investigation at a Martial Arts Center

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Introduction: Speculation about the nature of mind and its relationship to physical reality has been part of our field since its inception. PK research is particularly relevant in this context, as it strongly challenges explanations that reduce consciousness to a mere epiphenomenon. Since Schmidt's RNG studies (Millar, 2022), PK research has focused on micro-PK, involving extremely subtle effects and considerable ambiguity as to their true nature (i.e., whether indeed involving PK or instead a form of receptive psi). Directly observable and measurable PK effects would seem to be a more solid foundation for exploring 'mind over matter' and a number of research directions have been tested over time including analysis of spontaneous cases (RSPK or poltergeists) quasi-experimental work with physical mediums (Mulacz, 2021), and experiments focusing specifically on the movement of small objects isolated from the agent (Dullin & Jamet, 2020).

Method: We present our first investigation of Panagiotis Senteris (PS), a Greek martial-arts teacher, who one of us had encountered in 2020, and who claimed not only to produce a range of PK effects, but also to train others to produce such effects themselves. Our investigation involved a 3-person team from France (the two authors and an assistant) and took place October 22-24, 2021, at PS's martial arts center near Athens. Our objective was to document ostensible PK effects under good observation and control conditions, based on an approach that was partly 'anthropological' (PS situated in his own 'ecosystem' with his own target materials) and partly experimental (based on our own protocols, measurement systems and target materials). Documentation was based on video recordings with multiple cameras and continuous real-time with no takes. Additionally, our approach included a number of reference (or control) trials in France, prior to and following the trials with PS, using identical target materials.

Results and Discussion: We obtained over 200 videos centered upon 14 experiments with different target materials. For the sake of this presentation, we summarize results under 4 broad categories.

A – Influence upon proximate objects: We recorded a number of successful trials with target-objects influenced from a small distance (up to a few centimeters): movement of metal cans (with or without magnetic properties); rotation of a Crookes radiometer and of paper pyramids balanced on a needle (both free standing and enclosed in a glass container); influence on a digital scale (a 3.5 g decrease in displayed weight). We also observed the 'ignition' of a fluorescent tube upon contact with PS's body; shifts in a magnetic field detector (2 to 3 milligauss) and intentionally induced increases in PS's electric field (up to 160 volts/meter). These latter measurements seem especially relevant to understand the other effects. If PS can strongly alter his electric field, it seems plausible that effects on the rotating pyramid, radiometer, neon tube, etc. may be electrostatic phenomena.

B –Temporary adhesion of objects to a vertical surface: These experiments involved, first, holding a fairly flat object such as a book against the vertical wall of a plywood desk; and second, slowly withdrawing the hand while wishing for the object to remain in place, despite gravity. Several successful trials were observed with a thin wooden plank and with books weighing from 54 to 510 grams and adhering to the vertical wall for up to 5 seconds after the person withdrew their hand.

Control tests show that an electrostatic generator could make a single sheet of paper adhere to a vertical wall for a few seconds, but the weights of objects used would necessitate a far more substantial 'charge'. Both visual observation during the trials and video recordings showed no suspicious system present. It is conceivable that PS and his students have learned to generate a very high electrical charges in their bodies, in just a few seconds; however, it should be noted that one of the successful trials was done by one of the experimenters, who definitely has no such electrical powers.

C - Influence on distant objects (0.5 to 5 meters): Several target-objects were involved in this group. PS made a paper pyramid rotate, while enclosed in a glass cubic box from a distance of about 50 cm. He also triggered a 3 milligauss change in a CellSensor gaussmeter at a distance of 3 to 4 meters. Both PS and two of his students seemed able to move small battery-powered cars at distances that varied from 0.2 to 5 meters with the remote-control device inactive and in plain sight. Finally, over the course of a few minutes, PS extinguished a candle several times, while seated in a meditative posture 3 meters away from it.

The gaussmeter effect should be treated with some caution: this device belonged to the martial arts center, and we did notice some spontaneous shifts in its levels. Similarly, the toy cars used belonged to the martial arts center and when we conducted control experiments with one of these, we found a construction defect: at random moments the car would spontaneously move a few centimeters all by itself, and this occurred even when isolated in a faraday cage. For the time being, then, little can be concluded with respect to these trials. On the other hand, we find no 'normal' explanation - such as air currents – for the paper pyramid's rotation. And the results with the candle were even more impressive. These were brand new candles that we had brought with us; during the experiment we lit the candle ourselves and verified that air currents or intentional blowing could not extinguish it, given the distance. Furthermore, control tests (prior to and following the field trip) showed that the candle flames would stay lit for at least 130 minutes.

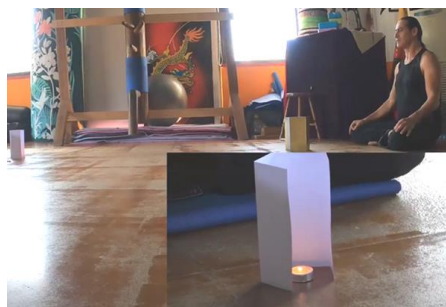


Fig. 1 The martial art master trying to extinguish a candle from a distance of 3 meters.

Physiological measurements: We used a Muse EEG headset to explore possible correlations between brain wave activity and his concentration on a PK trial. In one trial, we noted an unusual shift in EEG activity, that correlated with PS's concentration on the PK target; it ended precisely when he ceased focusing on the PK task. We also used an infrared camera to determine whether PS's "heat image" changed as a function of his concentration on a PK task or focus on his 'chakras'; in this case, we observed nothing particular.

Conclusion: As mentioned, this was largely a field-investigation, rather than a controlled lab experiment; the results are necessarily preliminary. Nevertheless, the phenomena were all documented under good conditions of observation; PS and his students were highly cooperative and disciplined - apparently viewing the many failures with the same equanimity as the successful trials - and at no point, over the course of 3 days of close scrutiny, did our team of 3 note any suspicious behavior. We thus feel quite positive about pursuing and extending this line of research.

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Multivariate PK Sensing at the Monroe Institute MC Squared Program

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Introduction: Neuroimaging studies of psi processes such as psychokinesis (PK) are a central interest at the Ray Westphal Neuroimaging Laboratory (RWNL, Division of Perceptual Studies, University of Virginia, USA). Obtaining neurological and physiological correlates of success in psi tasks is desirable for showing psi is meaningfully related to other measurable phenomena rather than just a free-floating anomaly. Physiological correlates can also provide information about unconscious psi processes, enable mapping of psi-related information flows through the body and brain, and resolve ambiguities regarding the source of observed psi effects (the so-called "experimenter effect").

PK presents an opportunity to acquire physical measurements of anomalous processes localized in time and space using sensors with real-time continuous outputs. For typical neuroimaging protocols requiring repeated relatively short "trials" interspersed with rest

periods, a useable PK sensor must provide a reasonable signal to noise ratio, not interfere with the physiological instrumentation, and present an attractive well-defined target for the PK agent with the potential for immediate feedback. This study is an evaluation of a multivariate PK sensor designed for use in neuroimaging studies, run with groups and individuals attempting to influence the sensor in a timed protocol.

Methods: A sensor system consisting of multiple channels in an electromagnetically-shielded enclosure connected to a laptop computer was presented to MC Squared program participants at the Monroe Institute in Faber, Virginia. Each sensor provided three outputs regarding localized air ionization events from cosmic ray sources. Participants were provided with a basic description of the target and asked to make the score shown on the real time laptop display go higher. Attempts at PK were timed at 120 seconds, with 135 second baseline periods in between. Both groups and individuals were offered opportunities to engage the sensor. One hundred and twelve participants from ten MC Squared programs participated in the study over a period of three years.

Results: Sensor outputs were significantly different (higher) during PK attempts vs. baselines. Simple scoring of sensor outputs was based on event counts (effect size 0.07, $p = 0.02$) that are relatively easy to detect and discriminate from artifact with automated scoring. However, each event also has two analog measures, magnitude, and velocity, and when these are combined in Manova the results are considerably more significant, $p = 0.009$. Additional information from the sensor is available in the timing of events in clusters. Cluster counts were much lower than event counts, and all baseline clusters were composed of two events only. In contrast, PK clusters were not only more numerous but also had multiple events. Weighted cluster scores, taking into account multiple events, were 70 for PK vs. 32 for baseline.

Discussion: This was an evaluation of a novel PK sensor for potential use in neuroimaging PK studies. The sensor detects air ionization events primarily from Muons (similar to electrons) arriving at the surface of the earth from cosmic ray sources. Previous studies using Geiger counters (Radin, 1993) and other types of radiation detectors (Yan et al., 2002) have shown apparent human intention effects regarding high energy particles. This study appears to demonstrate human intention is capable of directing the trajectories of Muons. Of additional interest is the non-significant response from a Geiger counter located in the sensor enclosure directly above the target sensors. Participants were not informed of this device when the target sensors were described.

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Rorschach Inkblot Test and Parapsychology

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Since Gertrude Schmeidler's monograph *ESP in relation to Rorschach test evaluation* (1960), the famous Rorschach inkblot test has hardly been associated with parapsychology. Schmeidler and LeShan (1970) demonstrated that subjects with high ESP scores showed more penetration responses in relation to their barrier responses; subjects with scores that stayed near chance had a higher ratio of barrier responses, and the difference was significant. This finding was later integrated in the theory of thinness/thickness of psychic boundaries (Krippner et al., 2001), assessed through questionnaires but not with projective tools (Rabeyron & Watt, 2010).

The Rorschach inkblot test has nevertheless been used marginally to study various exceptional experiences and psychic claimants: near-death experiences (Locke & Shontz, 1983; Lang et al., 2020); psychokinetic mediums (Carpenter, 1993; Roll, 1968; Mischo, 1971; Palmer, 1974); possession (Ferracuti, et al., 1996); induced memories of previous life (Ferracuti et al., 2002); and coincidence experiences (Keller et al., 2021). More recently, a study has investigated traumatic experiences of 31 people who report recurrent ESP experiences using the Rorschach Traumatic Content Index with a control group (Scimeca et al., 2015). In these cases, the Rorschach test is used to say something about personality traits of the participants but without any explicit connection with a parapsychological dimension.

I recently explored with a colleague the historical background of the Rorschach inkblot test on the occasion of its centenary (Evrard & Frigaux, 2021). The sources of inspiration for this test are multiple. The most obvious are the influence of his psychiatric colleagues Carl Gustav Jung (1919) (word association test), based on his own studies on mediumship; the self-taught psychoanalyst Herbert Silberer, who was interested in symbolism, mysticism, and esotericism, and published an article in 1912 on lecanomancy (a method of divination by inspecting the water in a pool); and Szymon Hens (1917) (inkblots and imaginative function). Nevertheless, other sources can be identified.

Since antiquity, mantic practices have stimulated sensory and motor automatisms. Of course, the Rorschach test is not mantic in the sense that its purpose is not to predict the future, but its use to uncover personal character and to prognosticate something of the trajectory of one's life takes up some of this heritage. Hermann Rorschach was not unaware of these traditional uses of spots. The book *Kleksographien* by the physician and poet Justinus Kerner (1857) earned Rorschach his nickname *Kleks* (i.e., stain). The principle was simple: a few drops of ink were put on a sheet of paper and then folded in half to obtain a symmetrical spot, a process that can be found in the cards designed by Rorschach. Kerner thought that this was a way of communicating with the dead, while mourning his wife and waiting for his own death. At the time when Rorschach reused this process for scientific purposes, it was already charged with many occult connotations.

The few studies that point to the probable role of manics in the genesis of the Rorschach test fail to refer to scholarly studies of them that were current at the time (e.g., Gaudriault, 1998). These practices were indeed reappropriated during the 19th century, within the framework of the first dynamic psychiatry, until, in the path established by the Englishman Frederic Myers (1885a) and his studies of automatic writing and vision in crystal, the "psychoscope" (a term designating any device that allows the emergence of motor or sensory automatisms) was proposed as an essential instrument of experimental psychology, but was later supplanted by the chronoscope and its derivatives (Evrard & Frigaux, 2021).

Myers (1885b) describes an induction procedure that involves spending ten minutes staring at the crystal, if necessary, with a black background behind it so that only its reflection is seen. After three or four sequences of prolonged observation, during which the participants have confused reminiscences or apparently incidental imagery, some subjects have the impression that the ball becomes milky or vaporous, and then after a certain amount of time, they see images or even entire scenes in the ball or "elsewhere": this is sensory automatism, i.e., uncontrolled perceptions. Myers also observed that, among the visions that emerged in the crystal, some involved forgotten or involuntary memories, but also information about events taking place at a distance or in the future. Unfortunately, there have been no systematic studies of this paranormal aspect, but it is clear here that attempts to psychologize the phenomenon fall back on the divinatory problem (Prince, 1922; Besterman, 1924).

These studies on automatisms have participated in the construction of great theoretical syntheses on the functioning of the mind. One of the four functions of the unconscious would thus be the *mythopoetic function*, a term coined by Myers and taken up by Flournoy, then by Bergson under the name of "fabulatory function." It is this continuous fabrication of fictions and myths which often remains unconscious and appears only in the dream, but which can also be expressed, on occasion, via waking dreams, hypnosis, somnambulism, possession, mediumistic trance, mythomania, hysteria, and delusions. One may be surprised at the ability of an individual to tell a story from a stain or an image, but this has been considered to reveal a fundamental property of intrapsychic functioning. One wonders to what extent this function is called upon in the free-response ESP protocols and whether the projective situation itself does not facilitate a parapsychological performance.

If a reunion between Rorschach test and parapsychology is possible, it will require the restoration of a complete history that will reintroduce this famous tool in its context, as one of the few psychoscopes to have remained useful until today, both for scientists and clinicians.

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Subtle Energies: Copy by Thoughts, Create with Magnets, A Powerful New Subtle Energy

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Introduction: Subtle vibrational energies can be measured by using the principles of resonance as taught in the fields of BioGeometry and Radiesthesia. Very high levels of these energies can be created by geometric arrays of the fourth state of matter (plasma, GANS [gas in nano state], monatomic matter), and arrays of symbols which have high vibrational energies. These different arrays create unique fields. It turns out that magnets also create the same unique subtle energy fields, depending on the structure of the geometric array. The fields teach us about the toroidal nature of matter, plasma, and magnetism with gravitational and magnetic inflow and outflow of energies. It teaches us about and how BG3 (BioGeometry 3) and 3-6-9 vibrational energies are formed in these fields.

These fields can be copied and moved onto different types of materials by thought and intention. The fields, with high levels of BG3 and 3-6-9 energies, will activate water by increasing their vibrational energy levels. The kinetics of water activation was studied.

A new source of horizontal negative green subtle vibrational energy was discovered. This energy, when placed in various geometric arrays, created very high levels of BG3 and 3-6-9 vibrational energy levels. A new geometric array was created by Joachim Wippich, the Teacher in my book *The Seeker and The Teacher of Light*. In addition to activating water, these energies may have many potential applications. They do have substantial energetic effects on certain viruses.

Methods: One form of GANS, Ormus, was formed by the method of alkalizing of solutions of sea salt. Ormus was placed in vials and the vials were studied in various geometric arrays to determine the types of fields formed and the strength of those fields. Disc magnets were used to form different geometric arrays and the fields they formed were studied. Similarly, different symbols and structures which contained BG3 and 3-6-9 energies were placed in various geometric arrays were studied for their levels of energy and the types of fields they formed. Levels of energies were measured using the BG3 Ruler. Vials of water were placed in the various fields and kinetics of activation were measured.

Thoughts/intention were used to copy energies to various substances. The levels of BG3 and 3-6-9 were measured on the substances. The substances with the increased levels of energy were then used to activate water and activation kinetics were studied.

Results: Several discoveries were noted. Different geometric arrays produced unique fields characteristic of the geometry. Strength of the fields were similarly dependent on the structure of the geometric arrays. Disc magnets produced similar fields that were produced by GANS. Single disc magnets form identical fields on a flat surface (two-dimensional). If two

magnets are put together with an insulator material (paper) between them, the fields they form become three-dimensional and are identical to three-dimensional fields formed by GANS, plasma, and monatomic matter.

Water activation using the various types of fields showed kinetics of activation which were dictated by the levels of vibrational energy in the fields.

Thought was used to copy permanently the subtle vibrational energies and the copied energies were the same as the original energy in both their level of the energy as well as in their water activation kinetics. Energies were copied onto wood, tile, paper, CD disc, and cotton.

Discussion: GANS, plasma, and monatomic matter have gravitational and magnetic characteristics. They form fields which contain the subtle vibrational energies of BG3 and 3-6-9 (described in *The Seeker and The Teacher of Light*). Structurally, these new classes of matter are made of vortex energy with inflow (gravitational) and outflow (magnetic), behaving as a torus. Their gravitational and magnetic characteristics arrange subtle elements in a balanced manner, generating the fields of BG3 and 3-6-9. Magnets are similarly, not just north and south poles, but have the same inflow and outflow properties. This is analogous to the double-torus structure of matter described by scientists such as Nassim Hamein. Both GANS and magnets form similar fields which are characteristic of their geometric array. An implication of this observation is that the vortex/torus nature of matter and magnets are similar.

The levels of these energies can be measured quantitatively. Consciousness/thoughts easily interact with the fields/subtle energies. In addition to using thought to move fields/subtle energies, it is possible to permanently copy these fields and energies onto a variety of materials such as tiles, CDs, wood, and paper. A further proof of the copying of the energies was by using these materials to activate water. Copying subtle energies is relatively simple - think or state "I AM copying the energies in this space, and I AM placing the copied energies to this material permanently." The energies then stay in the material on which it was copied. The original energy still remains in its original location.

Our research team discovered a source for a new extremely high level of horizontal negative green (a penetrating subtle vibrational energy). Joachim Wippich intuitively created a structure with a very high level of BG3 and 3-6-9 energies. There are many potential applications for such amazingly high levels of energies, especially with our abilities to copy energies. The talk will discuss how to create the structure. Experiments were conducted in activating water with these structures. Using radiesthesia techniques, it was demonstrated that these energies have a very energetic countering effect on select viruses.

Our research also discovered that when I AM is written on a piece of paper and placed beneath a sphere, an extraordinary amount of BG3 and 3-6-9 is generated. That energy can be copied onto any material. When copied onto water, the water becomes activated with that high level of BG3 and 3-6-9. It also turns out that any of the torus/creation symbols,

when written and placed beneath a sphere, generates an increased level of BG3 and 3-6-9, but much less than when I AM is used.

We learned in *The Seeker and The Teacher of Light* that by affirming who you are, your vibrational level increases and is measurable. The ability to show how our thoughts affect subtle energies and matter has implications in terms of who we are as explained in my new book, *Science, Subtle Energies, and Spirituality: A Path to I AM*. The experiments described in this paper are an experimental validation of another way to view ourselves.

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Exploring How Sentiment Measures Interacts with the Data Produced by the GCP

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This paper explores how the random numbers produced by the Global Consciousness Project (GCP) covary with various sentiment measures. Previous findings suggests that variations in such measures, conceptually, also should covary with the GCP data. The hypothesis, that the GCP data covaries with sentiment, is tested using time series statistics and by correlating several well-known quantitative daily sentiment measures with daily GCP data aggregates. Results supportive of such correlations and thus the hypothesis are found. The results motivate an even further exploration on how the GCP data interacts with, predicts, and affects various sentiment measures and its derivatives.

Introduction: The random numbers produced by the Global Consciousness Project (GCP) have been shown to react strongly to events of perceived global importance (Nelson & Bancel, 2011; Nelson et al., 2002; Radin, 2002; Radin et al., 2006). Results suggesting that the GCP data significantly correlates with seemingly unrelated data sources such as stock market returns and internet search trends have also been found (Holmberg, 2020; Holmberg, 2021; Holmberg, 2022). What could cause the GCP data to react to events of perceived importance, such as stock market movements and internet search trends? Arguably, the observed effects are mostly unrelated, but it is acknowledged that they could come to be if they are caused by some unseen cofounder. One such unseen cofounder is global sentiment, and notably, the literature already implicitly suggests that such a link exists. It is well known that the economy at large, and equity prices in particular, are highly affected by sentiment (Howrey, 2001; Fraiberger, 2017; Shiller, 2017). Furthermore, internet search trends are strongly related with the perceived importance of the events searched for, and thus affected by sentiment directly. In this paper it is hypothesized that many of the correlations found

originate from how sentiment covaries with the GCP data. It is also acknowledged that such a hypothesis can be tested for by correlating sentiment with variations in the random numbers produced by the GCP.

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Body Mapping the Somatic Experience: Somatization of Disease, Disorder and Distant Healing Intention Participation

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Introduction: “Body mapping is a visual, narrative, and participatory methodology that has several names and is used unevenly by health researchers” (Gastaldo et al., 2018).

The purpose of this study is to garner a greater understanding of how pain and illness are expressed and experienced somatically pre and post virtual attendance of a distant healing intention group session. A Body Mapping Index (BM-I) was created to examine the shared psi-somatization of the distant healing intention relationship. Within the healing relationship, the shared psi-somaticizing experience is often overlooked in favor of empirically measuring living system effects. This study aims to determine if the shared experience of the distant healing relationship, specifically the shared psi experience, can effectively be measured. The Body Mapping Index has been designed to guide the participant in their description by providing a physical representation for expressing the psi experience. Preliminary analysis

indicates that a shared psi-somaticizing experience does occur and is independently reported by both the practitioner and the sitter/healee.

Methods: A comparative analysis was performed to gain an initial understanding of the practitioner's and sitter/healee's overlapping experience.

Results: Preliminary results show a high degree of overlap (82% of respondents) in reporting of symptoms in concentrated areas of the body between both Distant Healing Intention Practitioner's and sitter/healee.



Fig. 1 Q167 - During my energy session I felt a oneness/merging (of consciousness/mind/feelings/physically) or a connectedness with another person/being sensation on the following areas of my body (if this is not something you experienced during your session you may skip to the next question).

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Neurothanatodelia: The 'Phenomeneurology' of DMT as an NDE-mimetic

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Introduction: Classical near-death experiences (NDEs) are altered states of consciousness within the context of actual proximity to death, which typically have profoundly transformative effects. Several studies indicate uncanny phenomenological similarities primarily with experiences elicited by the monoaminergic psychedelics, particularly the serotonergic tryptamine DMT. When such psychedelically-occasioned NDEs are psychometrically compared to authentic NDEs, they are shown to be insignificantly different. While providing helpful models for the NDE, these psychedelic NDE-like experiences may also gesture at the neurochemical substrates undergirding it. No study has yet been dedicated to a systematic qualitative analysis of the details of content of both a psychedelic and near-death experience, nor within individuals having experienced both such states, to clarify the fidelity of their modelling of the NDE, and thus crystallize the likelihood of any predominant endogenous role.

Methods: In this paper, we report on the thematic and content analysis of the DMT experience from the first conceived naturalistic field study of DMT use, focusing on the transpersonal (previously reported) and personal dimensions to the experience, and those pertaining to death and dying and the mystical experience. This is then directly compared and contrasted with the raw data from a previously published thematic analysis of the NDE, both qualitatively and in terms of content frequency. A comparison of scores of the near-death experience scale from the DMT participants of the field study, against those published already comparing prior laboratory DMT and actual near-death experiences, also supplement as a quantitative measure. Additionally, thematic analyses were performed on a near-death experience reported in a popularly published book, as well as, uniquely, on a novel interview focusing on the experient's subsequent 5MeO-DMT experience. This latter case study includes, importantly, the personal perceptions as to similarities and differences held by the experient.

Results: Preliminary analyses reveal that there are indeed exigent convergences between the DMT and near-death experience. However, these are most marked in the more basic phenomenological structure, that is, the underlying 'template' which is more invariant and thus correlatable with neural substrates, including (but not limited to) sense of dying, disembodiment, journeying to another spatial environment and encountering seemingly non-self-agencies. Whereas, on the more nuanced level of content, or 'texture', the specifics of which being variable between individuals and groups, the experiences are unavoidably distinct. The NDE appearing arguably more circumscribed (and possibly individually/culturally specific) in the content and aesthetics reported, while DMT is definitively unique in its content-prodigious, psychedelically-characteristic (and individually/culturally non-specific) experience. There is also no immediately recognizable linear progression of themes in the

DMT experience (as suggested by some studies, but not all, to occur with NDEs). This being so, there are a very small cluster of themes, and only in some cases, which even in content were identified as virtually equivalent. Additionally, there were at least two participants in the field study whose experiences intimately resembled the near-death experience in terms of a reliable sequence of NDE-related themes – though whose content, again, was more classic of DMT. Regarding the NDE-5MeO-DMT experiencer, there was found to be exceptionally high comparability between the original NDE and psychedelic experiences in general (such as entering other worlds, meeting menacing or benevolent entities, synesthesia, perinatal regression, and lucid dream-like properties). Much comparability was also identified with the 5MeO experience, in particular the major mystical experiential domains, such as ego dissolution, but especially transcendence of time and space.

Discussion: Taken together, when considering the two states *prima facie*, it is tempting (as the popular psyche has done) to refer to them short-hand as practically the same, while upon much more intimate inspection they emerge as manifestly different. DMT, as such, possibly more accurately represents an ‘NDE-mimetic’, and only occasional ‘NDE-ogen’. In this way, particular attention will be paid in the discussion to the possible neural correlates of the NDE, informed by the psychedelic neurosciences and the neurology of the dying process, which may best account for the major structural and minor content convergence, as well as significant content divergence between the two states. In light of the above findings, possible clinical applications of DMT, and the ontological implications of the comparison in the context of anomalous phenomena, shall be discussed. If findings from the NDE-5MeO case study do not directly argue for the release of this or analogous neurochemicals, finally discussed is the possibility of the very unique etiology of the NDE (neocortical bacterial meningioencephalitis) in effect simulating similar down-stream neural activity as that initiated by pyramidal neuronal activation by psychedelic agents.

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Terminal Lucidity, Understanding the Enigma of the Awakening Before Death

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Introduction: The 'Lucideuil' project is a research project within the framework of a thesis, with the aim of exploring the phenomenon of terminal lucidity and its clinical repercussions. The main objective is thus to study the supposed effect on the bereavement process of families and on the practices of professionals. The phenomenon of terminal lucidity, a term proposed by Michael Nahm (2009), is still the subject of debate regarding its forms and manifestations. However, a synthetic definition can be proposed as a total or partial recovery of the cognitive and/or motor functions of a dying person (Mutis et al., 2019).

This phenomenon may seem to indicate an improvement in the general condition of patients, but the various accounts and research show that terminal lucidity is only a transient event occurring minutes, hours or days before death (Nahm et al., 2012; Chiriboga-Oleszczak, 2017). Such spontaneous recovery is particularly striking when it occurs in people whose cognitive and motor functions had been objectively degraded for years (Nahm & Greyson, 2009; Nahm et al., 2012; Mutis et al., 2019; Mashour et al., 2019). However, it is mentioned in a very wide range of conditions involving impairment of people's cognitive or physical state.

Despite various avenues of work and exponentially increasing research, the current state of knowledge on this phenomenon still does not allow for a consensual explanation or the formulation of definitive explanatory models (Nahm et al., 2012). The only conclusion that can be drawn about terminal lucidity is that this phenomenon is a reality, and there are ample testimonies of its existence over several centuries (Peterson et al., 2021; Ney et al., 2021). The literature also points out that multiple factors seem to be at the origin of such a phenomenon, notably because of the diversity of pathologies involved (Nahm, 2009). Due to its enigmatic nature, this phenomenon is therefore placed in the field of parapsychology and more particularly, that of unusual end-of-life experiences.

As is the case with terminal lucidity, unusual end-of-life experiences are eventually found to be not so unusual and have been reported in many cultures and for a long time in human history (Fenwick et al., 2009; Devery et al., 2015). In particular, researchers in this field have focused on the impact of these phenomena, noting that end-of-life experiences such as terminal lucidity are seen as meaningful and spiritual experiences that bring relief and comfort to both the dying and their loved ones, and can then help them to better prepare for the coming death (Brayne et al., 2006; Fenwick et al., 2007; Santos et al., 2016; Klein et al., 2018; Grant et al., 2020). Beyond these various benefits, there are unfortunately still reservations about talking about such experiences, particularly in relation to fear of ridicule, fear of not being believed, fear of being discredited as a professional or not having the

opportunity to talk about it with professionals (Brayne & Fenwick, 2008; Fenwick & Brayne, 2011; McDonald et al., 2014; Devery et al., 2015).

Methods: The central approach was conducted retrospectively with two groups who attended to a terminal lucidity episode. One group was made up of the patients' families, the other of caregivers, with the idea of gathering complementary views on the phenomenon. Twenty semi-structured interviews were obtained in each group. A sample was transcribed and studied using interpretative phenomenological analysis. The participants also completed a questionnaire to obtain quantitative data on the course of the episode.

Results: On the side of families, when terminal lucidity can be invested as a last opportunity to prepare for death by exchanging with the dying person on his or her life history or trajectory, it can indeed allow an acceleration of the grieving process despite the pain of the loss. However, when it is not possible for families to make sense of this phenomenon or when it is invested as a miracle cure, terminal lucidity can be a source of suffering and potentially traumatic for the grieving process, because of its brutal and enigmatic character. On the side of the caregivers, terminal lucidity would come as an event to be welcomed in the care. It can then be heard as an alarm signal, leading to greater attention being paid to the dying person's last requests and thus contributing to better support and professional satisfaction. However, it can also cause difficulties or suffering because of the questions raised concerning the patient's place in the care.

Discussion: It emerges that communication around the end, allowing for a sense of meaning, could make terminal lucidity a help rather than a source of difficulty. It is therefore essential to promote better knowledge of the phenomenon among health care teams and professionals. They can then better support families by helping them to appropriate this event. It seems equally necessary and important to open up spaces for the general public to speak out and provide information about this little-known and inexplicable phenomenon.

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Toward a "Parapsychological Synthesis": Proposals for Integrating Theories of Psi

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Background: Throughout the history of parapsychology, complaints about a lack of a reasonable theory that could explain psi phenomena have regularly been advanced. It has been argued that this lack of theory would hamper the scientific progress and acceptance of

parapsychological research among scientists. In this presentation, I argue that the notion that there is a lack of theory in parapsychology is mistaken. By contrast, parapsychologists have already developed numerous approaches that may count as a theory (May & Marwaha, 2015; Kelly et al., 2015). Nevertheless, there are reasons that may give rise to the notion that there is a lack of theory in parapsychology. Two important reasons are the following:

1. Some seem to hold the opinion that parapsychologists must a) be able to develop a theory that is roughly as robust as theories in classical physics in terms of allowing the performance of successfully replicable experiments, and that b) the observed phenomena must follow efficient causation and must therefore be fully explicable by using our rational, i.e., logical thinking.
2. The existing parapsychological theories stand largely separate and are sometimes even regarded as incompatible with each other.

In this contribution, I suggest that these problems could be overcome by trying to develop an overarching theoretical framework that might be termed the *parapsychological synthesis*, by reference to the evolutionary synthesis that was developed by biologists between 1930 and 1950 by integrating results of several seemingly incompatible branches of research into a coherent and widely accepted theory of evolution (Mayr & Provine, 1980). Instead of promoting several different theories of psi, a majority of parapsychologists could arrive at the formulation of one synthetic theory in which several sub-theories are harmoniously linked with each other, each covering specific aspects of psi.

Proposals: The possible parapsychological synthesis must rely on certain core assumptions. The following are essential:

1. Parapsychology's "Big Four" exist: telepathy, clairvoyance, pre/retroognition, and (macro-) psychokinesis.
2. The *world in itself* is not perceptible and comprehensible for us. There is a background reality beyond the world we can perceive, measure, and explain using logical thinking. Our rationality was developed in the course of evolution as an adaption to cope with the excerpt of reality that we apprehend as a seemingly objective environment in a four-dimensional spacetime. In the world in itself, however, time, space, and causality don't exist in the way they appear to our senses and rational minds.
3. Psi phenomena are rooted in this background reality and entail different modes of causation than efficient causation. They entail top-down principles as exemplified by concepts such as synchronicity, wholeness-causality, or final causation (Nahm, 2021).
4. The world we perceive can be regarded as being composed of epistemically differing layers or realms. Following previous philosophical concepts, distinguishing superimposed realms of matter, life, and non-physical realms, such as soul and mind, appears suitable (Hartmann, 1940).
5. Our rationality is best adapted for understanding the realm of matter. But the rational mind can, in principle, never fully understand itself or mind at large. Nevertheless, the

mind is indicative of a fundamental aspect of reality that is at least of equal importance as the epistemic realm of matter.

Building on these core assumptions, the foundations of reality can be framed in terms of idealism, dual-aspect monism, neutral monism, panpsychism, panexperientialism, or panentheism. Depending on how exactly these “-isms” are conceptualized, there are many overlaps between them. Regarding theories for psi, parapsychologists should try to integrate promising candidates, such as the model of first sight (Carpenter, 2012), the general quantum theory (Atmanspacher et al., 2002), the model of pragmatic information (Lucadou, 2015), and hyperspatial models (Carr, 2015) into this general framework. Potential conflicts between aspects of these sub-theories could be addressed in specific forums to elaborate ways to resolve these conflicts and to create a joint parapsychological synthesis.

Conclusion: Striving to formulate one explicitly synthetic theory instead of presenting seemingly unconnected partial theories would benefit our field. Parapsychologists should furthermore highlight the fundamental non-physical nature of the world we perceive and openly address the resulting inherent limitations of our biologically conditioned rationality for explaining psi phenomena in their entirety. Trying to comply with mainstream approaches that focus merely on the epistemic realm of matter won’t work with psi. But this is no reason for regret. Rather, the exceptional significance of parapsychological research lies in providing direct empirical evidence for the non-physical foundation of existence. Therefore, as highlighted already by Jacques Vallee (2018) and Gerhard Mayer (2022), psi research should lead, not follow.

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The Turning Tide: Breakthrough evidence for global consciousness

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Introduction: In August 1998 two US Embassies in Africa were bombed by terrorists. This shredding of the social contract protecting diplomacy shocked the world, and the hours around the explosions became the first formal event monitored by the Global Consciousness Project (GCP). Over the next 17 years 500 rigorously specified tests were made of the GCP's general hypothesis that major events on the world stage would correspond to detectable changes in the data from our network of dozens of random number generators (RNG). See Figure 1. We looked at a variety of different categories of events, allowing some analysis of what characteristics seemed most conducive to the correlations found in the data apparently linked to the shared thoughts and emotions of people around the world. The overall effect size in the formal data is about one-third of a standard deviation, but over the 500 replications of the hypothesis test, this modest difference accumulates to a 7-sigma departure from expectation, and trillion-to-one odds against chance fluctuation as an explanation. This strong finding provides a basis for deeper examination of the data both to understand better how the effects arise, as well as to develop interpretations and applications.



Fig 1. World Map with GCP Random Number Generator locations indicated.

Method: We will consider several recent assessments of possible correlations of GCP data with external variables that are independent of the event-based analyses of the original project. These new analyses use a variety of methods including time-series, correlational, and multi-scale entropy analysis.

1. Stock market trends. Ulf Holmberg has shown that certain stock market measures co-vary with GCP data. (2020) A variable derived from the random numbers obtained by the GCP is statistically related to various well-known stock market index returns. The relationship is shown to be non-linear and [it is shown] that variations in the variable, to some extent,

predate the underlying trade. The results presented are found to be robust and qualitatively unaffected by the removal of outliers.

2. Google search terms. Ulf Holmberg proposed a Google search index that is predicted to covary with GCP data (2021). Using Google Trends internet search data, Holmberg designed several search indexes and applied time series statistics to correlate the indexes with aggregates derived out of the GCP data. The analysis finds that the GCP data significantly correlates with the indexes and that the data can be used to improve the statistical model's in-sample fit. See Figure 2. Furthermore, it is found that out-of-sample forecasts on global search trends can be made more accurate if the forecasts utilize the information contained in the GCP data. The results thus suggest that the hypothesis underlying the GCP is valid and that the GCP data can be put to practical use by individuals such as forecasters.

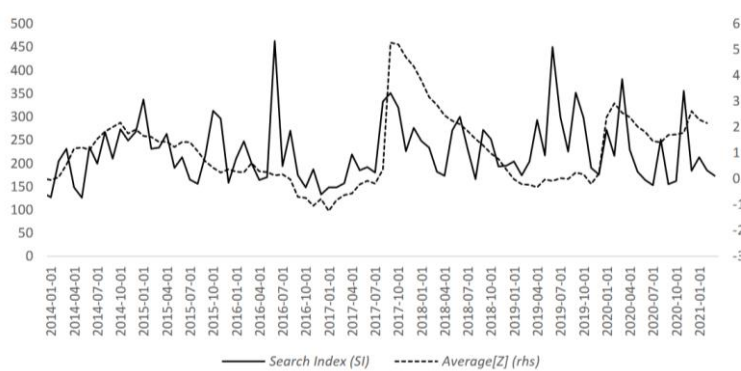


Fig 2. Google Search Index (solid) and GCP Monthly Filtered Average[Z] (dotted).

3. Multi-scale entropy: Dean Radin found variations in long term GCP data indicating significant negentropy. (2022) The analysis examined the whole 23-year database to explore whether the emergence of negentropy was specific to formally pre-specified events or reflective of a more fundamental relationship between mind, matter, and entropy. Two methods of analysis were used to detect temporal dependencies in time-series data. Both methods provided robust statistical evidence for negentropic behavior in what should have been, from a conventional perspective, a truly random sequence.

4. Evoked potential analogue: Roger Nelson discovered patterns in GCP data that resemble patterns of evoked potentials in human brains. (2020) In both cases there is a stimulating event that is linked to a characteristic response. A flash of light evokes a response in noisy data from the occipital cortex: a time-locked signal average across many flash repetitions shows a large voltage peak preceded and followed by a smaller peak of opposite sign. In a similar manner, powerfully engaging events on the world stage apparently evoke deviations in GCP data. Signal averaging and smoothing reveal the same pattern as the brain evoked response: a large peak surrounded by smaller peaks of opposite sign. See Figure 3.

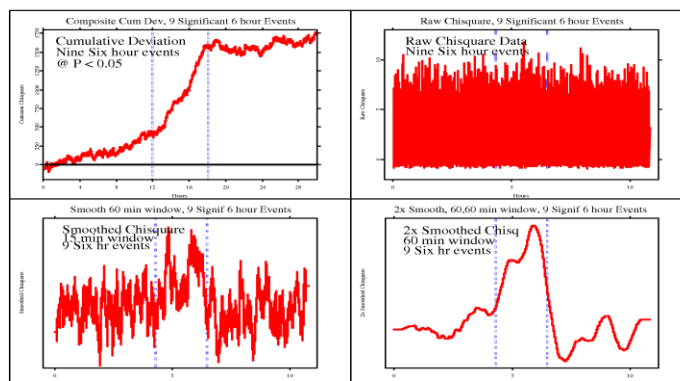


Fig 3. Composite of multiple events shown in two analytical approaches: cumulative deviation (upper left) and signal-averaged evoked response (lower right)

Results: Several analyses, independent of the originally specified procedures, yield interesting and robust correlation or covariance measures linked to variations in GCP data. There are potentially predictive relationships between GCP data and stock market valuation shifts, and we also can see significant correlation of GCP data to high-usage Google search terms. We find evidence that data from the GCP network varies in its calculated entropy: the data are not fully entropic, and instead show structure (negentropy) in multi-scaled entropy measures. Finally, the network appears to respond to stimulating events (disasters, celebrations) as if they were stimuli to the senses of a global mind (or at least, stimuli modulating the coherent attention of huge numbers of people). Visualized using standard brain wave processing tools, the GCP network response typically shows a characteristic pattern that parallels human brain evoked responses, albeit on a vastly different temporal scale.

Discussion: The desire to explain data like those from the GCP leads to suggestive theories or models. One candidate is a “consciousness field” that can be modeled as an information field sourced in the mass of attentive human beings and focused by world events. Another candidate theory is a kind of observational model in which the experimenter(s) are the source of the psi effect, using precognition of future states of the data to enable opportune specification of test events. The former is a more capacious model, flexible enough to accommodate structure not predicted in the original event analysis. The latter can plausibly explain the original hypothesis test results, but not the other structure that deeper analysis reveals, nor the linkage to external correlates.

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Anomalous Entropic Effects in 23 Years of Continuously Recorded Truly Random Data

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Introduction: The Global Consciousness Project (GCP) is arguably the longest-running mind-matter interaction experiment in history (Nelson & Bancel, 2011). Composed of a world-wide network of electronic random number generators (RNGs), the GCP collects and stores random samples from each RNG every second and has done so continuously for over two decades. The GCP explores the hypothesis that moments of coherent collective mind, which may be evoked by events reported by the media that attract the attention of millions of people, are reflected by the simultaneous emergence of negentropic effects in physical randomness. This hypothesis is roughly based on the philosophy of dual-aspect monism, which views reality as consisting of two elements – mind and matter – both of which are said to arise out of something more fundamental, perhaps the primordial equivalent to information (Atmanspacher, 2012). Metaphorically, mind and matter may be viewed as two sides of the same coin, whereby heads and tails may have different properties, but their behavior is inextricably correlated.

A formal experiment using the GCP data involved 500 events and ran from 1998 to 2015. The overall result showed a 7.3 sigma deviation from chance expectation during these events, indicating the existence of a correlation between mind and matter. Three classes of interpretations have been offered for this correlation. Skeptics typically assume that one or more features of the experiment were flawed. This interpretation can be abandoned by carefully reading the published reports, or by downloading the open-source database and rerunning the analysis from scratch. A second interpretation is that the observed correlation was due to “goal-orientation,” which refers to the investigators using their intuition to fortuitously select events to include in the experiment that would match the desired outcome (Bancel, 2017). This would presumably require an ability akin to precognition, and there is some evidence in favor of this interpretation. A third interpretation is that the mind-matter correlation arises because collective mind causally influences the physical world, i.e., a psychokinetic effect (Nelson, 2017).

Methods: All data recorded by the GCP from 1998 through 2021 were downloaded and artifacts associated with RNG component failures or glitches in internet data transmissions were identified and removed. An analytical technique designed to detect emergence of structure in time-series data, called “multiscale entropy” (Costa et al., 2005), was applied to arrays consisting of two-weeks of one-minute non-overlapping segments of the random data. As a control comparison, those results were compared to the same arrays that were randomly scrambled. A second analytical approach explored if the random walk produced by the RNGs on a daily basis was not random but instead a convolution composed of many hypothetical mind-matter “influences.” That analysis was tested against a control composed by randomly scrambled arrays.

Results: Both the multiscale entropy and deconvolution analyses revealed the emergence of statistically significant temporal structure in what should be random data.

Discussion: This outcome appears to support the philosophy of dual-aspect monism. Another interpretation, given that the observed results are a correlation, and correlation does not entail causation, is that mind and matter are simultaneously influenced by a common factor, such as a geophysical or geocosmic variable (Krylov et al., 2014; Spottiswoode, 1997; Tracy et al., 2022; Yuan et al., 2006), or by fluctuations in power grids during engaging world events that cause a surge in the use of electronic devices, which might in turn influence the RNGs. A third interpretation is that the free parameters used in the two analyses may have been fortuitously selected in a goal-oriented manner to provide interesting results. As an exploratory analysis, these results are intriguing but should be regarded as preliminary. Future studies may benefit by splitting the database into two or more partitions, with one partition used to develop the analyses and the others used to see if the results of the first analysis would successfully replicate.

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After-Death Communications: A Consideration of New Cases that Bear on the Question of Survival⁴

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Summary: A spontaneous After-Death Communication (ADC) occurs when a bereaved person unexpectedly perceives the deceased person. This may be through the senses of sight, hearing, smell, or touch, but experiencers might simply feel the presence of the deceased person or have an impression of having received a contact or a communication, for example during sleep. The deceased person is perceived in a manner that is typically interpreted by experiencers as indicative of the continued survival of some aspect of that person.

This phenomenon is quite common among those who have suffered a bereavement, with an estimated 25-50% reporting one or more ADCs (Cooper et al., 2015), and have been reported in different cultures and times (Haraldsson, 2012; Sidgwick et al., 1894). Despite their widespread occurrence, ADCs have been little researched and are absent from the media and public discourse. As a consequence, persons who experience an ADC usually have no frame of reference in terms of which to understand, integrate, and benefit fully from this experience, and fear that disclosure will cause them to be labelled as credulous, or even as suffering from some pathology (Evenden et al., 2013). For many participants, involvement in a research study can be the first time they have spoken openly about such experiences; Rees (1975) reported that only 27.7% of his participants had previously discussed their exceptional experiences (EEs) with anyone, and just 14.6% had told more than one person. Although some did not share their experiences because they believed that others would be uninterested or potentially upset by them, approximately half the sample believed that they would be ridiculed, reinforcing the impression that such experiences are stigmatized. This reticence acts as a hindrance to research into the effects of anomalous experiences upon the bereavement process.

Although the vast majority of experiencers are convinced of the authenticity of their experience, ADCs are by nature intrinsically subjective, and therefore susceptible to explanation as a psychological response to a deep emotional need. People profoundly affected by the death of a family member or friend might imagine having experienced these perceptions, even unconsciously, as their suffering would be so intense that they would be unable to cope with life without the loved one by their side, if only for brief, hallucinatory moments. There are, however, some types of ADCs that are more resistant to explanation in

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such terms and are therefore more evidential with respect to the survival hypothesis. These include contacts during which previously unknown information is perceived (such as the unexpected passing of the perceived deceased person); contacts witnessed simultaneously by more than one person; and contacts that occur when the experient is not in bereavement (e.g., perception of unknown deceased persons) so that a psychodynamic explanation is implausible. This presentation will focus on new cases that involve previously unknown information so as to evaluate the degree to which it supports the survival hypothesis.

Data and Methodology: The research project received ethical approval from the University of Northampton and was pre-registered with the Koestler Parapsychology Unit registry. An extensive online questionnaire was constructed in three language versions (English, French, and Spanish) using the JISC online surveys platform that asked about the circumstances of occurrence, type of ADC, message conveyed, emotions and sense of reality associated with the experience, impact and implications for the grieving process, and profile of the experient and of the deceased person perceived (including cause of death). Some of the outcomes from this survey have been reported in Elsaesser et al. (2021, in press), Evrard et al. (2021), Penburthy et al. (2021), and Woollacott et al (2021).

In this talk we will present an original analysis that focuses on those cases in which respondents reported that the ADC communication included information that was previously unknown to them and give an evaluation of the degree to which it constitutes evidence in support of the survival hypothesis.

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Physical and Social Sciences Marry Parapsychology to Combat Disastrous Impacts of Climate Change

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The report of the United Nations (UN) released in October 2018 posed a 12-year deadline to limit climate change to a global temperature rise of 1.5°C, stating that the existing commitments of nations at the time of the report were insufficient, thus promising a global warming of 3°C or more. It was concluded that reaching such goals would require nations to commit to target greenhouse gas reductions of 45% by 2030 and net zero emissions by 2050. However, negotiations at the UN climate change conference COP25 in 2019 were only partly successful and revealed conflicting interests that made the implementation of targeted emission cuts next to impossible. Three years later, in August 2021, the Intergovernmental Panel on Climate Change (IPCC) released a comprehensive report on the physical science basis of climate change, stating that we were bound to reach a 1.5 °C warming within one to three decades, and that “many of the changes we observe in the climate system are unprecedented in thousands, if not hundreds of thousands of years”. Following this report, the UN announced a “code red for humanity” in the world, where frequent natural hazards, land submergence, and accelerating species extinctions will become a new normal. Following the 2018 UN report, the Norwegian University of Science and Technology launched the multinational educational project REACT (from REsistance to ACTion, www.react-project.com) linking natural and social sciences with education, technology, and entertainment to directly involve global communities in the resolution of the climate change struggle. Although the pilot of REACT in Norway had to be postponed until late 2021 due to the pandemic, it is now being implemented in Trondheim.

Following our initial results and observations, we are restructuring REACT from a purely educational platform into a research platform that has its final goal to simultaneously advance two key research directions towards the 2030 and 2050 UN targets for the greenhouse gas emission cuts:

1. To review existing solutions for climate change mitigation, to engineer more effective low-risk strategies through fusions between technological and nature-based solutions, and to outline most likely future developments under different mitigation scenarios.

2. To design comprehensive packages for climate change adaptation across regions with different degrees of vulnerabilities under a broad range of global warming scenarios.

The main motivation behind the simultaneous advancement of the two research directions is to ensure that the latter direction (2) can be activated on a short notice in case the former direction (1) fails to be implemented in a timely and precise manner. As a side gain from an independent progression of the latter direction (2), we will explore the possibility of protecting local communities and ecosystems from a broad range of geophysical hazards that belong to the natural Earth's cycle, even if the climate change consequences are largely reduced. The implementation of REACT's final goal will be achieved by linking research developments across six major domains: global climate change drivers and processes, regional consequences for natural systems, direct and indirect societal impacts, pros and cons of current climate change solutions, transformed and new solutions for climate change mitigation and adaptation, and involvement of people and policy makers in the implementation of solutions. Within these six domains, we have designed a preliminary package of research experiments that require a close collaboration between natural and social scientists and parapsychologists. These include but are not limited to experiments with wildfires, carbon and methane sequestration, energy transformations within lab-borne storms, improved hazard early warning systems, bioengineering of living energy sources, and individual climate change attitudes.

With this abstract, REACT invites partners from all over the world and from all subdisciplines of parapsychology to join us and expand our scientific methodologies into the extrasensory domain. We are not limiting this invitation to scientific partners only but wholeheartedly welcome psi partitioners and lightworkers who are willing to contribute to the resolution of the global struggle. Our collaboration will start with the design and implementation of lab and on-site experiments that can be documented, published in high-rank peer-reviewed journals, and used as a proof of concept. By demonstrating the potential of our methods to contribute to the climate change mitigation and adaptation, we will consolidate our position as an interdisciplinary research team and apply our long record of successful funding acquisition to support more daring, large-scale experiments through both national and international project proposals.

Is the Altered Calligraphy in Psychographed Texts a Medium's Disguise or the Spirit's Handwriting? Proposal for a Pilot Study Using Graphoscopy

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Introduction: Messages through psychography, also known as automatic writing, usually have different handwriting in each session. This is the unpublished perception of mediums and

relatives participating in psychography seances. One can venture two possible explanations for this finding: (A) conventional materialistic reasoning: the medium produces and sustains a disguised handwriting with each new communication; or (B) unconventional spiritual premise: each spirit produces different calligraphy when driving the medium's fist.

Explanation (B) cannot be proven directly but its acceptance could be greater if the other proposal proves to be untenable. Indeed, Explanation (A) may be the least likely one since there are limits for handwrite disguising ability. Any attempt to overwrite the automatic writing motor program produces vicious movement patterns (Caligiuri & Mohammed, 2012). A graphotechnical analysis can point out inconsistencies of the disguise, as the writer inadvertently includes elements of one's handwriting finer structure and some forger's characteristics will "leak out" (Mirić & Arandelović, 2020; Upadhyay & Chandravanshi, 2021).

Some attempts to validate psychographed texts using graphoscopy are found in lay books and non-peer-reviewed journals. Although successful, they are often retrospective analyses on writings of the exceptional medium Chico Xavier (1910 – 2002), written in Portuguese (Oliveira, 2020; Henn, 2021). Chico was one of the very rare mechanical mediums, those who remain unconscious during trance; in these cases, the handwriting is almost identical to that of the deceased communicator. Today, some semi-mechanical mediums (conscious during the phenomenon) active in Brazil produce quite variable calligraphy, sometimes resembling the deceased's ones.

This ongoing research aims to document, through graphotechnic analysis, the level of variation of writing parameters in psychographed texts. The working hypothesis follows the spiritual premise that each text would have its own handwriting characteristics, different from one manuscript to another.

Intended Methods: The whole process sequence and breakdown of each step are illustrated in Figure 1. A medium will carry out his usual psychography sessions at his habitual place; a researcher will be present at the sessions observing and registering the medium's work. The time spent producing each text will be recorded; later, the word count will enable calculating the writing speed (words per minute). After authorized by the message recipient (usually a grieving relative), each text will be scanned right there to generate an image file for each page. The process will be repeated until the collected texts add up to ten; therefore, some sessions will be necessary.

Further, strategic repetitive words will be clipped from the texts to serve as standards for the analyzes; the researcher will shuffle the words' images and present them to another researcher. This participant, unaware of each word origin, will perform a graphotechnical analysis and will classify them according to specific writing parameters. After analyzing each word, they will be regrouped according to which psychography they came from. Then, each group of words will be investigated for two features: intra-textual convergence (internal writing parameters consistency in one text); and inter-textual convergence (writing parameters consistency between texts).

Expected Results: If the working hypothesis is true, the high intra-textual and low inter-textual convergences will make the materialist reasoning almost unrealistic. Thus, the assumptions of the persistence of the self after death and the actuality of mediumnic interaction would gain strength.

Elements for Further Discussion: External and internal factors affecting handwriting will be controlled for; the medium will work in his natural environment, and the calming preparation ritual probably buffers stress. If the medium shows a normal writing fluency, considering words per minute, it will decrease the suspicion of disguise.

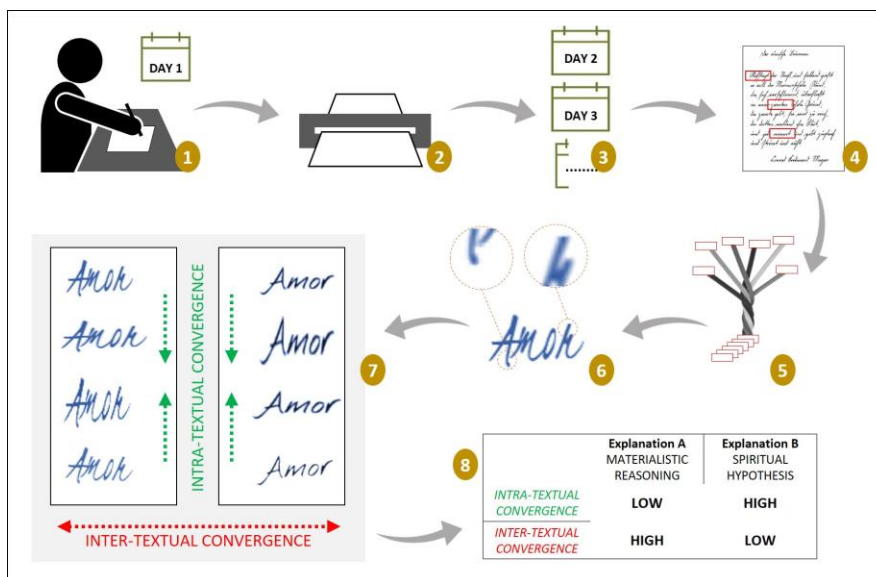


Fig. 1 Illustration of the whole process sequence and breakdown of each step. (1) psychographed texts from one session; (2) texts scanned into image files; (3) process repeated in further sessions; (4) clipping standard words from the files; (5) shuffling the words to hide their origin; (6) graphotechnical analysis of each word; (7) words regrouped for textual consistency.

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Exploring the Correlates and Nature of Anomalous Interactions with Objects (Psychometry)

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Introduction: Psychometry is “a type of anomalous cognition (or ESP) which permits a psychic or ‘sensitive’ to receive impressions using a physical object as an inductor or instrument for information” (Parra & Argibay, 2009, p. 57). Early studies explored claims of self-claimed sensitives or mediums, including Eileen Garrett (LeShan, 1967). Recent research has explored performance at psychometry tasks among members of the general population (Baker, Montague & Booth, 2017; Parra & Argibay, 2007; Parra & Argibay, 2008; Parra & Argibay, 2009). For example, Baker et al. (2017) found better performance in a group with no claims of psychic abilities compared to a group who claimed to be psychic. To date, little research has explored correlational factors associated with psychometry performance in the general population. The current project explores the relationship between Autonomous Sensory Meridian Response (ASMR) and its rarer cousin synesthesia in relation to psychometry. ASMR is “the experience of tingling sensations in the crown of the head, in response to a range of audio-visual triggers such as whispering, tapping, and hand movements” (Poerio et al., 2018). Synesthesia occurs when there is an additional response to an inducing stimulus and has previously been linked to enhanced reporting of a range of anomalous and paranormal experiences (Simmonds-Moore et al., 2019). ASMR has yet to be explored in relation to paranormal experiences, but seems to be promising as an anomaly-prone variable, given its association with traits that are associated with increased connectivity and tendencies to report exceptional experiences including openness to experience (Fredborg et al., 2017; McErlean & Banissy, 2017), increased scoring on transliminality, body consciousness, and unusual experiences (Roberts et al., 2020) and higher scores on empathic concern (McErlean & Banissy, 2017). ASMR tendencies are also associated with enhanced prevalence rates of synesthesia (Barratt & Davis, 2015) and may reflect a form of synesthesia itself (McErlean & Banissy, 2017). This study explored how ASMR and synesthesia relate to psychometry experiences, how ASMR and synesthesia relate to a range of other exceptional experiences, how they relate to one another and what psychometry experiences are like (in a qualitative component).

Methods: A mixed methods online survey was conducted in November and December of 2021. The survey included a demographic section, a question about synesthesia, a measure for ASMR, a measure for exceptional experiences, a question about whether people had experienced psychometry, and an open-ended question about psychometry. The study URL was distributed among faculty and staff in the College of Culture, Art and Scientific Inquiry at the University of West Georgia, psychology students at UWG, and was also sent out to members of the Rhine Research Center mailing list and shared widely on social media. Data collection continued for approximately 2 months. Following data cleaning, 164 participants completed the survey, of which 40 were male and 112 were female. The most frequent age group was the 18-24 category, followed by 25-34, then 35-44, 45-54, 55-64, and finally the

over 65 group. One hundred and thirty-eight participants were right-handed, 16 were left-handed and 10 were ambidextrous. The sample included 128 white, 16 black, 5 asian, and 15 other ethnic groups.

Results: The quantitative analysis found that there was a significant difference between those who reported psychometry and those who did not on ASMR scores. There was also a significant and positive correlation between synesthesia and psychometry. Synesthetes also scored higher than non-synesthetes on ASMR. ASMR tendencies correlated positively and significantly with proneness to having exceptional experiences (regardless of attribution) and to a slightly lesser extent to exceptional experiences given a paranormal attribution. Experience proneness and paranormal experiences correlated positively and significantly with one another. An inductive thematic analysis was undertaken on the responses to an open-ended question on the survey. CSM and TS both engaged with the data and independently identified initial codes and emergent patterns which were later distilled into 5 themes based on the overlaps in meaning units and ensuring that themes were grounded in the data. Illustrative quotes were chosen for each theme. The final list of themes included context, flash of imagery, lived feelings and intense emotions, noesis, and perspective taking/empathy.

Discussion: Results indicate that ASMR experiences play a role in psychometry and other exceptional experiences. Qualitative results indicate that psychometry experiences range in terms of their context and how the experiences manifest. The themes indicate that psychometry experiences occur in a variety of contexts that include intentional and unintentional psychometric practices. These experiences reflect a sense that there is a direct perceptual knowing or flash of information that is felt to come from an external source. Sometimes there is intense emotion that may be felt in the body or in the physical environment. Empathy/perspective taking appears to play a role, such that the person experiences the world from the perspective of an unseen other, and knows that the information is not them; there is a distinct self/other boundary.

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Anything Can Be Expressed and Analyzed Through its Hologram in the Search for Reliable Information

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My fascination with holograms dates back to 1987, when working as a M.D in the hospital emergency ward, I ended up in the Subtle Energy Research Laboratory at the USSR Ministry of Space (the equivalent of NASA). I was actively looking for a system that could improve my diagnostic skills, and in turn, the lives of chronically ill patients.

The Lab had been founded by the Ministry in 1983 to conduct extensive research on how and where Subtle Energy (SE) could be used. The head of the lab was a renowned Physicist, Dr. Vadim Polyakov, who gave seminars where we were trained in meditation to increase our abilities to concentrate and help Dr. Polyakov develop his system of using holograms – i.e., holographic images of people's organs – to evaluate their condition from a distance. For that we needed to concentrate on somebody's name and hang an image of this person's organ in the air and check for sensations with our hand. So, I started to analyze holograms at my hospital shifts too. Before meeting the patient, I was checking holograms of organs from a distance, and later compared my findings with traditional medical tests. The seemingly impossible had come true. Diagnostics from a distance was possible!

That was my first encounter with holograms without any knowledge of how SE works. In 1989 we left the USSR for Canada, where I decided to devote my life to the study of SE and its applications.

In 1970, David Bohm formulated his view that the Universe operates by holographic principles and is itself a gigantic Cosmic Hologram. But unlike in a regular hologram where an image is fixed, he postulated that out there nothing is fixed. Bohm looked at reality as if it

consists of two levels. The first level, which he called unfolded (explicate) order, is the world in which we function, where everything appears to be separately existing parts. The other deeper level he called enfolded (implicate) order, the level of subatomic reality, that he called the Field of Quantum Potential. This deepest level of reality penetrates the whole of space and does not have the property of locality, it is everywhere.

A fundamental postulate of SE (Quantum potential field) is that everything in the universe, without exception, vibrates, and that vibrations carry information. This is crucial to state before we continue. Everything has a dual nature: a solid aspect and a vibrational aspect. Vibrations emanating from objects form their Energy Fields, but also have a life of their own, i.e., all vibrations go into the Cosmic Hologram and are stored there. All vibrations from the past, present, and even future are stored in an inactive state, all together, waiting to be activated.

What is the trigger for the production of an active hologram? The moment when the Thought Factor is applied, when we start to think about a subject of our interest. When this happens, we instantaneously create a 3-D image in our heads of that subject. This is the untapped power of our minds. Our concentration, like a laser beam, comes into resonance with the relevant vibrations stored in the Cosmic Hologram, pulling them out and turning them into a specific hologram. Holograms do not exist in nature. They are products of interaction of our mind with the Cosmic Hologram. They do not have an electromagnetic component. They are pure SE vibrational forms.

We can learn to pull out any needed information coded into a hologram. If we train ourselves to analyze them, we will have universal tools to get objective information about anything. Everything can be represented through them, even such an intangible thing as a thought. I use my technique of Subtle Energy Profiling that allows me to watch and analyze the energy behavior of holograms, as vibrational forms of any subject of our interest. It is still fascinating for me how fast any hologram could be created, even from an absolutely unknown subject. If we want to find out the traits of a person that we never met before, we only need a couple of pieces of information, like a name, voice over the phone – the rest will be captured into the hologram automatically.

With the proper training and knowledge, we can access important information about anybody's traits. We can make a hologram of any business, knowing the name, some information about it, and the rest will be automatically included into a hologram. Using holograms, we can do a predictive analysis of how this business will do in the future, because information about the past, present and even future is accessible. We can construct a hologram giving it any size and shape for our convenience. We can create a hologram of a cathedral that is the size of a shoe box, to find out when it was built. When we want to see if an artery is blocked, we can build a hologram of the wide tube and put a finger inside it to feel if the flow of energy is blocked or not.

I was very lucky to be at the very beginning of my journey in the favorable environment of the hospital, because I had the chance to validate my findings with medical tests. That gave me a strong foundation to use holograms for getting reliable information.

To avoid mistakes in interpretation of information, the most important thing is your immediate state of mind: to be focused on the subject of your interest and on the goal you want to achieve, while keeping your mind totally neutral, so nothing stands in the way of receiving information. I call it being in the “Point Zero State of Mind”. The very second you lose control over your thoughts and emotions, you taint the answer. By achieving Point Zero State of Mind and applying the principles of SE and SEP technique, whole new worlds of information will open up for you. Whether you are a healthcare professional, a healer of any kind, a theorist or just a layperson who wants more accurate information about what is going on around you, the holograms are available to anyone and everyone. This world of vibrational information has truly been “right under our noses” all the time.

Playing in the Field: Exploring Children’s Unexplained Experiences

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Introduction: Unexplained experiences in childhood, such as telepathy, premonitions, OBE’s, voice-hearing and others, is an under researched topic, often studied in closed clinical contexts (Thomas, 2021). These types of experiences when studied with adults, are often referred to as paranormal or exceptional (Cardena et al., 2000; Roxburgh & Roe, 2014). Children tend to be excluded from these types of studies, lending unexplained experiences in childhood to be an under-researched topic. Some of the main reasons for the exclusion of children may be based on how children are viewed as *fantasists* or *artificialists* (Piaget, in Keleman, 2004). Adults’ capacities to conceive of supernatural agents and events remain unquestioned, while children are viewed as incapable of competently making sense of their experiences. In many ways, children’s ways of being and states of consciousness (such as play) remain unexplained but may be tightly correlated with their unexplained experiences. In this presentation, I share details from several recent studies and discuss the key findings that are emerging from the research. Through their experiences, children are challenging the mainstream model of reality and call for a rethinking of what it means to be human.

Approaches & Methods: Several small studies will be used to demonstrate: the types of experiences children report, catalysts for unexplained experiences in children and the socio-cultural factors that shape how these experiences are understood. For example, I include details of a study undertaken at Great Ormand Street Hospital with children who have experienced one to multiple cardiac arrests (aged 3-17 years). These children often report experiences that carry the same features as OBE’s, NDE’s, visions and others – yet are often quickly treated as ‘delirium’, without exploring these experiences with children. The studies were conducted using a participatory, qualitative approach that privileges children’s living experiences and the meanings children assign to them (Thomas & O’Kane, 1998; Dan et al., 2019). Participatory research uses methods such as narrative enquiry, art, play and

observation, enabling children to fully participate and explore their own unexplained experiences. Participatory research shows further potentials for transforming how self and human experience is understood– including experiences that cannot be explained through conventional science (Thomas, 2021).

Highlights: Some of the highlights emerging across several studies show:

- Children (and teenagers) may commonly have experiences that may be dismissed or diagnosed by well-meaning adults. These are experiences such as OBEs, Visions, hearing voices and sounds, premonitions, engaging with deceased relatives and telepathy.
- Aside from natural or spontaneous experiences, there may be a range of catalysts for children's unexplained experiences, such as trauma, medical illness (i.e., inflammation), crisis and activities (such as play; video game play etc.). The qualities of children's unexplained experiences are the same regardless of different catalysts (i.e., go beyond usual ideas of personhood, time, and space).
- Children's unexplained experiences may carry a healing potential as children gain a wider sense of self and connectedness to others and the world.
- Children's unexplained experiences are often studied in closed clinical contexts, framed as disorder or illness. Children may be resisting adult definitions in different ways. The research shows how participatory research approaches can effectively and meaningfully involve children in paranormal or anomalous experience studies.



Fig. 1 Drawing by a child aged 9 who sees figures in his home.

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A New Yet Ancient Foundation for Scientific Research

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Introduction: Here is a proposal for viewing differently the concept of consciousness and all fields of scientific research, by reintegrating the Ageless Wisdom teachings with modern science. The proposal is founded on evidence from diverse sources, personal and third-party experiences, intuitive realizations, and unexpected experimental results.

Why is the concept of consciousness fundamental to all scientific research? All scientific research conceived and conducted by humans must by definition exist within the medium of consciousness. Quantum physics has taught us this! What we have observed about consciousness so far covers all the bases: non-locality, ubiquity, entanglement, hypothesized primacy, and energy-like effects on forms, patterns and processes.

The Ageless Wisdom teachings. The tenets of the Ageless Wisdom teachings about the nature of man, the universe, levels of consciousness, and indeed all of science, pre-date our modern discoveries, clarify them, confirm some of them, and help resolve persistent conundrums. The Ageless Wisdom is "ageless" because it is an ongoing, systematized science based on human inner experience, experiment, observation, and intuition that spans thousands of years. It is time that we marry it with modern scientific research to advance our understanding and methodologies on many currently hard problems and explanatory gaps, particularly in the psychological, parapsychological, biological, and sociological sciences.

Hypotheses and Tenets arising from this marriage

1. Consciousness is present on many levels which co-exist and interact, like any physical vibrational series or spectrum. These levels may correspond with Bohm's Implicate Order, of which he speculated there are more than one. An implication of this which might clarify psychology and parapsychology is that the observed human effects in both cases do not

operate on one level but are instead an amalgamation of processes occurring on different levels. Without this multi-level or multi-dimensional understanding of human consciousness, both psychology and parapsychology are stymied because there are so many apparent anomalies and contradictions.

2. Consciousness originates from outside the body, not from within organic brains. The most immediate point of origin could be the Quantum Field. The bridge from the Field to the physical body may be via quantum resonance of the microtubules, ordering the water within them into particular information-rich configurations (consciousness) which are then distributed to the whole body and not only the brain. The ever-higher states of conscious awareness may derive from higher levels of the Field.

3. There are only two forms or energies of consciousness (however not the familiar physical energies) which determine all conscious states, alterations, and alternates. This foundational dichotomy may have begun to reveal itself during the conduct of an experimental pilot study looking at the physiological and psychological correlates of normal and meditative states, during which a portable random event generator (REG) was running. There was an indication that there may be two overall types of, let's say, energy or energy-like influence, correlated with known states of consciousness, showing up on the REG. These two forms are as follows:

- **Form 1:** The form which determines states of harmony, oneness, stillness, detachment, and non-individuality. This form is aspired to by the world's contemplative and meditative traditions and is presumed to produce a more evolved or higher, divine state of being. It results in alignment or attunement to the Source, aka "God", where all is one, connected and mutually interactive in a single meaningful field. This higher form is characteristic of the "soul" and is traditionally known as divine Fire, Mind of God, etc. *Experimental indications are that Form 1 may correspond with adherence to baseline randomness' of the Random Event Generator (REG).*
- **Form 2:** the form which determines states of disharmony or disequilibrium, such as individuality, all varieties of emotion (positive or negative), stimulation, excitation, depression, attachment, mentalism/intellectualism, illusion, glamour, desire, competition, recognition, etc. The contemplative and meditative traditions aspire to let go of this form, because it blocks our access to oneness, and we remain in an unstable, disconnected state. This lower form is characteristic of the human spirit and is traditionally known as prana, chi, etc. It is known as the basic life force energy, e.g., for the intelligence and movements of biological life and the physical, (lower) spiritual and etheric bodies. It is distinct from the divine energy of Fire or Mind of God of which our human minds ideally partake. The life force energy is thus not the appropriate source for human consciousness or intelligence, whereas the divine Fire is.⁵

⁵ Experimental indications are that Form 2 may correspond with deviations away from the baseline randomness of the REG.

4. The entire physical body in any given moment receives either of the two energies which then determine its expression of consciousness. Once one or the other form of energy has entered the body, it provides the movements, thoughts, and behaviors characteristic of that particular type of conscious energy. The human conscious mind is what the whole body receives and responds or reacts to. We lose out by over-emphasizing the brain in consciousness research, with inevitable flow into the physical and biological sciences.

5. The energies of consciousness, being received from outside, can be re-transmitted by the physical body and can therefore influence the consciousness of other physical bodies. This exceeds all forms of sensorily transmitted information signals between individual bodies. It follows from the level of oneness characteristic of the quantum field and the implicate order(s). Oneness is a real, practical, ever-present truth, and everything that exists or occurs is mutually interactive and cannot be separated. This necessarily includes the consciousness of individual beings, human or otherwise, and has immense ramifications for the conduct and interpretation of scientific research.

A recent example from neurobiology is the technique of *hyper scanning*, which reveals synchronization of more than one person's EEGs (brain wave patterns) in the absence of any sensory connection. This evidence of non-local entanglement between people is a further confirmation of the tenants of the Ageless Wisdom and various scientists of modern times, e.g., Carl Jung and David Bohm: that there is a oneness of consciousness which is shared and is not generated organically from within individual bodies or brains.

6. The “randomness” of the REG is not truly random. What if what we consider to be random, in having no particular meaning or direction, is actually the basic harmonious, dynamic operation of space (at various levels) when unperturbed by human deviations of consciousness? It is a level of order and pattern that can never be the same from moment to moment because space is continually expanding, and every point is moving relative to every other point; the configurations are never the same. Hence the non-repetition of random sequences. Therefore, when human consciousness shows adherence to the REG baseline, it indicates a state of non-imposition, harmony and oneness with space and with the divine, of which space is the vessel and representation. Conversely, states which perturb the harmony of space deviate the REG significantly from baseline.

Future methods: Planned experiments will analyze this phenomenon in more detail and use additional measurements which sit at the boundary between conventional and frontier science.



Fig. 1 A simplified chart of overlaps between The Ageless Wisdom and various branches of modern scientific research.

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An Exploration of Air CO₂ Sequestration Using Consciousness-Based Interventions for Climate Action

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Introduction: In a series of volunteer-run events that took place between December 2021 and January 2022, the *Public Parapsychology Community* provided a virtual space for academics and members of the public to explore the application of consciousness-based practices as change agents to help combat the global climate crisis (Ventola, 2021). This proposal was one of the three initiatives that emerged from those events.

Our main objective is to develop an exploratory but testable prototype that uses online consciousness-based interventions to remove carbon dioxide (CO₂) from an air-based chamber and move it to a second chamber. Within a parapsychological framework, this approach would ask that participants consciously apport a molecule from one container to another.

In parapsychology, the term 'apport' is used to describe the paranormal appearance or transference of objects to other locations (Cardena et al., 2015), and presumable instances of this phenomena have been documented mainly in physical mediumship cases. Sitter groups, such as the Felix Experimental Group (Braude, 2016), and the SORRAT (Grattan-Guinness, 1999) have recorded these types of phenomena. Also, individuals such as Amyr Amiden (Krippner et al., 1996; Krippner, 2011), Katie "The Gold Leaf Lady" (Braude, 2007), Uri Geller (Hasted, 1981), and Zhang Baosheng (Kongzhi et al., 1990; Li et al., 1990) have also been studied regarding their apparent abilities to move objects through spatial barriers without known physical mechanisms.

Moreover, a study conducted by David Luke is underway (Parapsychological Association, 2020) to examine the supposed abilities of Wixarika mara'akames (more commonly known as Huichol "shamans") to manifest their intentions on the weather (Lawlor, 2013), laying the foundations for how some consciousness-based practices or worldviews may affect the climate.

In our experimental setting, levels of CO₂, along with temperature, humidity, air pressure, and other variables will be monitored in several airtight chambers. Enclosure, light accessibility, and temperature will also be controlled outside the chambers. Participant selection will include a pre-screening process using psychometric scales and considering demographic parameters. The experimental design will include a brief guided training developed for the

experimental task, and a web application for experimental trials and data collection. Additional details regarding the experimental setup, participants, and tasks will be discussed in the presentation.

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Corroboration among Clairvoyant “Seers” During Reiki Energy Medicine Sessions

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Introduction: Reiki is a type of energy medicine with growing evidence for its benefit for various conditions and populations. The “energy” in energy medicine implies a life force rather than a conventional physics definition, and many people feel they can perceive this energy through extended perception beyond their traditional five senses.

Methods: This study evaluated clairvoyant perception during Reiki energy medicine sessions. Six expert Reiki Masters gave 30-minute sessions to 40 participants. Participants had one or

more of the following conditions: acute physical injury (such as broken bone), mental impairment (memory issues), and psychological symptoms (anxiety and/or depression). Six people vetted for clairvoyant perception made observations before, during, and after sessions using quantitative and qualitative measures. Participants and Reiki Masters also recorded their observations. Data were analyzed for corroboration: 1) within-seers, 2) between the Reiki Master and seers, 3) between the participant and Reiki Master, and 4) between the participant and seers. Participants' well-being outcomes and potential predictors were also evaluated.

Results: Well-being improved after the sessions ($F(3,159) = 12.3, p < 0.001$; baseline: 55.7 ± 18.8 , before: 58.9 ± 18.1 , after: 73.2 ± 16.2 , one-week later: 64.3 ± 20.3 ; effect size was 0.61, 95% confidence interval [0.39, 0.59]). The seers generally reported similar information in free-form drawings and free text. Seers' observations about the participants' health were highly corroborated and matched participants' self-report. No predictors revealed themselves, supporting the tradition that Reiki applies to anyone regardless of health condition. Furthermore, the symbols seers noted were meaningful to the participants, but seers did not see the same symbols nor ascribe the same meaning to them that the participants did. There were, however, numerous instances where the seers mentioned angels. In these instances, the participant also thought of them as guides and helpers. Angels were explicitly mentioned in 23 sessions of the 40 sessions. In these cases, the meaning ascribed to angels by seer and participant was the same.

Discussion: Participants' well-being improved from a 30-minute Reiki session, maintaining improvements one week later. There was evidence from multiple data and analyses that seers observe similar information during Reiki sessions. Furthermore, there was correspondence between the seers' observations of the participants' health condition and participants' self-reported health. Future studies are needed to refine the methods developed here to continue the exploration of extended perception, including its validity and its practical application in healthcare.

Decreased PTSD Symptoms Following Lucid Dream Healing Workshop

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Introduction: People have believed in the capacity for self-healing through dreams throughout human history. Recent investigations of lucid dreaming suggest that this unique form of dreaming may be especially useful for promoting healing due to the lucid dreamer's capacity for goal-directed action in the dream. The objectives of this pilot study were to

determine the feasibility of studying healing lucid dreams for people with PTSD and to gather relevant preliminary data.

Methods: Following a one-group, pretest-posttest research design, participants were recruited to experience an online healing lucid dreaming workshop. Of 144 adults experiencing chronic symptoms of PTSD who were screened, 49 completed the workshop from their homes in six different countries. The workshop consisted of 22 hours of live teaching via video conferencing spread, over six days, with curriculum including sleep hygiene principles, guided meditations, yoga Nidra, dream sharing circles, lucid dream exercises, dream planning lessons, and multiple lucid dreaming induction techniques. Outcome measures were collected before, during, and immediately after the workshop, as well as one month later. The primary outcome measure was self-reported PTSD symptom severity, as measured using the standardized PTSD Checklist for DSM-5 (PCL-5). Secondary outcomes included the degree of distress caused by nightmares measured using the Nightmare Experience Scale (NexS; Kelly et al., 2019), overall well-being using the Arizona Integrative Outcomes Scale, and positive and negative emotions using the Positive and Negative Affect Schedule. Salivary alpha-amylase levels were assessed as an exploratory measure with four of the participants who collected saliva samples each morning.

Results: Most participants ($n = 37$) achieved at least one lucid dream during the workshop, and over half of those participants ($n = 25$) enacted a healing lucid dream plan as intended. Compared to baseline values, significant improvements were observed in PTSD symptom scores, nightmare distress, and well-being. The average PCL-5 score for all participants at the beginning of the workshop was 43.4 ($SD = 12.2$), and this average fell to 23.9 ($SD = 13.7$) at the end of the workshop, and to 23.0 ($SD = 14.0$) at the one-month follow-up. Repeated measures ANOVA for all participants over the three time-points (pre, post, follow-up) revealed significant improvements in the PCL score ($F(2,140) = 35.40$; $p < .001$). Pairwise post-hoc comparisons of time-points using Tukey's method revealed significant differences between pre-workshop and post-workshop ($t = -7.11$; $p < .001$) and between pre-workshop and follow-up ($t = -7.46$; $p < .001$), and no difference in scores between post-workshop and follow-up ($t = -0.31$; $p = .95$). The average NEXS score for all participants at the beginning of the workshop was 9.3 ($SD = 4.2$), 6.7 ($SD = 4.1$) at the end of the workshop, and 7.1 ($SD = 4.4$) at the follow-up. Repeated measures ANOVA for all participants over the three time-points (pre, post, follow-up) revealed significant improvements in the NEXS score ($F(2,138) = 5.20$; $p = .007$). Pairwise post-hoc comparisons of time-points using Tukey's highly significant difference method revealed significant differences between pre-workshop and post-workshop ($t = -2.96$; $p = .01$) and between pre-workshop and follow-up ($t = -2.57$; $p = .03$), but no difference in scores between post-workshop and follow-up ($t = 0.42$; $p = .91$). For the well-being measures, a paired t -test was conducted to evaluate change from before to after the workshop. There were significant improvements in overall well-being ($< .001$) and lessening of negative emotion ($< .001$). Salivary alpha-amylase awakening response profiles for two participants enacting healing lucid dreams were consistent with a pattern of stress reduction, compared to control participants that did not achieve dream lucidity.

Discussion: The finding that participants experienced clinically significant and persistent relief from symptoms of PTSD, including reduced experiences of distressing nightmares,

confirms the feasibility of studying the healing power of lucid dreaming. Further confirmation of feasibility is provided by the finding that a majority of the participants in the study who achieved lucidity were also able to remember their dream plans for healing in the lucid dreamscape. Future studies are warranted that incorporate experimental conditions designed to distinguish effects unique to dream lucidity and to explore the mechanisms of action underlying the health benefits experienced following healing lucid dreams.

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Brief Video Presentations (BVP) Abstracts

Near Death Experiences, Post-Traumatic Stress Disorder, and Psychic Phenomena in a Latin American Sample: A Preliminary Study

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Introduction: It is widely recognized that Near-Death Experiences (NDEs) are associated with a series of changes in different aspects of people's lives (Sartori & Walsh, 2017), such as psychological, spiritual, social, etc. (Sutherland, 1992). Overall, those changes are mostly positive (Bauer, 1985). Besides, some studies report an increase of psychic (or psi) experiences after having an NDE (Greyson, 1983; Ring, 1984; Sutherland, 1989). So far, most of the studies involving NDEs (i.e., people that undergo an NDE) have mainly focused on European and American populations, and from other countries to a lesser extent.

Here, we present the first study that focusses exclusively on Spanish-speaking people, most from Latin America and a few from Spain. For this analysis, we focus on two main factors: identify if there is a higher prevalence of psi phenomena after the NDE; and evaluate if these types of experiences, given the traumatic context in which they usually occur, can lead to post-traumatic stress disorder (PTSD).

Methods: We designed a battery of scales that was shared on different social networks through groups related to NDEs, parapsychology, and similar topics. This battery contains: a) the Greyson scale, translated into Spanish and validated by Jiménez-Garrido *et al.* 2015; b) the Transliminality scale, designed by Michael Thalbourne and translated and validated into Spanish by D'León, Gutiérrez and Hernández (2017); and c) the PTSD revised symptom severity scale (Echeburúa *et al.*, 2016). We also included a series of questions related with specific features of the NDE, and a questionnaire related to the presence of psychic abilities before and after the experience (Sutherland, 1989). In addition, respondents had the choice to describe or not their experience in detail. The response collection process began in July 2020 and ended on December 31, 2021.

We carried out different analyzes of descriptive and inferential statistics, including correlational ones between all variables. All statistical analyses were performed with the SPSS software.

Results: 181 participants, aged 15 to 48, answered the survey. We discarded 22 that failed to answer the survey properly, and another 18 that did not reach the minimum value of 7 in the Greyson Scale, which indicates that they did not have a true NDE. The most common

situation leading to a NDE was having a medical condition (heart attack, stroke, coma, intoxication, etc., 30%), followed by a traumatic injury (car crash, serious fall, blow to the head, etc., 19%), and surgical intervention (use of anesthetics, operation, etc., 12%). For 39 of the subjects, their NDE seems to have led to PTSD. The mean value in the transliminality scale was 13, which is about one standard deviation above the average (D'León & Izara, 2017). Except for déjà vu and intuition, all the other psychic abilities considered were reported more frequently after the NDE than before it (Figure 1).

We found that men are more likely to have PTSD, and that this disorder is negatively correlated with age ($r = -0.30, p < 0.01$). Also, a negative correlation was found between a high score in the PTSD scale and post-NDE optimism ($r = -0.26, p < 0.01$). Age was positively correlated with NDEs associated with a medical condition ($r = 0.24, p < 0.01$). The scores in the Transliminality scale were positively correlated with the Greyson ($r = 0.28, p < 0.01$) and PTSD ($r = 0.31, p < 0.01$) scales, and the score in the Greyson scale was negatively correlated with that of the PTSD scale ($r = -0.20, p = 0.016$).

Discussion: Although most of the people in our study reported an NDE as a result of situations that could be considered traumatic, the vast majority of them (79%) did not present PTSD. The negative correlation between the Greyson and PTSD scales is quite interesting; it suggests that the deeper the NDE, the less likely a person is to develop PTSD. As expected, it is more likely that people develop an optimistic attitude when they do not experience PTSD symptoms, as indicated by the negative correlation between these variables.

Within the general population, women are twice as likely to develop PTSD as men (Christiansen & Elklit, 2012) because of various traumatic situations that do not necessarily put life at risk. However, in this study we found that men are more likely to develop PTSD than women. This might be related to the fact that women are more likely to believe in paranormal and spiritual phenomena (Blackmore, 1994; Silva & Woody, 2022), which could lead them to assimilate more quickly what they experienced during the NDE and incorporate it into their lives.

The fact that psi phenomena are reported more frequently after than before the NDE suggests that these experiences might serve as a catalyst that changes “something” within people so that they become more prone to experience this other aspect of reality. This “something” may be a biological trait, probably located within the brain, that allows us to perform abilities that fall into the realm of the supernormal. As I have suggested previously (Álvarez, 2021), this could be triggered by changes in signaling pathways that lead to changes in neuronal connectivity. There is evidence that this kind of changes can occur when the brain is deprived of blood flow (Sugawara et al., 2004) and oxygen (Ning et al., 1999), as it happens during many NDEs.

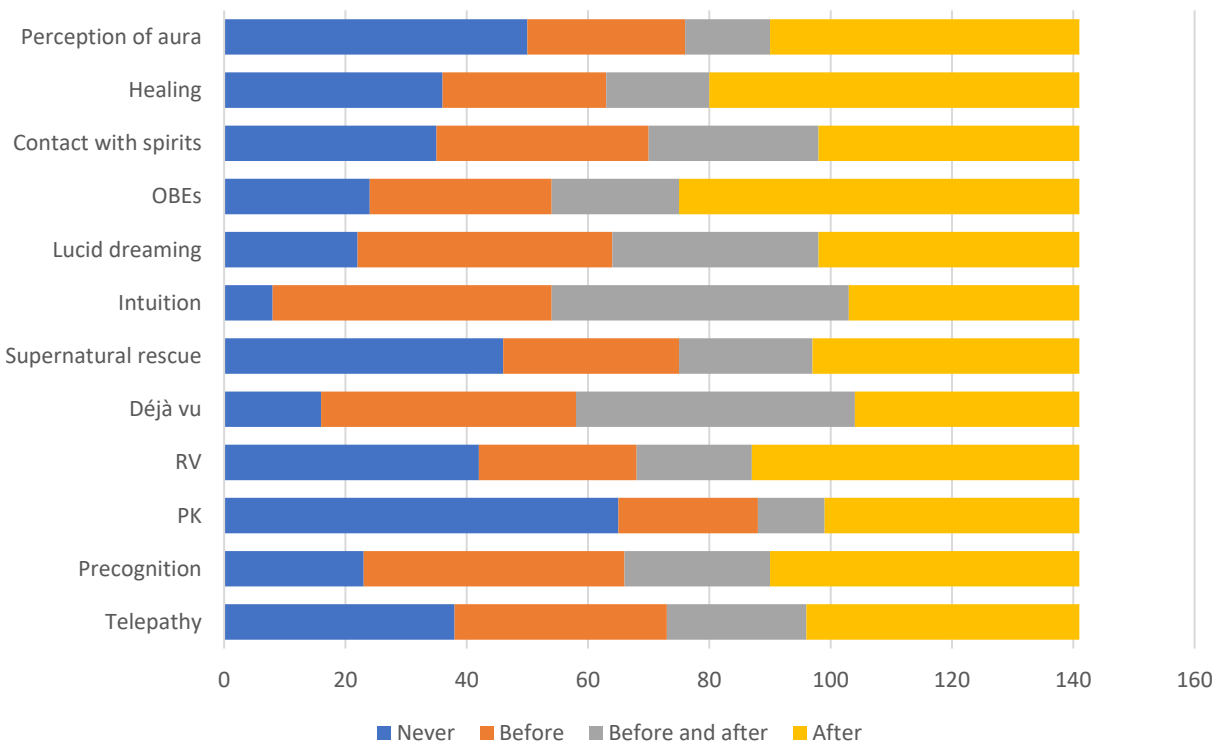


Fig. 1 Number of people reporting different kinds of psi experiences before and after their NDE. Some participants also reported these experiences both before and after the NDE. All psi experiences were reported more frequently after the NDE, except for déjà vu and intuition.

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Correlating Mediums' Accuracy Under Quintuple-Blind Conditions with Five Facets of Mindfulness

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Introduction: It is possible for anyone to experience contact from the deceased and this phenomenon has been reported across cultures since antiquity. A medium is defined as someone who has this experience regularly, reliably, and on-demand. Twenty Windbridge Certified Research Mediums were previously screened under controlled laboratory conditions for their abilities to report accurate information about the deceased. They then performed phone readings for deceased individuals and answered specific questions about verifiable topics regularly conveyed during naturalistic mediumship readings: the deceased's physical appearance when alive, personality characteristics, hobbies or interests, and cause of death. The mediums received no further information about the deceased or their associated living counterparts (sitters) and no feedback during or after the reading. The sitters did not hear or participate in the phone readings; a blinded proxy sitter served in their place. Each medium performed two readings for two different deceased people. Formatted items from the readings were scored for accuracy by the associated sitters. Each blinded sitter scored their own target reading and a decoy reading intended for another sitter. This quintuple-blind protocol addresses potential confounding factors as the source of the reported information: fraud, deception, cold reading, cueing, and overly general information. A previously published study compared the accuracy percentages of blinded target and decoy readings (Beischel et al., 2015). The sections of target readings including the four specific questions listed above received accuracy ratings significantly larger than those sections of decoy readings ($52.8\% \pm 3.9\%$ vs. $36.6\% \pm 3.8\%$, $p = .002$, $d = .75$, $n = 31$). An additional previously published study analyzed accuracy data broken out by each of the four questions from readings performed by 12 of the mediums (Beischel & Conboy, 2021). Scored readings were received from 21 of the 24 sitters. The means for each question type (physical description, personality, hobbies, and cause of death) varied ($53.9\% \pm 5.2\%$, $67.0\% \pm 7.1\%$, $49.4\% \pm 5.5\%$, $41.3\% \pm 6.5\%$, respectively) but no significant differences existed. It was

concluded that none of the four types of information requested is more or less difficult to acquire or report during a mediumship reading than any other. In addition, the 12 mediums' accuracy data were correlated with their scores on three surveys assessing sensory modality preferences and learning styles. No significant correlations were found. It was concluded that these individual characteristics may not impact mediumistic abilities.

Methods: The current study aimed to compare mediums' accuracy scores to their mindfulness, the paying complete attention, in a nonjudgmental way, to the present moment's experiences. The 12 mediums' accuracy scores were correlated with their scores from the Five Facet Mindfulness Questionnaire (FFMQ; Baer et al., 2006). This instrument uses 39 items employing a 5-point Likert-type scale to assess the following five facets of mindfulness: Observing, Describing, Acting with awareness, non-Judging of inner experience, and non-Reactivity to inner experience.

Results: It was determined that accuracy was positively and significantly correlated with the Observing facet of mindfulness. Specifically, mediums' accuracy scores for the content they provided when asked about the deceased's physical description, personality, and hobbies were significantly correlated ($r = .5, p = .03$; $r = .469, p = .04$; $r = .457, p = .04$, respectively) to their scores for the mindfulness facet Observing (which includes observing, noticing, attending to sensations, perceptions, thoughts, and feelings). Correlations between accuracy for the cause of death question with any of the five facets as well as any of the accuracy scores with the other four facets (Describing, Acting with awareness, non-Judging, and non-Reactivity) did not achieve significance.

Discussion: Though this sample size was not large, it may be appropriate to conclude that natural abilities in or intentionally developing the Observing facet of mindfulness may be beneficial to mediums' accuracy.

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Protocol for Finding Talent with Accurate Intuitive Abilities

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Introduction: Surveys indicate broad popular belief in exceptional intuitive abilities, including so-called psychic (psi) abilities such as telepathy, but this type of research topic is rarely taken seriously by the scientific community. A key practical challenge faced by scientific research on psi phenomena includes the lack of easy reproducibility of claimed effects. “Star Gate,” the code name of the US government’s now mostly declassified research and operations program of psychic espionage, which ran from 1972 to 1995, relied on a small group of individuals with purported psi talent (May and Marwaha, 2018). They claimed to produce results that were useful for practical purposes. Therefore, identifying psi talent might be required to produce reliably significant results in controlled experiments.


Methods: In this study protocol, we propose testing if a small percentage of psi talents exist in a large corpus of volunteers through five specific aims: 1) develop and integrate various psi tasks into a single online platform; 2) develop ways of analyzing the data to identify talents in a large sample of volunteers; 3) Select 50 of the top-performing individuals; 4) assess test-retest scores of these people to test if above-chance performance is consistent; and 5) evaluate potential predictors of high performance. We intend to recruit between 500 and 2,000 volunteers to perform psi tasks over an 8-month period. The 50 participants with the highest scores will be identified after 8 months or after data from 2,000 participants have been collected (whichever comes first). If data from fewer than 500 individuals have not been collected by 8 months, the experiment will be extended until a minimum of 500 participants are reached. The 50 selected potentially talented people will be compensated \$20 each to perform the test again. Among those 50 selected individuals, if some do not respond or decline to participate, the next top performers will be considered for inclusion until 50 participants who have completed all the tasks are included in a second round of tests. Selected talents who do not complete all the tasks will nevertheless be included in the global performance analysis across participants to avoid statistical bias due to optional stopping (see below). This study has been approved by the IONS Institutional Review Board (reference WAHH_2018_01).

Discussion: Upon completion of the experimental protocol described in this registered report, results will be presented in an accompanying journal article. We believe this study will help assess if psi can lead to reliably significant results in controlled experiments. No data has been collected at this point. The goal of this study is to present our protocol to the community.


Task 1, image guessing I

Click on the picture below that you think will appear in the box

trial 1/2
Thurs 4:00

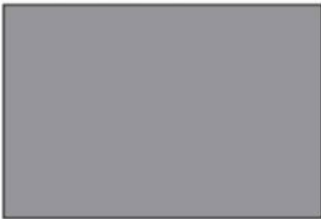


Next Trial









Task 2, image guessing II

Trial 1
Imagine what your future target picture will look like in the area below.
After you've gained your impressions, scroll down.



Select the shapes that match the content of the target picture:

Shape	Example
<input type="checkbox"/> rounded, arcs	
<input type="checkbox"/> angular, squares	
<input type="checkbox"/> linear, flat	
<input type="checkbox"/> points, edges	
<input type="checkbox"/> soft, cloudy, liquid	
<input type="checkbox"/> repeated patterns	

Now select a radio button for each element based on that element's presence in the target picture:


Element		Degree	
Water	none	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	prominent
people	none	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	prominent
plants	none	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	prominent
food	none	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	prominent
animals	none	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	prominent
temperature	cold	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	hot
scene type	artificial	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	natural
movement	still	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	dynamic
location	indoors	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	outdoors

Finally, enter up to 5 keywords to describe the content of this image:


Submit this description Clear form

Task 3, 4, 5, card guessing I, II, III


I



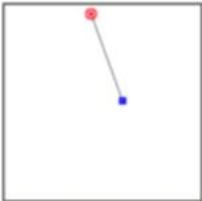
II



III



Task 6, location guessing



Odds against chance of getting this close to the target = 0.5 to 1

Next Trial

Task 7, lottery

Select 5 numbers:

01 ☐ 02 ☐ 03 ☐ 04 ☐ 05 ☐ 06 ☐
07 ☐ 08 ☐ 09 ☐ 10 ☐ 11 ☐ 12 ☐
13 ☐ 14 ☐ 15 ☐ 16 ☐ 17 ☐ 18 ☐
19 ☐ 20 ☐ 21 ☐ 22 ☐ 23 ☐ 24 ☐
25 ☐ 26 ☐ 27 ☐ 28 ☐ 29 ☐ 30 ☐
31 ☐ 32 ☐ 33 ☐ 34 ☐ 35 ☐ 36 ☐
37 ☐ 38 ☐ 39 ☐ 40 ☐ 41 ☐ 42 ☐
43 ☐ 44 ☐ 45 ☐ 46 ☐ 47 ☐

Select 1 "Mega" number:

01 ☐ 02 ☐ 03 ☐ 04 ☐ 05 ☐
06 ☐ 07 ☐ 08 ☐ 09 ☐ 10 ☐
11 ☐ 12 ☐ 13 ☐ 14 ☐ 15 ☐
16 ☐ 17 ☐ 18 ☐ 19 ☐ 20 ☐
21 ☐ 22 ☐ 23 ☐ 24 ☐ 25 ☐
26 ☐ 27 ☐

Immediate drawing - Submit

Task 8, psychokinetic

Please concentrate to form a circle. Seconds: 7/15




Fig. 1 Depiction of tasks 1 to 8. Tasks are organized on a website "dashboard." Participants can select tasks and perform them in any order.

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Evidence of Solar Rotation and Planetary Cycle Effects on Human Longevity and Professional Eminence

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Introduction: A growing body of evidence linking solar activity to human health, and seasonal variations has been shown to affect human longevity (Davis & Lowell, 2018; Skjærvø et al., 2015). Marzullo and Boklage (2011) found that seasonal solar variations affect embryonic development during gastrulation and again during the testosterone surge period of fetal development (Marzullo, 2014). The well-known 27-day solar cycle has received less attention in this field (Halberg et al., 2013).

Michel Gauquelin (1978) observed that the birth frequency of eminent writers and scientists showed sharp peaks when plotted against the ecliptic position of the moon, but he dismissed them as noise. No structured patterns appear in the lunation cycle, which usually figures more in reports of lunar effects (Bevington, 2015). The source of these patterns is hypothesized to be solar flares, which are known to concentrate in 'active longitudes' on the sun and to rotate with it. They tend to form in clusters at heliographic longitudes separated by 180° and sometimes by 90°, which is also a feature in the birth and death data, and to persist sometimes for over a century (Berdyugina & Usoskin, 2003). Blizzard (1969) showed that planetary conjunction cycles correlate with solar magnetic storms, and they seem to be involved with the timing of the 11-year sunspot cycle (Grandpierre, 1996). Evidence for these effects has accumulated (Hung, 2007; see articles in Morner, et al., 2013).

Methods: The Gauquelin data was downloaded from <http://cura.free.fr/>. Data on German dynastic families (Muller & Mentzer, 1993) were obtained from Ertel's (2007) posthumous archive kindly supplied by his son Christian; a collection of mathematicians was kindly provided in Excel format by its curators at the University of St. Andrews, Scotland; publicly available births and death data for the period 1974-2019 was supplied by the Scottish Registry. Published data on solar flares (Shea & Smart, 1990) was supplemented by data available on the NASA website.

Data were analyzed using the astrological Jigsaw 2 software based on the Swiss Ephemeris. Statistical validity was assessed using chi-squared ($df = 1$) from a 2x2 contingency table thus allowing effect sizes to be calculated as Cohen's d . Percentage increases were also calculated.

Results: Patterns in the 27-day cycle appear in many Gauquelin professional data sets, in their collection of Parisian birth and death data, and in three other independent datasets. A T-Square pattern of peaks similar to that of the writers and scientists was placed in overlapping 'lunar' longitudes and is apparent in the solar flare data. The birth data peaks show highly significant correlations with heliocentric planetary conjunction cycles.

Discussion: There are possible practical applications in the fields of medicine and insurance relating both to longevity and to SIDS deaths. Marzullo's work suggests a way to understand

the influence of space weather at key points during gestation of the embryo and fetus and possibly in the timing of spontaneous births. A solar origin of the 27-day variations is supported by their correlations with key phases in heliocentric planetary conjunction cycles.

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Enigma Operandi and the Hintu Force

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Introduction: Can one's life story become a case study? This study is composed of a collection of some of the synchronistic life-changing events, dreams, artworks, architecture, and design that I have experienced over a period of thirty years in Brazil, Germany and in the US. The retrospective case-study hopes to show that what I call *Hintu* or High Intuition is tangible and is farther-reaching, perhaps even distinctly different than intuitive emotional responses.

The data I have accumulated is multifaceted; the interconnectedness within its heterogeneity, its peculiar relation with time, all seem to call for a creative approach that goes beyond reader-response criticism while still retaining the importance of the reader/viewer; it has the potential to be evaluated as a *scientific-life-story*.

The Threshold: The subject matter of the unconsciously-driven body of work and of my personal art collection wasn't visible to me for decades, until I had what I later became aware was a climactic breakthrough in 2014. My continuing allegiance to my High Intuition has proven to be fundamental: after visualizing the subject matter of the *undercurrent art* as *the human torso*, followed by the several weeks of bringing the artwork together for the first time, an unexpected pain emerged in my own torso leading up to my hospitalization and to a life-changing medical intervention. Uncannily, back at home, I found myself alive and surrounded by torso images. Subsequently, *22 Healing Dreams* poured in and were registered in art-prints.

Methods: My experiment is triggered by a deep artistic call I have in me. My method is translated into acting openly: allowing *Hintu* permeate through oneself and letting a reaction unfold. It is very much like a creative act or *eureka*. To listen and to act: flow—trust—unconscious apprehension or impulse—action—outcome—recognition.

Results: The study is based on facts and establishes what I term the *Enigma Operandi* – The EO. EOs are occurrences that defy probability and are manifested physically sometimes presenting a two-way unorthodox causality. Synchronistic events and four EO groups compose this study, which is subdivided in nine categories ranging from basic chance encounters to unconsciously provoked materializations. My overview of those events is currently catalogued in two parts (18,000 words).

Discussion: Can a life story be acknowledged as a scientific study? Could a gravitational field provoke everything that is phenomenal? What is the makeup of *Hintu*? My goal with this presentation is to introduce the study, delineate its aspects with the intention of connecting with a producer or an editor interested in the interconnections between art and science, to help me shape the material into a *scientific-story*.

Critical Approaches to Exceptional Experiences

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Introduction: What do critical approaches have to offer parapsychology? In this brief video presentation, I detail the recent shift in parapsychology toward more inclusive perspectives and standards. As an important case in point, the *Journal of Anomalistics* has a forthcoming issue building on the initial insights of the *Women in Parapsychology* conference of the Parapsychology Foundation that took place in 1991 (Coly & White, 1994). There have also been efforts by the PA to promote membership diversity and raise awareness around inclusivity (Ventola et al., 2021). I have argued, in various ways, that parapsychology would benefit from decolonizing its scientific practice (Glazier, 2021b) and adopting an approach more in line with critical theory (Glazier, 2021a).

Critical analyses of exceptional experiences lay-bare the various power effects at work in subjugating the field's scholastic reputability, trace the textual effect of paranormal tropes, and work toward envisioning a more ethical scientific practice - how the scientific tradition has failed to take into account subjective values in the scientific process, values that, in their worst form, appear as misogyny, white supremacy, and human exceptionalism.

Objectivity, just like psi, is not a stand-alone variable or term - something that should be sought after, procedurally secured, and achieved. Rather, both are through and through implicated in the very research process itself. In qualitative research, we understand this through the concept of reflexivity (Finlay, 1998) and in parapsychological research through its close kin, the experimenter effect (see the classic text in parapsychology that grounds the field in a natural scientific approach, Rhine & Pratt, 1974). When compared to the experimental literature in parapsychology, qualitative research occupies but a small allotment (Murray & Wooffitt, 2010). While this advance is certainly to the field's credit, nonetheless, there has been virtually no scholarship, apart from feminism, aimed at applying critical analysis and theory toward researching exceptional experiences (see Williams, 1996, as a stand-out exception). I hope to not only begin to explore this foreign and exciting terrain, but also to encourage others in the discipline to follow suit - to see the value in, for instance, using the tropes found in the 'text' of paranormal studies to challenge legendary or physicalist models of reality.

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Breakthroughs in the Popularization of Science: A Comparative Analysis of Popular vs Scholarly Psychology Books

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Introduction: Many academic psychologists hold negative and stereotypical views about popular psychology books, even though there have been few formal, methodological investigations into these materials to understand their content, construction, purposes, or orientations, or their author's credentials. (Campbell, 2017).

This dissertation explored the subject of the popularization of psychology. It sought to determine whether the current delineations between scholarly and popular materials are as clear cut as those making such delineations seem to suggest, or if an alternative model of the relation between academic and popular psychology literature could be offered.

Methods: Research questions were addressed by means of analyzing a set of popular psychology books through a version of the qualitative case study methodology developed by Robert Yin.

Initially, a spreadsheet was created containing titles and related data of all published books titles that focus on the psychological category of *attention*. Next, from this larger set (145 Titles), a sampling of books was selected for the purpose of performing a more careful analysis of their actual content. This included six academic based books and six popular books, of which the determination of each was made through the application of pre-established guidelines set forth by university libraries.

While several characteristics of their books and authors were compared, three foci were central to this examination: 1. A handling of factual statements in relation to references, which involved examination of a minimum of six statements or passages per each book; 2.

bibliotherapeutic value; 3. how much potential the book had for helping its readers in the aspects for which it was intended to do so. To support investigations into these aspects, a thematic analysis of Amazon reviews and Google Scholar citations was also conducted.

Results: Investigations into the literature and background of writers critical of popular psychology materials found these criticisms to be more related to a clash of philosophical frameworks largely go unrecognized as such. The present author discovered that some of the most vocal opponents are members of skeptical societies who are also influential within the APA. Critiques were not based on hard evidence, but rather on challenges towards concepts connected with psychoanalysis, parapsychology, and those related to humanistic and transpersonal movements and topics. Another group of critics include those espousing religious values and moral values, some of which were critical not only of popular psychology but against the entire field of psychology.

A systematic review of the books themselves found that some books were easier to distinguish and categorize than others. The most obvious indicator that set the books apart were not based on the book's traits but rather on whether the publisher was an academic one affiliated with a university. Some titles of books such as those that had terms associated with behavior, cognitive science or neuroscience were easiest to separate than titles that had terms related to "how to" or empowerment.

It was found that scholarly books did back up statements more frequently and consistently with references to original sources than popular sources. Scholarly sources tended to be more reflective of the language and intentionality of the original authors. Popular sources more frequently seemed to reflect statements made by less formal, popularizing sources over the language used in the original research articles. Still, for both categories there was a wide range of number of sources, types of sources, and how well they were integrated into discussions.

A review of credentials of 145 authors within the Master Spreadsheet and of the 12 authors of books chosen for closer evaluation demonstrate that most authors had at least the equivalent of a master's degree, while many held a PhD or equivalent even within the popular category. Those who were not academics were often professionals within their domain of expertise or held dual credentials in multiple professional or academic disciplines.

Differences between popular and academic books were not simply related to a difference in quality or presentation of information but were found to be reflective of dueling epistemological and ontological approaches to knowledge, such as those reflected within the natural sciences vs. human sciences frameworks.

Several books seemed to hold bibliotherapeutic value. However, no evidence was found to suggest that information being shared should be called "naïve" or homespun, or of the folk categories. While some other's shared personal experiences about significant events in their lives, information provided was based largely on professional experience gained through client interactions, professional associations and training pursuits, interviews, extensive

reading of books and other materials (even if not all referenced properly), and through attending conferences.

Discussion: Separating books into two distinct categories turned out to be not only a challenging and subjective task, but for about a dozen titles, this was an impossible chore, leading to the conclusion that the dichotomy between scholarly and popular books should be seen as existing on a continuum, rather than fitting into only one or another. It was also determined that the idea of hierarchy of sources (with the peer-reviewed journal article on top) needs to be reconsidered, given there were instances where important, relevant information was appropriately shared of a historical nature, or for biographical purposes, that wouldn't have ever been appropriate for publication in a journal. Therefore, the criteria should be changed to whether the author referenced the most logical, original source instead, even if this source is a newspaper clipping or a speech or personal conversation.

It was found that not all books should be held to a single, universal set of standards, but rather each author's stated and/or implied purpose should be used as a guide to determine whether their own objectives were achieved.

It is notable that all Popular books were weakest in their coverage of topics related to cognitive psychology and neuroscience, as were a couple scholarly books of a philosophical orientation. It is recommended that authors wishing to include chapters on neuroscience reference original sources and do a more artful job of discussing such topics, or they would be wise to forego discussions of these highly technical topics all together. To a lesser extent, scholarly books did sometimes lack proper referencing, had outdated website links, and none of them were on par with the popular books in terms of the technological functionality of their e-book versions. The number of collective reviews the six scholarly books received (14 total) on Amazon was remarkably low compared to those in the popular category (3740). This may be partially due to their expense - scholarly books were much more expensive than popular books, with one e-book costing as much as \$186.00 (but it did contain over 4,000 references).

Further a search of Google scholar found that books in the popular category were cited almost as frequently as scholarly books, indicating the work of professional practitioners, and historians and marketing professionals does make its way into scholarly arenas. This further supports the new view of popularization.

This project's findings have implications for educators, researchers, librarians, and journal editors, across all scientific disciplines, who may presently disqualify useful materials without fully understanding them, and for writers who could improve in their research and writing skills.

Subtle Energies

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The initial motivation for my research was based on four questions. I have always been intrigued why the act of consciously observing quantum experiments could affect their results. I also wished to discover why quantum effects were not observed in the macro world. How does Einstein's "spooky action at a distance" work? And why, after nearly 100 years of unsuccessful theoretical research, were there so many unsuccessful and untestable theories of quantum gravity?

I believed a new approach to physics research was required, one that involved the mind. Examples of such hitherto unscientific, but ancient, techniques included the use of Noetics, dowsing, visualization, and similar research tools to investigate subtle energies, psi lines, auras, the relevance of geometry, and similar phenomena. Using the above approach soon produced promising results.

Subtle energies distort geometry, both physical and abstract, from a solitary dot to a complex three-dimensional pattern. This phenomenon led to a protocol that has enabled subtle energies to be very accurately measured and quantified, leading to numerical results as well as equations and graphs (Figure 1). Additionally, I found that, when any three bodies are in alignment, they produce a *subtle energy alignment beam*. These bodies can be three planets, three grains of sand, or even three circles drawn on paper or in sand (Figure 2).

Using the above two discoveries led to me to create techniques that enabled the measurement of the velocities of subtle energies in our solar system (Figure 3). I found that there is a strong interaction between gravity and subtle energy (Figure 4). Subtle energies have field strengths that not only could be measured locally and extending to Neptune in our solar system (Figure 5), but also to the center of our galaxy (Figure 6).

Further development of these discoveries led me to additional results. Certain information is not only communicated across our solar system faster than light, but *instantaneously* (Figure 3). Several equations were found with high correlation coefficients that involve universal constants, a gold standard in science. The mind can achieve macro-level entanglement. And a connection exists among consciousness, gravity, and the expanding universe (Figures 4 and 6). This strongly suggests that there is a connection between the mind, subtle energy, and dark energy (Figure 7).

In conclusion, I believe that I have made a good start on achieving my four objectives. All the above discoveries are explained in greater detail in my 58 published papers available from my website www.jeffreykeen.co.uk.

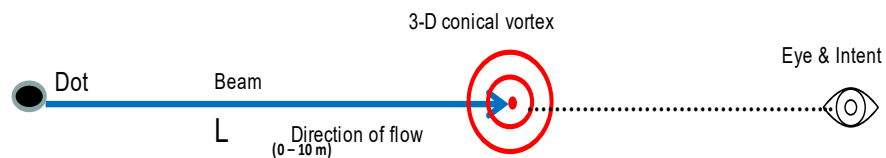


Fig. 1 Measurement and quantification of subtle energy.

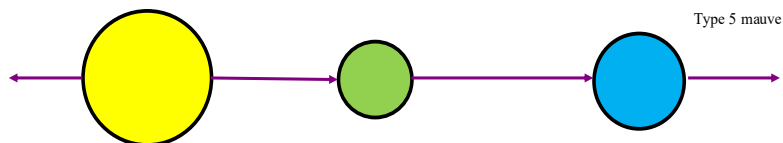


Fig. 2 Subtle energy alignment beam produced from three bodies.

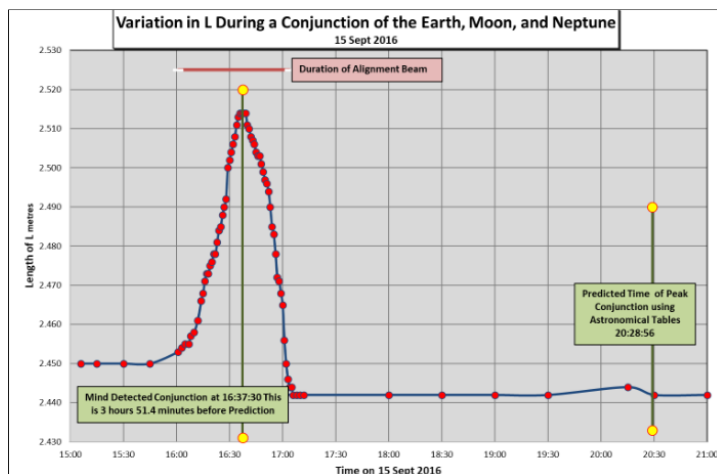


Fig. 3 Variation in L during a conjunction of the earth, moon, and Neptune.

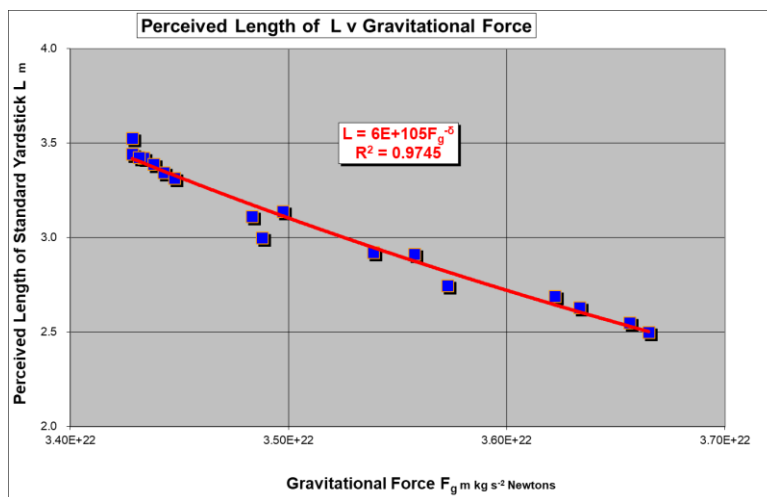


Fig. 4 Perceived length of L vs. gravitational force.

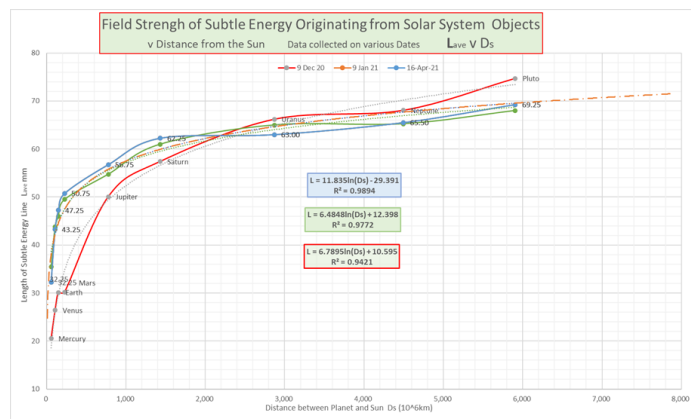


Fig. 5 Field strength of subtle energies originating from solar system objects.

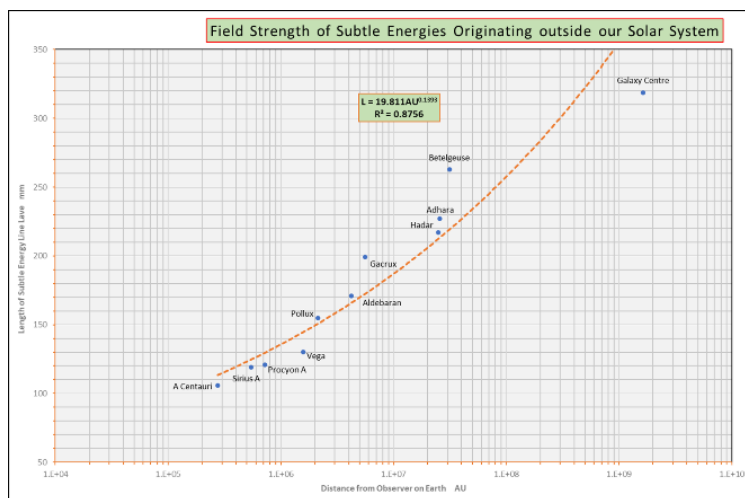


Fig. 6 Field strength of subtle energies originating outside our solar system.

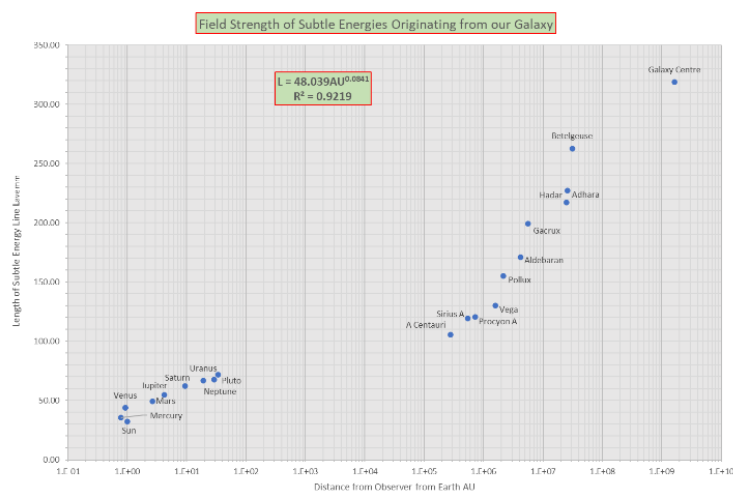


Fig. 7 Field strength of subtle energies originating from our galaxy.

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The Transparent Psi Project (TPP): A Consensus-Based Replication of Bem 2011 Experiment 1

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Introduction: Growing evidence for a systematic positive bias in the published research reports in various scientific fields had led to a ‘crisis of confidence’. Studies testing controversial hypotheses, such as studies of extrasensory perception (ESP), suffer even more of the burden of the confidence crisis because the lack of trust promotes risk-aversion and the maintenance of the status quo. We need to develop objective indicators of trustworthy, reliable research studies independent of the hypothesis that is tested.

Methods: This project aims to develop methodological tools that facilitate highly credible and rigorous research. Furthermore, we aim to conduct a multi-site, fully transparent replication of Bem’s (2011) Experiment 1 using these credibility-enhancing methodologies.

We have conducted a multi-site, fully transparent replication of Bem’s (2011) Experiment 1. We have developed a study protocol for this replication effort via a Consensus Design Process. During this process more than twenty experts on the field (both proponents and opponents of the original ESP hypothesis) contributed to finalizing the protocol.

The protocol includes a comprehensive toolkit of safeguards against researcher biases and mistakes that are often thought of as the primary cause for the abundance of non-replicable findings in psychology and biomedicine. The safeguards include radical transparency about the whole research pipeline via Born Open Data, Direct Data Deposition, Real-time Research Reports, automation, trusted third party oversight, tamper evident seals on data and software, documented training, and lab logs.

Results: We have conducted a pilot study involving two research sites and one hundred eighty-four participants. This pilot study demonstrated the feasibility of our approach, and the adequacy of the consensus-derived study protocol. During this pilot investigation we observed 49.49% successful guesses (99.5% CI = 47%, 51.9%; posterior mode = 50.6%, posterior 90% HDI = 49.4%, 51.7%).

Following the acceptance of our research protocol as a Stage 1 registered report in Royal Society Open Science, we started the main study. We have collected data from 2,097 participants at nine research sites worldwide. The data were more consistent with the model assuming that humans' guesses about the future, randomly determined, position of a target do not have a higher than chance success rate, rather than the model assuming that they do.

In the main study so far, we observed a total of 49.87% successful guesses (99.5% CI = 49.1%, 50.6%; posterior mode = 50%, posterior 90% HDI = 49.5%, 50.3%). Observing this percentage of successful guesses is 76 times more likely if the guesses are successful at random than if they have a better than chance success rate. The results proved to be robust to different statistical approaches, increasing our confidence in our inference. Taken at face value, the data provide strong evidence that the probability of successfully guessing later computer-generated random events is not higher than chance level contrary to what was previously reported by Bem (2011) and others (Bem et al., 2016).

Discussion: The findings of this study are not consistent with the predictions of the ESP model in this particular paradigm. The methodology of the present study reasonably addressed all alternative explanations stemming from deficiencies in modal research practice (LeBel & Peters, 2011) that we were able to identify, with extensive input from other researchers. The failure to replicate previous positive findings with this strict methodology indicates that it is likely that the overall positive effect in the literature might be the result of recognized methodological biases rather than ESP. However, the occurrence of ESP effects could depend on some unrecognized moderating variables that were not adequately controlled in this study, or ESP could be very rare or extremely small, and thus undetectable with this study design. Nevertheless, even if ESP would exist, our findings strongly indicate that this particular paradigm, utilized in the way we did, is unlikely to yield evidence for its existence.

At the submission of this abstract we were 15 participants short of achieving our target sample size. We will reach our sample size target by the time of the conference and report on the final findings. During the presentation we will also discuss our experiences with using the credibility enhancing toolkit in this project, and the feasibility and acceptability of these approaches to other researchers.

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Sleep Paralysis, Extraordinary Experiences, and Belief in the Supernatural

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We investigated sleep paralysis (SP) with an online questionnaire and used a selected sample of subjects who had had at least one SP experience, with a total of 380 subjects. On average, the participants experienced 10–20 SP episodes. We created our own questionnaire on SP experiences by taking items from two already existing questionnaires, the *Waterloo Sleep Experience Survey* (WSES; Cheyne & Rueffer, 1999) and the *Unusual Sleep Experiences Questionnaire* (USEQ; Paradis et al., 2009) and adding some items of our own given our emphasis on interpretation, coping strategies, and paranormal aspects of SP. In addition, we have applied three further questionnaires, the *Fragebogen zur Phänomenologie außergewöhnlicher Erfahrungen* (PAGE-R-II, in press; see Fach et al., 2013, for the first, longer version) to measure extraordinary experiences; a German translation of the *Belief in the Supernatural Scale* (BitSS; Schofield et al., 2018); and a German translation (Ritz et al., 1993) of the *Tellegen Absorption Scale* (TAS; Tellegen & Atkinson, 1974) to measure the personality trait absorption.

We presented first descriptive results of quantitative data with a poster at the 2019 PA convention in Paris (cf. Mayer & Fuhrmann, 2021). One of our research questions concerned the connection between the frequency of SP experiences and extraordinary experiences in general, and belief in the supernatural. The often bizarre and disturbing quality of the experience, the lack of familiar cultural patterns of interpretation in our society, and the accompanying somatic and mental circumstances link SP experiences to the realm of extraordinary experiences (ExEs) and altered states of consciousness (ASC).

SP is usually experienced as very unpleasant and anxiety-provoking. In addition of being unable to move, many of the concerned have auditive, visual, or tactile perceptions such as hearing voices, seeing strange objects or entities of various kinds, feeling pressure or weight on the chest, being choked, feelings of floating or falling, out-of-body experiences, etc. From the point of view of sleep medicine, the specific quality of such experiences is considered

hallucinatory and harmless, and therefore does not require greater attention. However, Belz and Fach (2012, 2015) took a different approach. They included SP as a specific ExE in their model of fundamental categories of exceptional phenomena. They theoretically derived four classes of ExEs, assigned to the four quadrants formed by the dimensions “external–internal” and “coincidence–dissociation.” In their model, SP is placed in the quadrant built by the external and the dissociation poles, i.e., experienced as external and disconnected from normal body function. We used their questionnaire, the PAGE-R-II, to assess the extent to which people with SP have had other extraordinary experiences. We expected positive correlations between the frequency of SP and the experience of “External Phenomena” and “Dissociation Phenomena.” This hypothesis was confirmed regarding the “dissociation” pole but not regarding the “external–internal” dimension.

Together with some other findings, this led to the assumption that there are two main types of experiencing SP: a “classic” one associated with anxiety and an external attentional focus, and another one with more inward focus, more often associated with positive feelings. We explored this thesis by conducting two factor analyses. With the first, we reduced the 10 items on the list of feelings and emotions experienced during SP to the three emotion factors: a “happiness–curiosity” factor, a “fear–pain” factor, and an “other fears–feelings” factor. In a second step, we computed a factor analysis on the so-called hallucination factors found by Cheyne et al. (1999): the emotion factors, the four subscales of the PAGE, and the TAS. The 3-component-solution suggests two general types of SP experiences as suggested above. However, this hypothesis requires further investigations.

Many Western scientists consider SP experiences to be one of the sources and causes of human belief in ghosts due to the specific perceptions mentioned above. Based on previous research, we expected a positive correlation between belief in the paranormal and frequency of SP, using a German translation of the BitSS. This hypothesis was not confirmed. The absence of significant correlations between supernatural beliefs and frequency of SP in our study tend not to support the assumption that SP is a major source of human belief in ghosts – at least this is true for our sample coming from a secular Western society.

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Across Millions of Pairs, Text Similarities in Descriptions of Events Likely Depend on Similarities in Astrology Charts

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Embeddings, a way to measure similarities between texts, are a recent gift of machine learning. They were used here to quantify similarities in short descriptions without dates of pairs in 7153 world events post-1600 AD as found in a provided database. There are 25,579,128 unique such pairs. The zodiacal placements of the charts were also calculated for either the actual date at midnight of the event or the same but using the start date for a multi-day event. Only Sun, Moon, Mercury, Venus, Mars, Jupiter, Saturn, Uranus, Neptune, Pluto, North Lunar Node, and South Lunar Node tropical degree placements from zero to 360 degrees were computed. Adding up the cosines of the differences between planetary placements for two events offers a neat and novel way of measuring similarities between these zodiacal placements for the two events. Thus, I have metrics for textual similarities and chart similarities. The imagery of these metrics plotted against each other suggests non-monotonic dependence. This study answers a precise question: what is the p -value for independence, i.e., nondependence, between the two metrics? The upper p -value for independence is less than 0.01 as computed by Hoeffding’s D measure. The conservative Monte Carlo approach to estimating the upper value of this p -value was necessary due to physical computation constraints. Thus, likelihood for the alternative to independence, namely dependence, between event textual similarities and event chart similarities is established. Data and Wolfram language code are included. Null Hypothesis: measures of event description and event astrology are independent. This is shown to be unlikely. The Alternative Hypothesis is thus supported: there is a dependency between the two measures. Code, data, and more information.

How Much Light Energy Change Can Cause the Variation of Radin's Double-Slit Fringe?

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Introduction: The existence and mechanism of mind-matter interaction, which is sometimes termed *psychophysical effect*, is fundamental to our understanding of the physicality and causality of the entirety of phenomena that are amenable to experimental investigation. Recent reports (Radin et al., 2012; 2013) on variations in the fringe visibility of the interference patterns of laser-engaged double-slit experiments, which seemed inexplicable in the absence of psychophysical influences, have elicited notable debates within the scientific community and substantial interest among the lay population. In accounting for the observed changes of fringe pattern, Radin et al. reported that the electrical field of the light passing the two slits might have reached an asymmetry of 3:1 when under the psychophysical intent in comparison to the generally symmetric baseline. However, a change to the double-slit interference fringe could have multiple causes. The objective of this research is to investigate, by computer simulations, which kinds of physical variation could have led to the changes of the double-slit interference fringe as reported by Radin et al.

Hypothesis: We theorize that a change to the double-slit interference fringe-pattern, or equivalently the fringe visibility, that is comparable to the level reported by Radin et al., could very well be caused by a slight asymmetry of the spectral bandwidth of the light passing the slit, subject to psychophysical intent.

Methods: We implement computer simulations of double-slit fringe pattern based on the Huygens-Fresnel principle, using the primary experimental geometrical parameters of Radin et al. to assess how an asymmetry of the double-slit configuration could affect the fringe visibility. The computer simulation outcomes are validated against the well-known results of single-slit research, as a function of the slit width or slit opening, and symmetric double-slit research, as a function of the slit separation and slit width (or slit opening). Subsequently, we assess how an asymmetry in the physical size properties (slit width and the lateral offset of the slit center) and the photonic/spectral properties (intensity, wavelength, and spectral bandwidth) between the two slits would affect the fringe pattern. The asymmetry is realized by changing a respective property of one slit only. Fourier transformation of the double-slit interference fringe is also conducted, to infer subtle differences between fringe patterns that may be grossly less distinguishable.

Results: The main result is that the normalized interference fringe corresponding to the asymmetry of the electrical field of 3:1 or 1/3:1 is grossly indifferent from that caused by an asymmetry of the spectral bandwidth of 0.00205 nm between the two slits at a center wavelength of 632.8 nm. A spectral broadening of 0.00205 nm centered at 632.8 nm would take approximately 3.64×10^{-6} times of the energy of reducing the electrical field of light of that slit to 1/3 to reach an effective 3:1 inter-slit ratio of the electrical field. This 0.00205 nm

spectral broadening of the light is estimated to associate with an energy change of no more than 10 picowatts for the experimental setting utilized by Radin et al.

Discussion: This study has challenged the interpretation of the physical cause of the fringe pattern changes in the double-slit experiments of Radin et al. when correlated with consciousness influence of unknown mechanism. Finding an alternative interpretation to the effect that takes just about 3.64×10^{-6} of the energy of that modeled by Radin et al. will open new avenue of developing experimental approaches to target the energy-level mechanism of psychophysical effects. We also suggest one experimental configuration with adequate phase sensitivity to augment Radin's double-slit to examine the occurrence of spectral broadening against the occurrence of intensity change in replicating the psychophysical experiments.

By using computer simulation based on standard wave approaches to light, we demonstrate that the extent of the change to the double-slit fringe as reported by Radin et al. can be caused by a spectral perturbation to the light, which would take only approximately 3.64×10^{-6} times of the energy change pertinent to the intensity change as was modeled by Radin et al. This indicates that the intensity change, as modeled by Radin et al., was unlikely the physical precursor to the observed effect.

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Unlocking Genius: Tech-Assisted Altered States

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Introduction: Manori Sumanasinghe and Nelson Abreu have nearly 50 years of combined experience exploring consciousness and educating a niche of motivated individuals, interested in the intricacies of "inner reality" through non-profit consciousness and scientific anomaly academic organizations. As an architect and an electrical engineer, both with a focus on innovation, they set out to expose a wider demographic to the world of consciousness. They describe the approach as meeting people where they are, speaking to their more immediate needs, such as relief from discomfort, stress, and anxiety; tapping into their imagination and inspiration. It is hoped that by democratizing and demystifying the out-of-body experience and allied phenomena, more funding will pour into research and more people will want to deepen their practice. They will discuss how Neuma Being can reliably induce substance-free altered states and the results of a pilot of self-reports of altered states.

History is no stranger to luminaries finding their muse through dreams, hypnagogia and other altered states. “Creativity, originality and initiative” is the number-three in-demand skill predicted for 2022. 77% of professionals experienced poor sleep, stress, and burnout prior to the pandemic. Worldwide, the cost of unwell workers represents 10-15% of global economic output. Studies show that mindful altered states are associated with creativity and are able to curb depression and the ill effects of burnout, while improving overall well-being.

Meditation remains challenging for many and about 1 billion people are affected by disorders that have no medicinal relief, except psychedelic-assisted therapy (depression, PTSD, addiction, pain). Silicon Valley has made micro-dosing a trend, as well. However, substances are not for everyone or every occasion. Out-of-body experiences have been shown to reduce pain intensity by 37%. Frequent lucid dreamers have been able to solve 25% more puzzles. What if technology and a more accessible language could open up the microverse of lucid dreaming and beyond to “everyday people”.

Methods: Individuals spend thousands of dollars and months of time to learn how to achieve these mindful and heightened states of mind. This keeps millions of others from even trying. What if there was a safe, effective, and quick solution to tap into the stress-reduction power of the subconscious? It would make these benefits accessible to busy problem-solvers from creative professionals to first responders making high-stakes decisions during long shifts. What if the solution was adapted to pandemics: No-Contact, Physically-Distanced, and Hygienic?

Over time, some technologies have emerged to facilitate altered states, including the Neuma Lounge: it's been described as "laying inside of a sound bowl." It uses micro-vibrational technology to induce hypnagogia and beyond in as little as 20 minutes. From there, the Neuma Lounge guides you into your subconscious using unique digital sound baths, musical scapes and verbal cues. Beautiful, musical altered states journeys in a welcoming environment allow for quickly, reliable, safe, easy, frustration-free access to the subconscious.

The Neuma Lounge can stimulate deep relaxation, discomfort relief, vitality, mental sharpness, problem-solving (insight) through a “body asleep, mind awake” state achieved in as little as 20 minutes. It uses design, ergonomics, sound, vibration, and guided mindfulness to achieve deep relaxation and creative, insightful altered states, safely, quickly, effectively and with no physical contact — whether you’re an experienced wellness pro or a curious newcomer. The Neuma Lounge provides a substance-free alternative for deep relaxation and problem-solving states of mind, which is important for professions and personal preferences that make psychedelics a non-option. Refreshing cognitive function through long shifts and raising self-awareness can help us make better decisions and improve interpersonal communication.

Over the course of their experience, shifting vibrational patterns and soundscapes induce a “body asleep, mind aware” state — transporting users to the “threshold consciousness” state of mind and body known as hypnagogia. This state is marked by reduced activity in the prefrontal cortex of the brain, which is involved in planning, decision-making, and social behavior.

The result is an increase in the free-flowing state of thought that occurs organically during rapid-eye movement (REM) sleep, combined with mental awareness to channel and harness this inspiration. Research reveals that this state can be pivotal for personal problem-solving, creative development, and stress-relief. The hypnagogic period is known for being extraordinarily rich in images. Essentially, this induced hypnagogia is ideal for combating burnout by taking advantage of naturally-occurring brain phenomena.

The Neuma Lounge is controlled wirelessly through a mobile application that allows for the selection of modes of operation designed for creativity, calm, vitality and well-being. Curated soundscapes, music and vibrations are computer-controlled and directed to a number of low-frequency transducers that allow you to hear music and instructions and feel the resonance. Multiple guided sound and vibrational journeys are available, so the experience can be customized to the desired state of being.

Inspired by the womb of a mother - the most primal safe space known to any human - the Neuma Lounge gently embraces and envelopes the user in a unique micro-environment. The soundscape expressed through the technology transports the users to imaginary spaces within their minds. The vibrations and sound can be felt in the body, in the bones, giving an experience that is similar to being inside a guitar or on top of a speaker. The experiences are sometimes pleasant and sometimes visceral.

Some patterns move all over and make you lose yourself into the experience, while others are highly ordered and draw your attention to the body: to specific areas, often in a sweeping motion that mimics ancient and contemporary energy mindfulness practices. By first drawing your attention away from distractions and toward the body, it eventually renders the body numb and deeply relaxed, opening you up to transpersonal, expansive experiences.

Results: In our pilot studies, 76% felt tingling and/or energy movement, 71% felt a difference in weight, 62% felt like they were floating. These are very similar to the sensations reported in surveys related to the out-of-body experience. 98% reported an improvement in well-being; 89% in relaxation; 94% in focus; 94% in tranquility; and 83% felt recharged with effects lasting several days. Testimonials value imaginative breakthroughs, self-discovery insights, mental clarity for decisions, emotional release, and deeper relaxation. In the pandemic context, sessions are contactless, social-distancing friendly, hygienic, sufficiently automated but with some personal attention.

SESSION STATS

	2020	2021	2022
Total Sessions <i>Number of sessions we have offered to date</i>	119	92	85* ↗
Paid Sessions <i>Number of paid sessions we have offered to date</i>	43	77	72* ↗
Returning % <i>Number of returning bookings</i>	18.6%	41.6%	50%

* Jan 1 – April 10

BETA TEST

	Group A	Group B	Group C
Participants <i>Number of Participants</i>	85	33	24
Lounge Activation <i>Micro-vibrations in the lounge</i>	✓		✓
Live Guided Instructions <i>Manori guided the sessions live</i>	✓		
Pre-recorded guided instructions <i>Scripted/Improved guided journeys</i>		✓	✓
New Magical Soundscapes <i>Our own new soundscape + sound baths</i>			✓
	Aug – Sep 2020	Jan – Feb 2021	Aug – Sep 2021

BETA TEST

	Group A	Group B	Group C
Relaxation <i>Improvements in Relaxation</i>	89%	52% ↓	93% ↑
Focus <i>Improvements in Focus & Awareness</i>	94%	39% ↓	97% ↑
Tranquility <i>Improvement in sense of inner tranquility</i>	94%	35% ↓	96% ↑
Recharged <i>With effects lasting several days</i>	83%	39% ↓	89% ↑
Goals achieved <i>Arrived with an outcome in mind, and results met</i>	72%	70% ↓	92% ↑
	Lounge + Instructions	Instructions Only	Lounge + Improved Instructions

Fig. 1 Mind Spa sessions by the numbers.

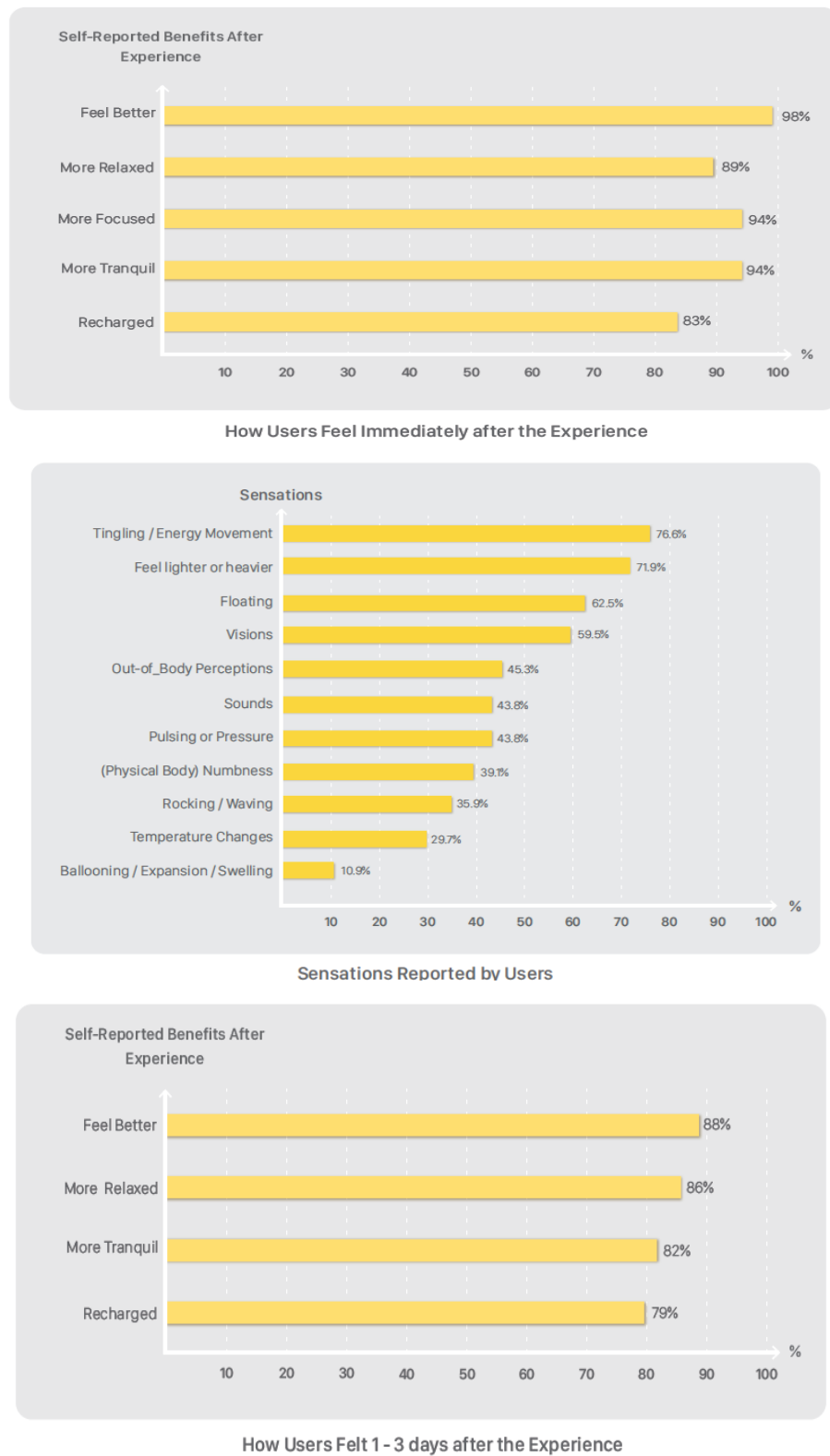


Fig. 2 Subjectively reported experiences.

Theory of Multiple Planes

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Introduction: We need a unified theory of reality that covers the existence and function of physical, mental and spiritual processes in such a way as to extend our sciences beyond their current limitations. Many of us want this within some non-dual scheme since that seems necessary for unification, but we still recognize that there appear to be multiple planes of activity, each with distinctive kinds of motivations, information and actions. Often these planes are taken in order, starting from a first source and ending with final effects in nature. Each plane seems to have its own dimensions (usually three of space and one of time) and has distinctive features of the beings there.

Question: My question now is whether a being can move from one plane to another. This depends on whether (1) the planes are smaller parts of one larger continuous whole, or whether (2) they are each discrete spaces. In the first *continuous* option (1) we could move our bodies to visit any plane, whereas in the second *discrete* option (2) we could not, so that visiting would require more an awakening or building of some new part of us. Recently Bernard Carr (2021) and others have been suggesting the first option, whereby the multiple planes are higher dimensions of physical spacetime just as time can be fourth dimension in addition to our three spatial dimensions. I want here, however, to explore the second discrete option.

Proposal: If the multiple non-physical and physical planes are discrete, there must still be some kinds of connections between them in order to function together. Descartes proposed that mental and physical are two planes, which gives his basic dualism. A major shortcoming of his theory is, however, that he did not propose any regular method to link them together. That has led many thinkers to deny multiple planes altogether, but I would rather we have a theory of multiple 'small' dualities with some familiar connections between planes.

We need to connect multiple planes existing between the first source and the final effects in the last plane. I propose that the entities in each plane have (or are) the propensities to generate new entities in a next plane. This second plane receives and may then retain those new object propensities for later action. The second plane is thus a kind of container: selective retention in the second plane also constrains what is retained in the first plane. The overall template for connections *between* planes is therefore the combination of 'generation and selection'.

So far, this is a general framework of levels, and it is not yet determining what is distinctive in each plane. Information about features can be found from observation, science, or from useful kinds of spiritual revelation, but in all cases, they have to be supported by multiple confirmations.

Applications: We will explore examples in quantum physics, psychology, and near-death experiences, as well as new proposals recently advocated for linking non-physical with the physical planes. A recent theory (Thompson, 2021) has shown how non-physical causes can be linked to variations in certain basic ‘constants’ of quantum field theory, and how they can be linked to specific biological effects by targeted variations of the electric ‘fine structure constant’. Thompson (2022) has presented another theory to link discrete planes by a generalization of the projection operators used to describe quantum measurements. This can be used to give fast object recognition in the visual system and show also how to implement rapid recall in an associative memory. All these processes could perhaps have been accomplished by material or mechanical processes, but only much more slowly. That implies that these theories should be testable even on the physical plane, and confirmation would open the way to seeing information and control passing between multiple planes.

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What Can the Psi Data Tell Us about the Meaning of it All?

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Abstract: In this paper, I wish to consider an arguably important, yet underexplored question: What does the psi data (specifically the laboratory data) suggest about our lived experience? To put it another way, what does the psi data tell us about the meaning of it all? Current scientific theories offer little support for meaning in some intrinsic sense. There is no evidence for an overarching purpose for our existence. The physicist Stephen Weinberg has said, “the more the universe seems comprehensible, the more it also seems pointless”. Many influential physicists, such as Brian Greene and Sean Carroll, have argued similarly, and such a view is difficult to square with those who argue that meaning helps us live a more satisfying life. We can note that throughout the history of humanity, art, music, and literature has been produced by individuals attempting to express some greater sense of meaning beyond drudgery or simple, mundane experience. Yet according to many scientists and philosophers, this deeper or intrinsic sort of meaning is not to be found in our conventional scientific theories.

However, the psi data doesn't fit conventional theories either. If we accept the psi data as real, we perhaps might broaden our thinking to consider what that data is telling us. Perhaps such a broader or richer framework might support a notion meaning or purpose for our lived experience.

But first we must try to pin down this term 'meaning.' Philosophers have struggled to understand the sense of 'meaning' or 'larger purpose' that many humans throughout history have attempted to find. I will try to identify some necessary components for this sense of 'meaning' by examining some examples from literature and film.

We might understand most works of literature and film (although perhaps not always) as expressions of elements linked together into a whole. In the book (or TV show) *Game of Thrones*, for example, we follow a wide range of various characters on different trajectories throughout the plot. As we read (or view) this vast unfolding story, we can discern an underlying unity. Somehow, we sense, these different characters are meant connect or impact one another, even though they are spread out over a very large landscape. *They each play a part that fits into a larger whole.*

In many cases, we can view this whole, in a way, as a process guiding the characters toward some sort of high powered or climactic moment. An author often uses techniques of foreshadowing future events that have yet to unfold. Through such foreshadowing, the reader senses how events will tend to unfold. Thus, characters that are linked holistically are also governed through a process outside of their own linear time.

Although characters within a novel or movie appear to be influenced by larger forces outside of them, I believe we should see them as characters exercising free will or true volition. In the movie *Casablanca*, the central character Rick (Humphrey Bogart) is faced with a difficult decision during the time of World War II. He can choose a life with the woman he loves, but at the cost of seriously weakening an important source of resistance against the Nazis. That readers believe the character Rick has the true ability to choose is necessary for experiencing the power of the film. Viewing Rick's actions through a deterministic framework substantially diminishes the power or meaning the viewer would experience.

Thus, I submit that these three components necessary for meaning in work of literature or film are 1) connection with a greater whole, 2) a central purpose or direction that guides the various events and characters through time, and 3) freedom to choose. These three are necessary for a feeling of what a novel or movie means. Of course, I do not suggest that our lived experience fits well with such novels and films. It is arguably rare to find lived experience exhibiting the unity and sense of completion we find in works of literature. Nevertheless, I do argue that these aspects of meaning we find in many important examples in literature and film point to something important in our quest for greater meaning.

Further, I believe the psi data also points toward supporting these aspects of meaning. The empirical data on telepathy and remote viewing do suggest our conscious experience is connected to other people as well as the world around us. This is consistent with each of us representing a part in a greater whole. The precognition literature is consistent with our

sensing of how events might unfold through time. Apparently, events (and people) are connected to this greater whole or unity, which can be understood as a deeper process (that we may not yet understand). The psychokinesis data, in addition to suggesting an action or influence at a distance, also appears to require free will or agency. Overall, perhaps we can take the psi data as providing necessary support for the ingredients of finding meaning in our lives.

But to go further, we need a theory or framework that helps us account for the psi data, and hopefully supports these necessary components of meaning. In recent work (Williams, 2021), I've combined threads in philosophy of mind and foundations of physics in a way that leads toward a view of taking consciousness as fundamental and identical with the intrinsic aspect of matter. I proposed identifying the quantum ground as a field of potentiality in a nonlocal space, which provides the ontologically prior basis of our physical world. Further, this ground also provides the foundation for conscious experience. This underlying quantum ground of aware potentiality is consistent with all of the laboratory data recently summarized by Cardona.

How does the notion of meaning explored here fit such a nonlocal quantum field with phenomenal properties? Consciousness of every organism is ultimately rooted in this more fundamental ground, a quantum field of aware potentiality. Every conscious organism is linked with this inherently holistic quantum ground. Further, this field of potential is arguably oriented to guide such organisms, as well as various events, through time. An inherently unified ground guiding conscious organisms and events through time suggests some sort of overarching direction or purpose. In addition, this ground, as the base of conscious experience, also provides the basis for volition or free will. I suggest that this fundamental quantum field possesses self-organizing properties: each part (conscious organism or event) is connected and guided by the whole in a way that supports the overall goals of the system.

The psi data thus supports a more profound sense of meaning about our world and lives than what we find from our more conventional theories. Providing a deeper sense of meaning for our lived experience is an important application that psi provides to us. Once we accept the psi data and follow the implications, we can recognize the connection we have with one another through a deeper reality, which I believe can support a more compassionate world. This deeper reality also likely possesses creative resources for artists, musicians, and writers to express this oneness or wholeness in myriad different ways. Simply put, a stronger, more deeply felt sense of meaning adds richness to our experience of life.

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