

June 2013

*Mind-Matter Mapping Project Round Table Series
Colloquium #2*

The tip of the iceberg: placebo, experimenter expectation and interference phenomena in subconscious information flow

Appendix 1: [Matti Pitkanen](#)

Appendix 2: [Larry Dossey](#)

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For Follow-up to this discussion go to [JNL Panel#2 Open Commentary](#)

A multi-disciplinary dialogue on the experimental evidence for nonlocal bio-communication, its emergent characteristics, impact on mainstream sciences and future research directions.

Invited panelists

Remote Perception: Lyn Buchanan, Daz Smith, Marty Rosenblatt, Angela Thompson Smith

Biomedical Application: Kean Hin Ooi, Hideyuki Kokubo, Margaret Moga, Larry Dossey

Physics and Consciousness Anomalies Research: Roger Nelson, Brian Millar, Jean Burns, Ulrich Mohrhoff, Matti Pitkanen, Anna Aragno, Massimiliano Sassoli de Bianchi

Moderators

Lian Sidorov, Jean Burns, Brian Millar

Biographical Notes

Dr. Roger Nelson is the Director of the [Global Consciousness Project](#), which grew out of the research that he, together with Robert Jahn and Brenda Dunne, coordinated at the Princeton Engineering Anomalies Research (PEAR) lab for over two decades. His interests revolve around developing technologies and experimental applications to study consciousness, intention, remote perception and mind-matter interactions both in the laboratory and in natural situations. The most ambitious of these projects is the GCP, which exploits RNG technology “in a world-spanning instrument designed to monitor the effects of globally shared emotions or states of consciousness”.

Dr. Larry Dossey, M.D. is former Chief of Staff of Medical City Dallas Hospital, co-founder of the Dallas Diagnostic Association and a decorated battalion surgeon in Vietnam. He is the executive editor of the peer-reviewed *Explore: The Journal of Science and Healing*. He is the author of twelve books and numerous articles on the scientific evidence and implications of “non-local mind”, a term he coined in his 1989 book “Recovering the Soul”, and he has since lectured on the subject of nonlocality and mind-body medicine at major medical schools and hospitals including Harvard, Cornell, Johns Hopkins and the Mayo Clinic. Currently almost 90 medical schools in the US have implemented courses on mind-body medicine, many of which use Dr. Dossey’s works as textbooks.

Lyn Buchanan is a former remote viewer, Database Manager and Unit Trainer for the US government’s Remote Viewing project and is the Executive Director of Problems>Solutions>Innovations (P>S>I), a data analysis company possessing the most complete body of data on real-world applications of remote viewing. He started his career as a military computer expert for the Nike Ajax/Nike Hercules guided missile systems, then took a break from service and went on to earn a BA in Psychology, a BA in Linguistics, and an MA in Linguistic Psychology. Re-entering the service in 1974, he became a military linguist, specializing in German, Russian, and Spanish and was assigned to a 4 year stint at the US Intelligence Field Station in Augsburg, Germany, then to the "psychic spying" unit at Ft. Meade, Maryland. After the CIA declassified the existence of the military RV unit in 1995, Lyn’s focus turned to public RV teaching and research, as well as developing civilian applications for the technology, including service to police and other public-funded investigative organizations and agencies. He has developed computerized analysis techniques for identifying, categorizing and predicting viewer error rates. He has also designed and written computer programs and techniques to enhance the results of organized CRV efforts and to aid and guide the student's progress through specific areas of CRV training. Lyn’s personal goal is to systematize the accumulating body of RV data in order to conduct meaningful research into the scientific basis of this technology.

Dr. Margaret Moga is Associate Professor of Anatomy and Cell Biology at Indiana University School of Medicine - Terre Haute. Her research focuses on bioenergy healing, including both measurable physical correlates and subjective experiences of healer and client. Together with William Bengston, she co-authored the 2007 paper on resonance, placebo effects and type II errors referenced in this discussion.

Hideyuki Kokubo has a degree in biophysics from Nagoya University, Japan. He is a lecturer at Meiji, Atomi and Toho Universities; researcher at the Institute for Informatics of Consciousness, Meiji University; Research Director at the International Research Institute; Director of the Society for Mind-Body Science; and Executive Editor & Managing Director, International Society of Life Information Science. He is also Former Editor-in-Chief & Director for the Japanese Society for Parapsychology.

Dr. Brian Millar followed a PhD in Chemistry from Edinburgh University with a Perrott-Warwick grant at Trinity College, Cambridge (which allowed him to conduct parapsychology research under the tutelage of John Beloff in Edinburgh) and then with further experimental work at University of Utrecht, Holland. He has published more than 50 papers in major parapsychology journals such as EJP, RIP, JASPR and JSPR. His primary focus is on developing a physical theory of psi interactions. The Observational Theories (OT's) that he pioneered argue that the actual origin of Psi in a Rhine-type study may in fact be

the experimenter rather than the “subjects”, and he has recently (2012) proposed a series of quantitative analyses designed to test the source of the effect in successful psi experiments.

Dr. Jean Burns is a physicist who is interested in the relationship of consciousness and psi to physical laws and in particular, in how consciousness may interact with the physical world. With respect to the latter topic, she has developed a model of consciousness in which it is shown that PK and free will can be carried out through the ordering of quantum randomness. She also has published numerous papers on the general subject of consciousness and physics, such as reviews of current models, of their relationship and discussion of the issues involved. She has been an Associate Editor for the Journal of Consciousness Studies since 1994 and is a Founding Editor.

Matti Pitkanen is a theoretical physicist and former professor at the University of Helsinki. His primary research interest is Topological Geometrophysics - a unified theory of fundamental interactions assuming that space-times are 4-surfaces in 8-dimensional imbedding space, inspiring a generalization of quantum measurement theory to a theory of consciousness. Since obtaining his Ph.D. in 1982 (on the subject of topological geometrodynamics), he has continued to lecture and publish books, articles and invited chapters on this topic and its applications to quantum mechanics, astrophysics and consciousness research.

Anna Aragno PhD. A published author of many scholarly papers and of two books, “Symbolization: Proposing a Developmental Paradigm for a New Psychoanalytic Theory of Mind” (1997) and “Forms of Knowledge: A Psychoanalytic Study of Human Communication” (2008), Anna Aragno came to the US from Italy on a Fulbright in the late 60’s. With a background in the arts and languages, she now devotes her time to private practice specializing in the treatment of creative artists, presenting at conferences, and writing scholarly papers with a strong emphasis on metapsychological revisions. Her affiliations have now expanded to include contributions to the new scientific field of Biosemiotics.

Ulrich Mohrhoff is a physicist affiliated with the Sri Aurobindo International Centre of Education. His primary research interests lie in the foundations of quantum mechanics and the interface of contemporary physics and Indian philosophy/psychology – topics on which he has published numerous papers in peer reviewed journals. He was the founder and managing editor of AntiMatters (ISSN 0973-8606), a quarterly open-access e-journal addressing issues in science and the humanities from non-materialistic perspectives, which appeared from August 2007 till November 2009. His textbook *The World According to Quantum Mechanics: Why the Laws of Physics Make Perfect Sense After All*, was issued in 2011 by World Scientific Publishing.

Angela Thompson Smith Ph.D. has 25 years experience in the parapsychology and remote viewing fields including 5 years working at the Princeton Engineering Anomalies Research (PEAR) Laboratory and 20 years in the RV field as a trainer, researcher, and in applications work.

Marty Rosenblatt holds a B.A. and M.S. in physics from University of California at Los Angeles. Marty has worked as a computational physicist and managed many projects in development and application of sophisticated computer programs for analyzing high-energy problems of interest to the U.S. Department of Defense and NASA such as hypervelocity impact and nuclear weapons effects. He was a founder, CEO and senior staff scientist of PhysiComp Corporation (1994) and its internet subsidiary. As current President of PIA (Physics Intuition Applications Corporation), Marty has designed, managed, and participated in numerous associative remote viewing (ARV) protocols. These

protocols involved trading in financial markets and were developed and improved over many years. In addition to his role at PIA, he currently teaches financial ARV workshops at the Monroe Institute.

Daz Smith is an artist, graphic designer, author and active remote viewer who works with some of the most recognized operators and researchers in the field of RV on both public and private remote viewing projects. He also runs several large information websites on the subject of remote viewing and he edits and publishes <http://www.eightmartinis.com/> - a magazine covering the latest breakthroughs in remote viewing from the standpoint of protocol, applications and analysis. In 2010 Daz graduated the Lyn Buchanan P>S>I Operational Certification Program. This certification program is designed to help viewers produce CRV work in a style and at level that meets or exceeds current field standards. Over the past six years Daz has worked for some of the most recognizable leaders in the field of remote viewing: Lyn Buchanan, Courtney Brown Ph.D., Paul H Smith Ph.D., Angela T Smith Ph.D., Alexis Champion and many others, on both public and private client remote viewing assignments.

Kean Hin Ooi is a Zhineng Qigong Instructor and Therapist with a BPharm (Hons) from the Science University of Malaysia. He is National Industry Expert (Qigong Therapy), and Internal and External Evaluating Officer of Qigong Therapy for the Ministry of Human Resource, Malaysia; a Panelist of Qigong Therapy National Occupational Skill Standards for the Ministry of Health, Malaysia; and Honorary Secretary of the Federation of Malaysia Qigong Associations. He is the author of several books and videos on Qigong and has been invited to lecture on qigong therapy and science at various university centers. Since 2000 he has been involved in experimental work ranging from external qi effects on cell cultures and other remote targets to the design of clinical trials on asthma therapy.

Massimiliano Sassoli de Bianchi graduated in physics from the University of Lausanne (UNIL), Switzerland, in 1989. From 1990 to 1991, he was an Assistant in the Department of Theoretical Physics (DPT) of the University of Geneva (UNIGE). In 1992, he joined the Institute of Theoretical Physics (IPT) at the Federal Institute of Technology in Lausanne (EPFL), as a PhD candidate. He received the PhD degree in physics from EPFL in 1995. Since 1996, he has been working in the private sector and as an independent researcher. His research activities are focused on the foundations of physics, quantum theory, and consciousness. He is the director of the *Laboratorio di Autoricerca di Base* (LAB) in Carona, Switzerland, a small research center aiming at the theorico-practical development of a multidimensional view of reality and consciousness evolution. He is also the editor of *AutoRicerca*, an Italian journal whose mission is to spread writings of value on the vast topic of inner research. For more information: www.massimilianosassolidebianchi.ch

The tip of the iceberg: placebo, experimenter expectation and interference phenomena in subconscious information flow

‘The experimenter effect is the most important challenge facing modern parapsychology. It may be that we will not be able to make too much progress in other areas of the field until the puzzle of the experimenter effect is solved’

Palmer, J. (1986). ESP research findings: The process approach. In H. L. Edge, R. L. Morris, J. Palmer. & J. H. Rush (Eds), Foundations of parapsychology (pp. 184–222). London: Routledge & Kegan Paul.

Two comprehensive analyses of antidepressant trials have uncovered a dramatic increase in placebo response since the 1980s. One estimated that the so-called effect size (a measure of statistical significance) in placebo groups had nearly doubled over that time. It's not that the old meds are getting weaker, drug developers say. It's as if the placebo effect is somehow getting stronger.[...] After decades in the jungles of fringe science, the placebo effect has become the elephant in the boardroom.

Silberman, Steve (2009) Placebos Are Getting More Effective. Drugmakers Are Desperate to Know Why. WIRED MAGAZINE: ISSUE 17.09

Background

In a paper published in 2007 in the Journal of Alternative and Complementary Medicine, Bengston and Moga describe a series of experiments in which mice injected with mammary adenocarcinoma were treated with “healing intent”. Although the typical mortality rate in such cancer models is 100%, the combined results of the 5 experiments showed a remission rate of 91.7% (Bengston and Moga, 2007), with an unusual healing process passing from a tumor ulceration stage to full life-span cure. What is even more remarkable is the fact that 80.5% of the control mice, who did not receive the healing-with-intent cure, also demonstrated remission – leading the authors to formulate the hypothesis that under certain conditions, macroscopic entanglement (“resonant bonds”) can form in an experimental setting, potentially resulting in a proliferation of Type II errors. Complicating the picture, however, it appeared that

additional psychological factors like expectation and fear came to play a significant role in determining which of the mice remitted and which did not.

Going back almost eight decades, French chemical engineer and parapsychologist Rene Warcollier wrote in "La telepathie experimentale" (Warcollier, 1926) that his group telepathy experiments revealed, with surprising consistency, an "extraordinary observation": *"the percipients have very frequently shared identical spontaneous images (perceived visually or intuitively) whose origin remained unknown. [...] Their lack of coherence seemed to indicate an origin external to the experimenters, but that was doubtlessly only an appearance. Our 1923 experiences [...] have revealed very numerous cases of analogous perception between the percipients, which were altogether independent from those that the agent intended to transmit. It was a true mental contagion of errors [...] probably [...] the transmission of a [...] fragmentary, subconscious thought of one of the percipients"*. This phenomenon, now widely recognized in the remote viewing research literature for which Warcollier's studies laid the experimental foundation (Warcollier 1926, 1927, 1928, 2001), has yet to be adequately investigated. But is it just a glitch in an already marginal (and some would argue questionable) field of research, or an important aspect of consciousness?

Other apparently related observations dot the landscape here and there: case reports of patient-analyst dream synchronicities and the cross-telepathic dreams of Eisenbud's patients - patients who had no other connection with each other except the fact that they shared the same doctor (Ullman and Krippner, 1973, p 30-42, 89-92, 116-124, 210-213; Mishlove, 1975); similar accounts of inadvertent dream telepathy in the Ullman and Krippner Maimonides studies (Ullman and Krippner, 1973); an apparent, critical-mass cognitive phenomenon ("100th monkey effect") in which insights or learned skills appear to spread to isolated populations, as in Sheldrake's controlled figure-recognition experiments, Arden Muhlberg's Morse code study or Pavlov's findings on hereditary transmission of acquired habits (Carter, 2007, p 30-31, 74-82 and 146; Sheldrake 1987, 1995a,b,c, 1998a,b, 1999a,b, 2002; Gilman, 1985; Muhlberg, 1987; Borland, 2000). Cleve Backster's pioneering work showing plant and cell culture polygraph responses to human thought (Backster, 2003) was followed by formal studies of distant mental interactions with living systems (DMILS) measuring the effects of consciousness on growth rates of plant, bacteria and cancer cell cultures, cell death, motility, conformational changes in DNA and proteins, cell membranes and colony architecture (Benor, 2001; Chen K, Sidorov L, Dossey L, 2005; Sidorov L. and Chen K., 2003). A recent meta-analysis looking at 131 DMILS experiments shows that 56 of them reported results with odds against chance of 100 to one or better, with a cumulative probability beyond a trillion to one (Radin, 1997, p 151-152). Focusing attention on a remote human subject was shown to statistically alter his/her galvanic skin response, muscular activity, heart rate and blood pressure, even when separated from the sender by thousands of miles. While these physiological responses were typically below the awareness threshold of the percipient, they were remarkably consistent over almost 2 dozen independent studies, with cumulative odds against chance of 3.8 million to one (Radin, 1997, p 152-156). Finally, there are over a dozen EEG and fMRI studies, published by journals such as *Science*, *Nature*, *Physics Essays* and *Behavioral Neuroscience*, which demonstrate statistically significant correlation between the brainwaves of sender-receiver pairs, with odds against chance ranging between 50 to 1 to 14,000 to 1 (Radin, 2006, p 18-19, 75, 136-141).

Taken individually, none of these observations is a show-stopper: science carries on as usual, primarily because we either ignore or dismiss such data. Reports such as these are outliers and they conveniently remain outliers in the mainstream publishing world, because their implications threaten to undermine some of the most cherished beliefs powering the engines of our scientific progress.

However, looked at as a set, these findings begin to self-assemble into a question that is all but unavoidable: assuming that even a fraction of these results are valid (and most of the researchers listed above have impeccable academic credentials), what do they tell us about the way in which conscious beings communicate with each other? How can information be transmitted without direct contact (and often without specific intent, as in Warcollier's, Sheldrake's or Bengston's experiments)? And most importantly – if such subconscious, inadvertent information flow is part of the fabric of the universe, then how does it impact the way in which science conducts its business – namely, the gold standard of controlled experimental trials? Far from parapsychology alone, this question may indeed be at the heart of many scientific endeavors, including the effort to understand the effect of experimenter expectation and the quietly unfolding placebo crisis affecting controlled clinical trials (Silberman, 2009). We can continue to dismiss such results as questionable data relevant only to heretics patrolling irrelevant branches of fringe science; or we can stop to ask whether their knowledge (meticulously collected over a century of experimental studies) might contain some useful clues as we begin to tackle these uncomfortable but increasingly unavoidable challenges.

The dialogue we have started brings together researchers and practitioners with very different perspectives on the problem. What all these participants share, however, is a suspicion that conscious beings are part of a vast information flow which goes beyond the direct mechanisms we currently understand, and a desire to explore the laws that govern this subconscious, apparently nonlocal phenomenon. In a previous article (Sidorov, 2003a) we attempted to discuss such possible cognitive bridges in the context of quantum computing and nonlocal communication mechanisms proposed by Pitkanen's Topological Geometrostatics. But all such theoretical speculations have very limited value in the absence of adequate study replications and opportunities for further experimental testing. It is our hope that the present forum marks the beginning of a better collaborative effort in dealing with a phenomenon which may prove to be fundamental to both life and evolution.

Specifically, what we wish to address here is the issue of interference: what determines which of the available information in a network of experimental participants (principal investigator, subjects, experimental animals or other human subjects, etc) reaches the target and comes to dominate the outcome? Whether we are talking about remote viewing or placebo drug trials or healing studies on cancer-inoculated mice, we are dealing with a network of multiple conscious entities, each with its own beliefs, intentions and expectations, all joined together with a common purpose. How does information travel across such a network and what degree of control is achievable over this dynamic? How does meaning (hence emotional impact) emerge as a function of correlations and intent alignment (see McMoneagle discussion below)? How can we begin to isolate or quantify the impact of emotional significance, inter-participant bonding, expectation, attention and conscious intent (see Buchanan, 2003)? Are PK effects on the physical world additive – and to what degree? As Brian Millar and Adrian Parker have argued in recent papers (Millar 2012; Parker, 2013), experimenter expectation seems to be woven into the very fabric of psi – and indeed, knowing what we now know, it stands to reason that it should.

But is experimenter expectation *equally* significant in individual, bench top REG and field-REG/GCP* experiments; in external qigong healing and placebo-controlled drug trials; in remote viewing and group telepathy studies? What determines the overall information vector in a network of conscious entities – and how? This, we believe, is a question whose time has come.

*GCP: Global Consciousness Project

Question 1: What has your experience been with inadvertent information transmission in the context of remote viewing and telepathy? Specifically, are viewers susceptible to picking up the mental contents of analysts, taskers or other viewers, and which conditions are most likely to produce such “contamination”? Have you been able to identify conditions under which a tasker’s expectations came to dominate the data?

ANGELA SMITH: Telepathy has been well researched, validated, and even, ironically, quoted by skeptics to explain other anomalous phenomena. Within the remote viewing field telepathic overlay is an accepted fact and provision for dealing with it is provided in the protocols. However, it takes a skilled, well-trained and seasoned remote viewer to recognize and report such extraneous data.

As a viewer, there have been at least two occasions (once for a client, the other experimental) where I was accidentally provided with the wrong target coordinate but managed to access the correct data. During the client project, I noted in the session that “something felt wrong” with the coordinate but went ahead to access useable information for the client.

Telepathic overlay, in remote viewing, can result from inadequate client/customer/analyst education, from excessive frontloading, tasking viewers beyond their skill level, working with “sensitive” viewers, performance anxiety (fear of failure, fear of success), and group projects. It is my experience that group tasking, even under “blind” conditions, may increase the potential for telepathic overlay. This can actually prove to be a positive in group applications work.

I don’t usually consider telepathic overlay “contamination” unless it is in the context of training or in experimental situations. The goal of remote viewing applications work is to access new and unknown data and a skilled, trained, and practiced viewer will aim for that and learn to recognize and utilize telepathic overlay.

In my opinion, conditions such as “blind tasking” and “incognito viewers” have no place in applications work, where unknown information is sought. Such conditions might be necessary in experimental work and training but not in real-life projects. Doctors do not work “blind”, neither do the police: it should not be expected of remote viewers. The goal in application work is not to test the viewer for their accuracy (that should already have been done) but to apply their skills to solving real-time problems. In such cases,

telepathic overlay may be the vital link to solving a problem i.e. "seeing through the eyes" of a missing child to assess their location, circumstances, and condition.

LYN BUCHANAN *IA: What has your experience been with inadvertent information transmission in the context of remote viewing and telepathy? Specifically, are viewers susceptible to picking up the mental contents of analysts, taskers or other viewers, and ...* I have found this to be true, especially in classes where several people are learning the remote viewing process. For that reason, I always give each student a different target, rather than having them all work on a common target. In one class in Denver, though, we had 12 students, each sitting at different tables around the room, facing the wall. For some reason, every one of the students correctly identified the target which was given to the student next to him/her, and missed the target which was assigned.

Question 1B: *...which conditions are most likely to produce such "contamination"?* As mentioned above, the conditions which I have experienced as providing the most contamination are those where:

- a) multiple viewers are assigned the same target, (even in operational work, I will assign each viewer a different aspect of the task in order to prevent "telepathic overlay").
- b) viewers are told that another person will be working the same target. For example, if I tell a viewer that this question will also be worked by a viewer they highly respect, he/she has almost always produced data which is very much like that produced by the other viewer. If the viewer is told that a person they don't like or don't respect will also be working the same target, the information is most always different and even opposing to what the other viewer finds. When two viewers work the same target and each is kept ignorant of the other's participation, they are not as prone to produce as much contamination.

Question 1C: *Have you been able to identify conditions under which a tasker's expectations came to dominate the data?* I have seen the work of other viewing disciplines produce such contamination. In Controlled Remote Viewing, however, we try to always keep the viewer blind to the target and especially to the wishes of the customer (in operational CRV, this is the tasker).

MARTY ROSENBLATT The best example of "inadvertent information transmission" that I know about was reported in ["Precognitive Telepathy, Emotion, and Displacement"](#). This documented example illustrates the mystery of the communication of information between sub-consciousness and the conscious minds of two participants in a precognitive applications group. The two people involved had almost no contact before this precognitive telepathic event.

Consciousness appears to be the fundamental reality. The non-local subconscious reality entangles, in a complex fashion, with conscious reality in the space-time physical world. The tasker or experimenter viewpoint becomes less appropriate as we explore the basic manifestations of non-local consciousness. This appears to be especially true within precognitive consciousness.

There is a perception of "contamination" when the tasker receives information from remote viewers that is apparently not relevant, or perhaps apparently wrong. From the tasker's perspective, this is indeed contamination or noise. From the perspective of 'consciousness is the fundamental', there is no contamination and the RV information supplied makes perfect sense...but not to the tasker or the rest of us, yet. This viewpoint is important, I believe, because the subconscious dominates in precognitive tasks

and we can peek inside this mysterious consciousness universe. It is as if the tasker, viewer and others involved all have their subconscious minds entangled in the predictions to some degree.

We do not have the appropriate perspective on the "physics of non-local subconsciousness". Viewers have potential access, at the subconscious level, to all the mental and emotional contents of analysts, taskers and other viewers; the issue is communication between non-local subconsciousness and conscious minds.

This communication process is where expectation, intention, attention, attitudes and beliefs become dominant factors.

DAZ SMITH It's been my experience that I now believe that at times, in participating in remote viewing projects, I am only giving data across that the project tasker wants/expects and not information direct from any 'actual' target - in some kind of connectedness with all the people involved in the projects from taskers, to analysts, to people later viewing the results.

I also participated in a remote viewing project for HRVG whereby the actual target did not exist other than in the mind of the tasker - yet we ALL as participant remote viewers still described what felt like a real location (the imaginary target was a location, a dam with a whole village, people, trees and much more - but all this only existed in the mind of the tasker and none of it was real in any way) - we, as remote viewers ALL could not tell the difference and it was just as easy for us ALL to describe a target that existed as imagination as it was a real 'physical' target. This showed me that there is a lot going on here we still do not know.

KEAN HIN OOI Depending on the ability of the practitioner, generally it is rather easy for one to lose the focus unintentionally and pick up the wrong info (including the info of the tasker himself), particularly at the early stages of developing such ability. In nonlocal diagnosis or scanning, the condition of the patient is felt by the tasker.

Specifically, are viewers susceptible to picking up the mental contents of analysts, taskers or other viewers, and which conditions are most likely to produce such "contamination"? Again, it is the ability of the viewer to remain mindful and focused which is related to the mental and physical condition.

Have you been able to identify conditions under which a tasker's expectations came to dominate the data? Again, it depends on the ability of the viewer to remain mindful and focused.

ANNA ARAGNO Given the very short amount of time I have to compile my responses and, more importantly, the fact that I am not an experimentalist nor an expert in this field, nor am I as well read in this area of research as are all the other illustrious panelists, I will limit myself to offering some general comments that come directly from my experience practicing the psychoanalytic method.

Before addressing specific questions, as I go along, a few prefacing words:

Although our medium is language, and we practice through “dialogue”, the psychoanalytic method, which is concerned with identifying and interpreting *all* things unconscious (Ucs), is anything but, and far more, than *linguistic*. The dialogue generated by, a) a completely non-judgmental ‘listener’ whose *whole sensorium* bends towards *attuning* to the Ucs of, b) a freely associating ‘speaker’, who is asked to say “whatever comes to mind”, without censoring anything, and report dreams when they arise, produces what I have called a “*semantic field*” (Aragno 2008) that initiates and propels deeper and deeper connections at multiple levels of inter-action between the two interlocutors. Psychoanalysts are “biased listeners” only insofar as our interpretive pool of knowledge for *clinical* work is based on principles of psychic defenses, development, structure, and meaning. But these interpretive premises for clinical therapy do not extend into the investigation and meta-theoretical articulation of the many Ucs processes and phenomena that *regularly* and spontaneously arise in this ‘semantic field’. Our specialized attentional stance requires that we “reach into the other’s Ucs; the methodology invites research into *what happens between two (and more) people, at deeply Ucs levels of interaction*.”

A major tool in our *clinical work* has to do with human perception, at the experiential/emotional level, not ocular or visual, namely, the analysis of the ‘transference’. The present is experienced in *terms* of the past, and the Ucs subjective experience of childhood becomes projected onto the object/screen of the analyst. This unconscious ‘transfer’ or carry-over of entire dynamics but form a recent past also occurs in the triadic field of ‘supervision,’ where it is called “the parallel process”. Another, and probably *the most direct access* we have to the Ucs, is through the Dream, the “royal road” (Freud) or, as I have called it, the MRI of the deep Ucs!

In proceeding, then, I would like to offer these several premises: 1. That consciousness is *not* ‘conscious awareness,’ which requires a whole additional layer or level of *linguistic* reference within a *specific* semantic discourse (consciousness is not an “abstraction” but *becoming aware of some-thing*). On the other hand the “image,” may belong to a special class of “pre-conscious” awareness (I have called “morphic-sentience”). 2. That there are many *strata* of unconsciousness, each with its own “language of signification”, so to speak, incomprehensible unless we are equipped with a dictionary *for that form*, and that the process of *manifesting* or *giving form* (and perceiving it) is unpredictable, complex, contingent on, and steeped in, microgenetic semiotic phases through a *specific* medium. 3. That while “meaning makes sense” (as Proff. P. Bouissar put it) in psychoanalysis we observe, rather, that *senses make meaning*... dreams are a composite of emotional and sensory experiences, compiled in highly condensed and displaced ways. We have yet to comprehend the full potential range of the human sensorium at Ucs. levels. And, 4. That, in my opinion, we ought to be talking less about “information” *per se* (since it is *so* fluid and semiotically organized) and more about different forms, or formulations of *meaning*, more specifically, about ideas or experiences that are endowed with *emotional-meaning*, which are transmitted and received via attunement at deeply *unconscious* levels of connection between people.

Now to the questions:

1-6. The two orienting themes “Experimenter effect” and “Increase in Placebo effect.” Since I have no experience whatsoever in controlled experiments of this kind and our dialogue is specifically kept free of all and any judgment *or* expectation, I would turn the question on its head and look at the subject, specifically at the phenomenon of *Ucs transference* of the subject towards his role (and of the experimenter, to *his* role) in relation to both the situation *and* to the real/fantasied/projected/imagined attitude and expectations of both. Precisely because it is a contrived situation the Ucs dynamics between two *specific* people generates an extremely complex motivationally muddled field with respect to intent and delivery, prone to much Ucs interference.

Question 2: In remote viewing, displacement is defined as the correct description of the wrong target. This could be another photo in the target pool, the mental images of the analyst evaluating the session data against the possible targets or an unusual word the viewer may hear in the near future. What factors do you find contribute the most to the likelihood of displacement in a remote viewing session? How does emotional impact or survival relevance (of target vs. displacement site) enter this dynamic?

LYN BUCHANAN I have tried to track such "displacement" conditions, and find that a very large part of it happens due to the individual interests of the viewer. That is, a viewer will "jump" to a more interesting target. However, in keeping records, I have also seen another very significant factor that might even play a stronger role. Those findings have brought about an answer to the question of, "What is the default time frame a viewer will view?" The records seem to show a 3-part rule that:

- a) "The default time frame in which a viewer will view the target is at the present time (at the target)."
- b) "But, if there is a 'temporal attractor', the viewer will default to that time frame." (A 'temporal attractor' is the time at which any strong or emotional event happened or will happen at the target site. Even the moment the feedback picture was taken can act as a 'temporal attractor', if the viewing is going to be judged by how accurately the session matches the feedback picture. An example of this is that it is extremely difficult for a viewer to view Pearl Harbor the day >>before<< the attack. They will be attracted to the attack, every time.)
- c) "If there are more than one 'temporal attractors' at the target, the viewer will be drawn to the strongest."

MARTY ROSENBLATT Displacement is, perhaps, the most revealing form of contamination. The viewer's subconscious mind (aka, the sub) seems to "purposefully" provide the wrong data sometimes. Add to this the precognitive work of Daryl Bem that shows the sub is "attracted" to some targets and

repelled by others, and **'the sub has a personality and a mind of its own'** is becoming a persuasive point of view.

The personality- psyche-spirit- belief system of the viewer seems to be the "translator" between his/her non-local sub and his/her conscious mind. Displacement may be the result of translation issues involving translating conscious mind thoughts-emotions-intentions-etc to the sub, and/or vice versa.

Hypotheses abound for "reasons" for displacement. My favorite is that the sub is purposefully working to teach the conscious mind how to improve the translator mind...yes, there are a lot of "minds" around. I believe this viewpoint is valuable and appropriate. The conscious, sub, and translator minds are meaningful constructs and thus exist in the universe of consciousness.

Most of us have strong survival instincts, and thus it makes sense that there would be a "survival relevance" in at least the translator and conscious minds, which would be well-known to the sub (submerged mind).

There is a relationship with emotions in ARV work. We see it quite often in two ways. First, when we teach ARV with self-judging and a viewer gets very excited about good matches, that match is often a miss. Secondly, when we let the viewer, who has been independently judged, know they had a miss because of displacement, they very often don't care about the miss; they get very excited/happy that they produced a great match with the wrong photosite and are therefore psychic.

ANGELA SMITH Displacement and the Target Pool Effect are very common in remote viewing training and research. For example, a student describes a dish of lush, red strawberries; the smell, taste, appearance, and textures of the fruit. However, that is not her current picture target, but the one she receives next from a pool of potential targets. There are many such examples.

A significant factor that contributes to displacement in remote viewing is poorly managed data pools with an inadequate mix of "high impact" and "low impact" emotional valence targets. Expectation is also a major factor in remote viewing displacement. For example, I have participated in projects where I knew the taskers' expectations i.e. having a vested interest in certain outcomes. Such information could have a huge effect on viewer performance. However, "setting aside" those expectations prior to the session can help towards negating its effects.

DAZ SMITH I have encountered this. I believe and it's been shown that the intent of the person managing the project - the tasker and what they expect to receive back - is very important and if confused or linked to more than one target/thinking about more than one target as in the case of ARV projects - then this is transferred in the RV process in the telepathic link between all involved.

Again like question 1 - from experience it appears as if desire/intent/need from the target tasker is key (leader) in this process.

KEAN HIN OOI When one gets emotional, his ability to remain mindful and focused will drop substantially.

Question 3: Does it seem to you that human consciousness appears to have a higher affinity for other minds than for inanimate targets? In other words – is there a natural tendency for the mind to seek available conscious information about a target at the expense of probing the physical target itself?

MARTY ROSENBLATT "Probing the physical target itself" is done with consciousness. What we know of "inanimate targets" is what consciousness has observed; we then make inferences and generate physics-math models for similar targets.

Affinity is an important consciousness issue closely related, I believe, to the vibrational entanglement of all "things" within conscious awareness. As soon as you believe there is a separation of one "thing" from everything else, you have automatically created an entanglement between that one thing and everything else. Similarly, if you believe there is a separation of one "thing" from a second "thing", you have automatically created an entanglement between those two things, etc. There is a kind of consciousness **"Entanglement Energy (EE)" involved in forming and maintaining separation of things - a thing is any construct that has meaning to consciousness.**

We have an objective physical world which demonstrates that many things are organized in the same fashion among humans. We seem to agree mostly on physical things that can interact with our physical senses. However, beliefs and emotions about all things appear to be unique within individual conscious and subconscious minds. The attraction or affinity between things may be like a **Consciousness Force**, CF_{ij} , connecting any two things, i and j . CF_{ij} could be envisioned as being related to the **Entanglement Energy** (EE_{ij}) through a **Consciousness-Distance** (CD_{ij}) ... separation takes "work" and provides "potential energy". We assume EE_{ii} ($j = i$) is a minimum for each i ; this minimum is probably not equal to zero and may be Heisenberg/ZPE related.

Let's look at one human being as a thing with $i = I$. This individual has essentially an infinite number of EE_{Ij} since j includes all things in the physical and non-physical universe. What might be things, j , having low vs. high EE_{Ij} ? Perhaps those things we call instinctual have low EE_{Ij} since they are "so close" to our being human. Perhaps psychological "things" with great positive or negative emotion tend to have large EE_{Ij} .

Within one human, I , there are a very large number of things that the human has directly experienced in the physical world, let's use J to label these conscious experiences. Let's call the associated entanglement energies, EE_{IJ} , the associated forces CF_{IJ} , and the "distance" CD_{IJ} . For example, $J =$ a traumatic experience, is expected to have a high EE_{IJ} compared to $J =$ a daily drive to work. The associated CF_{IJ} force is expected to be much higher and the CD_{IJ} distance much lower for the traumatic experience compared to a daily drive.

This example leads to the idea that an affinity is directly related to the Consciousness Force and current Entanglement Energy and Consciousness Distance. However, there is another important factor which could be called a **Shielding Factor** (SF_{IJ}). For example, after a traumatic experience, the person will try

to forget the incident - to put a shield up to protect the conscious mind from re-experiencing the trauma. However, as soon as something similar comes into his/her consciousness, the shield is weakened and the strong attraction-affinity Force and Energy of the trauma become conscious again.

In any model of consciousness and the conscious mind, I believe we will have to somehow include the concepts of: Entanglement Energy, Consciousness Force, Consciousness Distance and Shielding Factor. Furthermore, the variables we use should now include word concepts; e.g., for forces, words like: survival instincts, sexual urges, and happiness.

Entanglement Energy may be like a binding/cohesive potential energy at the ZPE/consciousness interface. I can envision a word-oriented complex model being used to explore these ideas. The basic i,j elements would now be very general things, like experiences. The model would have to estimate what things are similar, what things have an affinity, etc. Current physical-based models don't appear to have the link with the primary forces involved in human consciousness. The model will probably not be a usual physics math-based model. It may be a complex word-based computer model, with fuzzy quantitative logic.

DAZ SMITH I'm not convinced I ever go to the 'physical' targets. It's more like I just have access to information on what the smells, tastes, textures and so on should be - without actual physical sensation of these. When I write down 'the target feel hard, slippery, cold and metallic' I don't actually feel these in any way – I just instinctively know what the correct thing to write is.

ANGELA SMITH Everything has importance and a viewer can just as likely access information about an object, location, or structure as they can about an event or an individual. However, tasking is important: if a viewer is tasked only to access a location they may ignore data about an individual or group that might be vital.

In addition: some RV training creates a huge expectation effect. Students trained to only access data about objects, structures, and locations will be at a disadvantage when tasked with global applications work that includes individuals and events.

LYN BUCHANAN *Question 3A: Does it seem to you that human consciousness appears to have a higher affinity for other minds than for inanimate targets?* Rupert Sheldrake's term "morphic resonance" not only indicates that there is such an affinity, but that the strength of it depends a lot on the "morphic" part. That is, we tend to pick up on the thoughts, feelings, etc. of other humans better than we do those of a cat, slug, clam, spider, etc. The most distant morphic thing to resonate with, then, would be something like a bolt, brick, rock, etc. Many people like to, say, hold an object which belonged to a person and get information from it. Having watch hundreds of viewers as they work and seeing their micromovements, reactions, etc., it has become my personal belief that the people who say they are getting information from the objects are only using that object as a mental focusing tool to access the person back in time, and are actually getting the information from the person, instead.

Question 3B: In other words – is there a natural tendency for the mind to seek available conscious information about a target at the expense of probing the physical target itself? I believe that is the case, yes. That does not mean that information cannot be gotten from objects. Your question was about the

"natural tendency", and I believe that such is our first and most natural tendency, since such an information path resonates morphically and is therefore so much easier.

KEAN HIN OOI *Does it seem to you that human consciousness appears to have a higher affinity for other minds than for inanimate targets?*

Yes, it is relatively easy to detect the lesion of a patient but it is difficult to perceive the crack line of a piece of rock.

In other words – is there a natural tendency for the mind to seek available conscious information about a target at the expense of probing the physical target itself?

Difficult to answer... some find it easy to perceive the physical condition of a patient, some find it easy to perceive the emotional condition of a patient. Perceiving the thinking (item on the mind, for instance one of the 3 cards picked) of a person might be easier but perceiving the changing thought of a person is highly difficult.

ANNA ARAGNO It appears to me that the human *unconscious* responds to and generates meaningful “forms” according to the *quality* of relationship, intention, attention, and natural sensory proclivities to particular media that are given naturally by temperament. (some will pick up color, others shapes, others words... but all pertain to *meaning correlations*).

Question 4: Are there ways in which you as a viewer can differentiate between the two types of information, or ways in which one can manipulate the tasking/probing of a coordinate to minimize this issue?

LYN BUCHANAN Fortunately, the CRV (Controlled Remote Viewing) process has many such "tools" built into it to do just that. And yes, with much experience, an almost natural awareness develops because of those very "tools" which tends to alert the viewer to such pollution.

ANGELA SMITH: Not all remote viewers come into the field from a naïve background. For example, I had decades of personal experience with Out-of-Body Experience (OBE) work prior to becoming trained in RV. Rather than seeing this as a disadvantage, it has actually created an ability to merge the two disciplines in creative ways. As an OBEer I can often recognize when I am not “on signal line.” In RV, the viewer is trained and expected to “access the signal line” coming from “the matrix” rather than being allowed global access to the data. To take advantage of this, I cross-train remote viewers in several different RV methods, (including telepathy and bi-location), that allow greater access to the data. Viewers learn to actively make use of telepathic overlay and to recognize when tasking creates a problem.

MARTY ROSENBLATT Reporting what you, as a viewer, receive from the sub is always the viewer's responsibility, and during a session, I don't believe the viewers should think or worry about affinities or displacement. "Set aside" those thoughts, issues, and/or feelings.

As a tasker (I now prefer to think of this role as a facilitator), I use redundancy, e.g. multiple viewers. I also use two coordinates one on each "side" of a 1ARV binary prediction.

BRIAN MILLAR RV, almost alone in current research, uses highly selected Subjects. It is reasonable to expect, that compared to work using unselected Subjects, considerably more of any Psi measured is due to the Subject, relatively uncontaminated by leakage from Experimenter and other participants.

The Observational Theories (OTs) differ sharply from more conventional ideas in that the real Psi interaction occurs with feedback, not at the guessing stage: the mentation is influenced by the FUTURE Observation of targets. Because on the conventional wisdom the experiment is over once the mentation is recorded little attention has been accorded to the details of feedback and many variants have been adopted.

The most psychologically impressive is probably taking the S to the target site and letting him look around for himself. Since he has to travel via surrounding territory to get there his eye may be attracted to conspicuous features in the vicinity and this functions as (false) feedback. The OTs suggest that RV spills over into areas adjacent to the target proper due to this feature of feedback presentation rather than any inherent property of RV. If this is so then taking S to the target site in a closed vehicle should eliminate this kind of displacement.

The feedback set-up in which all potential targets are visited (blind) by S is similar. On OT, elements of Non-Target sites will likewise be incorporated into earlier mentation in addition to the actual Target. Such displacement may be expected too with other free response methods using a target pool, such as the Ganzfeld.

According to the OTs, during the "viewing" itself there is nothing paranormal going on. The Remote Viewer acts as "Random Mentation Generator" (RMG) and can in principle be replaced by an appropriately programmed computer/RG. The RMG can be played upon not only by the (future) RVer himself but by any Psi-gifted participant who gets future feedback of the targets. It lies beyond the scope of this note to go into all the combinations that can be played out but the OTs suggest two general recommendations:

- 1) Eliminate extraneous humans wherever possible and select support personnel who turn out to color the results least (especially no Psi-gifted other than the RVer).
 - 2) The feedback given to each participant should be specified explicitly in the experimental protocol.
- According to the OTs it may prove possible to determine the contribution of each Observer by suitable manipulation of his feedback.

Because on the OTs the "origin" of the Psi effect lies in the future any temporary glitch in the experimental procedure (so long as it is corrected before feedback) has no influence on the results. Schmidt described McMoneagle's "magical cord" as the "teleology" of the OTs.

Question 5: Can you please comment on the following statements made by Joe McMoneagle:

- A. *"There are hundreds of examples from fifteen years of remote viewing that point to this truth. Coordinates have been incorrectly read, but the target rightly described; the spelling of a target's name is wrong, but the information is correct about the targeted individual; the*

system breaks down at the last minute and a target envelope isn't put where it is expected to be, but the description of the target is accurate anyway; and there are many other examples. Intent appears to be a sort of magical cord which strings all the elements together; it's what makes the remote viewing effort work." (McMoneagle 1997, p 136)

ANGELA SMITH I totally agree: having experienced this too.

MARTY ROSENBLATT Yes, we have many examples as well. Clear crisp intent is key at both the conscious and subconscious levels. Sometimes, the subconscious mind appears to have intentions which are not always in sync with the conscious mind. One of the challenges in ARV is to bring these intentions more and more into sync...this is perhaps the primary challenge facing ARV viewers.

LYN BUCHANAN It is my feeling that this is an extreme over-simplification of the very complex set of problems involved in the seemingly-simple act of the viewer "getting the target". It completely ignores the problems of "telepathic overlay" (picking up on other viewers' work). No tasker worth his/her salt would ever intend for a viewer to simply parrot another viewer's work. It doesn't take into consideration viewers personal histories and/or preferences, which often make them avoid one target but be attracted to another. It ignores a myriad of other problems which occur. Besides that, when a viewer "goes operational", he/she had better be well trained and self-disciplined enough to "get the target" in spite of any bias the tasker, monitor, customer, or anyone else has. In an answer I wrote once to someone's question about this, I wrote that the viewer will tend to view what the viewer wants most. If that is to please the tasker, then that is what he/she will get. If that is to avoid the target or to view a more pleasant target, then he/she will. But if what the viewer wants most of all - more than pleasing anyone - more than satisfying inner desires - whatever - if what the viewer wants is the truth, then that is what he/she will find, no matter what anyone else's intentions may be. In short, it is the viewer's intent, not the tasker's, that makes the difference.

DAZ SMITH I generally don't use coordinates given to me by clients and project managers - they aren't needed - I just use the date of the day I do my RV session - the data seems to mostly still work and be accurate. It's like the moment the tasker thinks and adds their 'intent' to a target - it's set, no coordinates are needed: it's something that can be connected to.

KEAN HIN OOI It has long been reported in qigong literatures, it is the intent of the practitioner that brings the perception.

B. *"Someone who understands what they are doing and understands how RV probably works - feedback or when it is provided is not as important. In fact, it is not even necessary."*(Sidorov 2003b)

LYN BUCHANAN I agree.

DAZ SMITH I have now started to amass a large body of work for paying clients and most of these are very scant with their feedback provided to me. This doesn't seem to have had any effect on the quality of remote viewing. In the early years of a remote viewer's life, feedback is critical to development of confidence in what they record as data and confirmation, but in the later years of a viewer's development it doesn't appear necessary at all to the RV process. It appears that the source of the information received by viewers in the RV process is not dependant on nor comes

primarily from the feedback. This was also shown in early SRI RV work which determined that the feedback and quality of the feedback had no impact on the quality of the remote viewing being done in the laboratory. (A good source of info on this subject is: "Feedback Considerations in Anomalous Cognition Experiments" by Edwin C May, Nevin Lantz and Tom Piantineda (Stargate Archives)).

MARTY ROSENBLATT While feedback is not always necessary, it can be quite helpful. In all forms of precognition, including ARV, consider the fact that there must be feedback to know whether there is a hit or not. Perhaps the analyst or tasker is the only one who must know this directly at the conscious-now level; however in our non-local world, the viewer also knows about the feedback "someplace" within his/her subconscious.

ANGELA SMITH I disagree. Feedback is important to the viewer, particularly to an inexperienced viewer. If a novice archery student shot at a target and was never allowed to see the bulls-eye or where their arrows landed, they would take much longer to become an accurate and true archer. Feedback creates a necessary success- failure - loop that refines later effort. Admittedly, there are some projects where client confidentiality, topic sensitivity, or the need to re-task at a later date that exclude feedback. Feedback should be provided to the viewer when available.

KEAN HIN OOI Very true.

- C. *"The best way to improve signal line (if there really is such a an animal, which I'm more and more inclined to doubt), is purifying intent and expectation regarding focus on a specific target of interest [...]. Information in its own right exists within each of our universes because that is what we need to operate. It is mutually exclusive to all other universes. Our assumption, which may be incorrect from the outset, is that everyone's universes mix - which they probably do not. There is only an illusion that what I know is what you know and so forth and so on. Therefore, everything that I will ever have to know is already extent within my sealed universe (of experiences), and therefore resides within my own knowledge base. I have simply to disregard the necessity for a belief in space/time in order to access correct information anywhere within my universe. Something easily done, if one is willing to give up certain concepts regarding reality."*(Sidorov, 2003b)

MARTY ROSENBLATT Yes to giving up, at least temporarily, a belief in space/time as being particularly important. This is the concept of the "eternal now", or "all separation is an illusion", etc. These ideas have been around for as long as we have records. We appear to be on the threshold of applying these ideas in a purposeful fashion throughout society...that's a consciousness paradigm shift!

DAZ SMITH I believe it's best to get a statement down on paper from the project tasker on their intent behind the project - what they expect to get in the results, and so on; then to, over time, check this against results for patterns. I'm convinced the RV mechanism is at first telepathy with all people connected in each experiment, then something else.

LYN BUCHANAN I couldn't disagree more. We are born alone and we die alone. In between, even when there is no one else within miles, we are never alone. This science we are studying proves that to be true more than any other thing I've ever found.

ANGELA SMITH In my current incarnation as an ordained shamanic minister, this has added a whole new dimension(s) to my RV skills. While I respect the efforts of orthodox remote viewing trainers, practitioners and researchers to keep RV clinical and scientific, they often ignore remote viewing's humble background.

“As observed in the laboratory, the basic phenomenon appears to cover a range of subjective experiences variously referred to in the literature as autoscapy (in the medical literature); exteriorization or dissociation (psychological literature); simple clairvoyance; traveling clairvoyance or out-of-body experience (parapsychology literature); or astral projection (occult literature). We choose the term ‘remote viewing’ as a neutral descriptive term, free from prior associations and bias as to mechanism.” *Puthoff, H.E., & Targ, R. (1976). A perceptual channel for information transfer over kilometer distances: Historical perspective and recent research. Proceedings of the IEEE, 64, 329-354.*

Remote viewing has since become both over-simplified (in terms of definition and training) and complicated (in terms of interpretation and application) since those early years. What began as a series of very successful and exciting RV experiments, has now evolved into a pseudo-religious divergence of belief, and opinion that is divisive and alienating.

I agree with the statement “I have simply to disregard the necessity for a belief in space/time in order to access correct information anywhere within my universe. Something easily done, if one is willing to give up certain concepts regarding reality.”(Sidorov, 2003b).

The current problem is that with each RV trainer/researcher claiming that their definition of RV is correct and anything else is “not remote viewing”, the current situation will not allow progress. RV will continue to function as a very limited, little known, and under-appreciated skill.

ANNA ARAGNO About “purifying intent”... an almost inhuman feat, probably an impossibility. Too many Ucs crosscurrents.

KEAN HIN OOI This is what Guanzi (qigong master) said more than 2000 years ago. “Think, keep thinking, as if ghosts and gods will inform, not the (work) of the ghosts and gods but the extreme of qi.”

ULRICH MOHRHOFF There is no such thing as an individual's sealed universe (of experiences) or an individual's own knowledge base. We are the very opposite of Leibnizean monads. What is illusory is the impression of being a separate entity sealed off from the rest of the world. According to Indian metaphysics (which does know a thing or two about these matters) this illusion is created by a tool of universal Nature termed *ahankara* meaning ego- or I-maker. A glimpse behind the screen by which our subliminal self is sealed off from our waking surface consciousness reveals that we are more like a public square with thoughts entering from all sides — universal thought currents, thoughts created or relayed by other inhabitants not only of this

world but also of supraphysical planes of existence (which are frames for different kinds of experience). Everything that I will ever know is indeed present in my subliminal consciousness, but this is because the deeper I probe it, the more universal it gets. McMoneagle is of course right that belief in space/time *as a separating factor* (which it is not) can be an obstacle.

Question 6: In your working model of RV, does the viewer connect with the physical target, with the viewer's future knowledge (feedback) about the target, or with the world's overall knowledge of the target (i.e. summing over tasker, monitor, analyst, end-user and other conscious beings' awareness of the target, weighted for conscious and unconscious connection with the viewer)? If you never get feedback on a target, then is it possible to correctly describe it – and what is that knowledge based on: does the mind probe a physical substance, or does it connect with a cognitive representation of the target, an “intelligence” intrinsic in all material objects, as Wheeler came to believe toward the end of his life? (Weinberg, 1992 p. 251)

MARTY ROSENBLATT In my working model of RV, the viewer is potentially an almost-infinite being, just like many titles of many books in the field, e.g., "Limitless Mind" by Russell Targ, or "Opening to the Infinite" by Stephan Schwartz. The viewer is a very advanced quantum computer with full non-local access to any thing via the subconscious.

At the subconscious level, the viewer-target connections include all the choices you suggest and more; the key issue concerns the elusive "weighted connections". These viewer-target connections are subjective to each viewer and are directly related, IMO, to the entanglement energy, forces, distance and shielding discussed in Question 3. The sub has all the information about the target - all conscious non-local connections/entanglements with the target and with similar targets. This info is in a Universe of Collective Consciousness (UCC). What specific information reaches the viewer's conscious mind is determined by the viewer's translator mind - that part of the viewer that delivers subconscious information to the conscious mind.

When viewed via linear time, a physical target appears as a separate thing in our life. And yet, it is not truly separate from us at all. A cognitive representation of any material object is part of its UCC representation; however, I believe that emotional entanglements and belief-system entanglements are also important representations for all things.

All we ever know about any physical thing is our conscious interactions/observations and mathematical models concerning our observations. The physics-math space-time models concerning physical things are rather amazingly accurate in predicting the behavior of physical things. In remote viewing, and especially obvious in precognition, a physical target exists only as an information symbol/depository for all its entangled consciousness representations.

ANGELA SMITH My working model of RV is a global one: that is I am, as the viewer, a necessary part of the whole dynamic: not just to passively receive information but to probe, visit, question, access, explore, investigate, and be an active participant in the process.

I also accept that this global environment includes any tasker, manager, viewers, analysts, clients and customers. My job as the viewer is to access the correct tasking, use whatever minimal frontloading is provided, and seek new, unknown, and useful information about a project.

In my global model, the viewer is a multi-dimensional being, outside the restraints of time and space, and capable of accessing information that would normally not be accessible to ordinary means of inquiry. The global model allows for the fact that the viewer can access the physical target, at multiple time points, as well as through some information base i.e. "Akashic Record". I don't believe that remote viewing has to be an either/or model!

Yes, it is possible to correctly describe a target, even if feedback is not available. If the act of viewing is outside of conventional time and space – it does not matter when and where feedback occurs. There have been projects where I have waited decades for feedback: there does not seem to be a perceived correlation in terms of correct information with the availability (or lack of) feedback.

LYN BUCHANAN *Question 6A: In your working model of RV, does the viewer connect with the physical target, with the viewer's future knowledge (feedback) about the target, or with the world's overall knowledge of the target (i.e. summing over tasker, monitor, analyst, end-user and other conscious beings' awareness of the target, weighted for conscious and unconscious connection with the viewer)?*
Yes. (sooner or later, to all of the above)

Question 6B: If you never get feedback on a target, then is it possible to correctly describe it? Yes. This has been proven many, many times.

Question 6C: – and what is that knowledge based on: does the mind probe a physical substance, or does it connect with a cognitive representation of the target, an "intelligence" intrinsic in all material objects, as Wheeler came to believe toward the end of his life? (Weinberg, 1992 p. 251) I've had people tell me all kinds of personal beliefs about where the information comes from, and they cling to these beliefs as though they were the last floating thing in a vast, unruly ocean. They seem to believe that if they let their grasp slip from those beliefs, they will surely drown. I always thank them for the information and go on. I get asked that question a lot by radio interviewers: "Where does the information come from?" My answer is always the same - that I not only don't know, but I don't really care. My remote viewing work is based not in the lab, but in the hard and cold real world. If a viewer can help me bring home even one missing child or missing soldier, get a criminal off the street, provide a company with the information they need to succeed, diagnose an illness correctly or even find someone's missing cat - then I don't care what he/she believes about it. Believe whatever you will - just get to work and do something good with it.

DAZ SMITH *In your working model of RV, does the viewer connect with the physical target, with the viewer's future knowledge (feedback) about the target, or with the world's overall knowledge of the target (i.e. summing over tasker, monitor, analyst, end-user and other conscious beings' awareness of the target, weighted for conscious and unconscious connection with the viewer)?* It could be any or all of these and more, or even just information from the tasker and anyone they've had contact with about the target down the chain?

If you never get feedback on a target, then is it possible to correctly describe it – and what is that knowledge based on: does the mind probe a physical substance, or does it connect with a cognitive representation of the target, an "intelligence" intrinsic in all material objects, as Wheeler came to believe toward the end of his life? (Weinberg, 1992 p. 251) It seems so – I've had clients come back to

me and say 'yes you were very accurate' yet not tell me what the target was or how, where and why I was accurate.

ANNA ARAGNO The mind picks up correlate resonances of a *significant human situation and state*. How deeply felt the correlation is, is manifest by the closeness and precision of the represented imagery. This may also be archetypal, in the sense of universal human experiences. But there are no predictable markers as to who, or when, this will occur, in fact unpredictability is the norm.

KEAN HIN OOI Yes, the viewer connects with the physical target. The mind will pick up the information of the subject. For a patient, it could be 2 aspects: physical condition and mental/emotional condition. For a space (a house normally for fengshui screening) it is also the information too. There is no intelligence, just information – it could be positive (calming info from a church) or negative (anger and sadness from a mortuary). Such information has no initiative or subjectivity.

Question 7: The PEAR lab found that emotionally bonded pairs of participants achieved PK effects approximately 7 times greater than the typical REG benchmark (Jahn and Dunne, 2005). Corroborating decades of individual REG trial results (Jahn and Dune 2011, 2012), the field-REG data also indicates (Nelson et. al, 1998) that certain conditions are more conducive to significant effects on random event generators during shared group events – such as:

1. Group resonance, particularly in emotionally meaningful contexts;
2. High ratios of subjective to objective, or emotional to intellectual contents;
3. Relatively profound personal involvement, especially if shared in a group;
4. Deeply engrossing, fully interactive communication;
5. Situations or sites that are spiritually engaging;
6. Circumstances that evoke a sense of fun and humor;
7. Activities that are intensely creative, and
8. Freshness or novelty for participants.

Have you had any experience with more than one operator focusing on a given target? Are PK/healing effects additive and to what degree? How would you create the conditions for such amplified group healing effort?

ROGER NELSON The PEAR lab did a small number of experiments with more than one operator focusing on one target. Most involved two operators attempting the standard REG task, to increase high numbers or low numbers on instruction. Some pairs were “bonded” couples, married or in other long term close relationships. Others were not bonded. Only the former produced stronger effects than the individuals had shown. Some of the points derived from the FieldREG research seem relevant, particularly numbers 1, 3, 4, and 8. These experiments were a new experience (8) and promoted a richer interaction (4). They required focus on the interconnection or resonance of the pair and this tended to produce interactions in the pair (1 and 4). For me, the most important point, borne out by the bonded pair results, is that the close and functional interaction practiced for years by the pair could be and probably was a model for the interaction asked for by the experiments. By including a third member, the REG, in

an already effective interaction, the bond defining the couple could be extended to effect the desired interaction.

This is, of course, purely speculative but fits the descriptive facts. It is also consistent with a field-like model, which is one promising general approach to an explanatory framework for psi effects.

MARGARET MOGA In addition to random event generators, low-frequency (0-60 Hz) magnetometers can also detect group fields (Moga and Bengston, 2010; Moga and Geib, 2009). Bache (2008) has noted that strong group fields are created when there is, “collective intention focused in an emotionally engaging group project... of sustained duration”. In our studies of magnetic field oscillations during either individual or group bioenergetic activities, we have observed that ‘sustained duration’ is very important. Magnetic field oscillations begin about 15-20 minutes into the individual or group session, and then, depending on intensity, may persist for several hours in the practice space.

HIDEYUKI KOKUBO I have not tested bio-PK/healing under such conditions. However, through our quantitative studies on magnitude of controlled healing power, I suppose that healing effects will be cancelled mutually in general if several healers do healing on the same target simultaneously.

The first reason is the spatial distribution of bio-PK power generated around a healer during a trial (Kokubo, 2013). It is a wave-like distribution which has positive/negative areas, and its phase and wave length is different by trials and by healers. It is not easy for healers to control the details of their distributions of bio-PK power. Waves will be denied mutually if they are averaged at random. Therefore, the average of magnitude of bio-PK power is considered to become small theoretically if healers emit their power to the same target without fine adjustment of their power.

The second reason is that some healing ways have different mechanisms (Kokubo, Usui, Shimahara et al, 2013). Bio-PK (healing) phenomena are considered to have several different mechanisms because a bio-sensor shows specific patterns of responses for some types of healing. Those types of healing are competitive or inhibitive for each other in final effects (Now I am preparing a paper about competition/inhibition among some types of healing ways). Although healers use several ways/techniques during a trial usually, they do not seem to be aware of the differences of mechanisms. I suppose that the results of simultaneous healing tests are instable and the average of results is smaller than our expectation until we understand the details of differences among healing ways/techniques in future.

Above discussions are limited on bio-PK. I consider that there are several unknown factors in psi phenomena and those factors follow to their own physical laws. However, I don't know whether the detected “unknown factor” by a bio-sensor is the same as the “unknown factor” detected by a RNG.

LYN BUCHANAN *Question 7A: Have you had any experience with more than one operator focusing on a given target? Yes. Many.*

Question 7B: Are PK/healing effects additive... That has been my experience, yes.

Question 7C: *and to what degree?* I can't quantify it, since I don't do either research or detailed data collection on such things. So sorry, I am not qualified to answer that question. I do know, however, that it can be used as a tool.

Question 7D: *How would you create the conditions for such amplified group healing effort?*

a) by using large groups to do the work.

b) In the military unit we did an experiment once, where a viewer, D. L., was given the target of a tennis match. When she and her monitor went over to do the session, our director handed me a picture of sailors on an aircraft carrier, lounging on deck in the sunshine during a quiet lull in the action. He told me to, "Access D.L. and try to make her view this target instead of the one she is tasked to do." Neither she nor her monitor knew of this plan. The monitor had full >>intentions<< of her accessing her target well. When her session summary was turned in, the major part of her session had to do with airplanes, ships, people laying around doing nothing, etc.

MARTY ROSENBLATT: We regularly use multiple viewers to focus on a given RV target. We do it for redundancy reasons as well as keeping it more interesting with other people. We also believe it removes stress on any one viewer. We don't know to what degree the effects are additive, but we do feel multiple viewers is the right way to go for long-term ARV applications.

KEAN HIN OOI ... All the above bring better connections in a group, is it not?

Have you had any experience with more than one operator focusing on a given target?

This is common in Zhineng Qigong (ZQ). Healing can be done with group onto one person. A picture tells a thousand words (pictures taken on Nov 6, 1998.)

Creating EM wave with intent: http://www.youtube.com/watch?v=b46_uNboB4c

Dissolving tumor: http://www.youtube.com/watch?v=5m_ReyrgiLs

To us it is the same in prayer healing.

Are PK/healing effects additive and to what degree?

It is definitely additive and if the practitioners know how to create a qi field, then the effect is much stronger, 1+1 will be greater than 2. But the synergy produced is very difficult to measure (too many factors involved – mental condition, etc) or has yet to be measured.

How would you create the conditions for such amplified group healing effort?

In the creation of qi field (information field) the participants have to think unanimously. The order should be given by one person.

ANNA ARAGNO 7- I. Definitely true... 2.3. research from analytic groups show extraordinary Ucs connections formed fairly quickly through dreams and thematically in joint metaphors. 4. also very true. The group creates a safe envelope, within its own semantic field, in which

profound emotional experiences can take place. 7. Self-knowledge and the engaged investment in this shared activity is very creative.

Question 8: What approach do you find most successful in trying to establish a connection with the target? Do you focus on the target coordinate intently, do you think of any other network participant (such an involved analyst or tasker)? Are there certain cueing (target probing) techniques that seem to elicit more information, or physical preparation/ psychological strategies that seem to enhance target contact, such as meditation?

MARTY ROSENBLATT In doing ARV, I say the coordinate out loud at the beginning of the RV session and again at the beginning of the FeedBack session. This reinforces my intention to "move my sub" to the FeedBack session and describe/sketch the Target. The similar sound vibrations also increases the entanglement between the RV and FeedBack sessions acting as an "affinity beacon", perhaps.

HIDEYUKI KOKUBO Target probing is easy in our healing experiments at least now, because I have tested healing on approximate conditions only. The target is set on a table in front of a healer. The most important point is that a healer understands the target parameter which is measured after the healing trials. Healers sometimes misunderstand that healing effects are always detected if they do. But it is not correct. I measure only specific parameters of the target samples and I can not detect any effects if healers change other parameters. Therefore explanations are given to healers enough before experiments.

LYN BUCHANAN *Question 8A: What approach do you find most successful in trying to establish a connection with the target? Do you focus on the target coordinate intently, do you think of any other network participant (such an involved analyst or tasker)?* I trust my subconscious mind to follow the training it has gotten. I write the coordinates in order to a) make a record of which target I'm working and b) to get my pen moving so the ideogram is easier to make than it would be if my pen started from a dead standstill. After that, I neither remember nor worry about any of it. I have trained, practiced, and worked operationally for almost 30 years, now, and have learned in all that time that my subconscious mind knows what it's doing and will give me the correct information.

Question 8B: Are there certain cueing (target probing) techniques that seem to elicit more information, or physical preparation/ psychological strategies that seem to enhance target contact, such as meditation? No. In fact, I have found that a "cool down" before a session relaxes me and gives me a session that feels good, goes very smoothly, and seems to be the most accurate - but usually produces garbage as a result. I have found that when I want the best session, I mow the lawn, wash the car, do the session, clean the garage, etc., etc., etc. For me, if I do the session as just another of my daily tasks, I get my best results.

MARGARET MOGA During Healing Touch energy healing, practitioners are trained to detect abnormalities in the biofield while *moving* their hand or hands through the client's biofield. A clairvoyant image of the client's body is often obtained when the Healing Touch practitioner is *moving* "light" or

facilitating the movement of “light” into the body. Obstacles to the “light” become visible in the mind’s eye. Both of these “sensings” involve movement (physical or mental) within the area being sensed (i.e., the client’s body or biofield).

ANNA ARAGNO Free association. Premonitory and telepathic dreams occur completely spontaneously in the psychoanalytic situation, often from those who appear to be the *least* connected or in touch with themselves or the analyst, but always at intense or crisis-times for the analyst. I believe that the freer and looser the mind, the more will its own Ucs evocations be accessible to consciousness and the more easily will it pick up Ucs transmissions from others... this is why sleep is so propitious (and probably certain drugs like LSD) it has little or no inhibitory censors. Empathic-attunement and emotional resonance are identifiable factors facilitating these phenomena.

KEAN HIN OOI *What approach do you find most successful in trying to establish a connection with the target?* Creation of a qifield – consciously build a holistic entity with the target.

Do you focus on the target coordinate intently? Yes, and relaxingly, without losing the clarity of the mind.

Do you think of any other network participant (such an involved analyst or tasker)? No, unless they are also taking part in the external qi work.

Are there certain cueing (target probing) techniques that seem to elicit more information, or physical preparation/ psychological strategies that seem to enhance target contact, such as meditation? To be effective, one has to get into qigong state or meditative state.

ROGER NELSON My personal approach is not so interesting as the reports from many operators in the PEAR lab experiments. By far the most common description from people with considerable experience as operators in the mind-machine interaction (MMI) experiments as well as the remote perception experiments we did over the course of a quarter century is some variety of “getting out of the way”. We did not have a formal exit interview, but a standard part of the protocol was to talk about what happens, how it feels, and what insights the participation in these experiments produced. Most people reported a progression from trying hard, to relaxed effort, to simply allowing effects to accumulate, or images (RV) to develop. The mature recipe was, for our most accomplished operators, a rather simple process of setting the intent and then stepping back, trusting that the universe would provide. This “simple” process is in fact far from easy or natural, and was not something most people could do without practice. Indeed, fewer than half reported this as their experience, but it was most common in people with a healthy record of success in the experiments.

The lab environment was something we as experimenters thought important. From the beginning, great (but relaxed) effort was made to create a friendly, living room style in the PEAR lab. We considered the operators to be partners and friends, and spent as much time in personal conversation as in the experiments. All experiments were designed to allow operators to “do it how you can” rather than as we thought they should. The physical experiments were designed to take care of themselves, with safeguards to ensure correct operation and data recording. This relieved the operators and the experimenters from the

demands of “science” and created a freedom to just be with the experiment, expecting we all would learn from it. This isn't to say we excluded or avoided all the pressures and challenges presented by attempting to push scientific frontiers, but we did a good job, and the evidence indicates we were successful in many cases.

The following paragraph is relevant also to Question 9.

There is some indication in the long term data base of substantial changes, and this may offer some insight on a speculative level. Regrettably, I will not be able to give fine detail, but the general picture should be instructive. The REG data show three periods that are distinct. The first 3-4 years have a generally positive effect size which though small is highly significant. This is followed by a similar period with essentially null effect, and then by another period with about the same effect size as at the beginning. A cumulative deviation graph of the High – Low difference shows this in striking clarity.* One potential correlate stands out in my perception. As described earlier, we considered the lab environment to be an essential part of the experiment that could have a determinative effect on the results. We generally acted and felt like a family that included not only the lab personnel but the friends and colleagues who came to participate in the experiments. Most of the time we succeeded in dealing with the complexities of a close environment, but there were of course occasional disturbances. The period during which the effect size went to near zero corresponds with a time during which the “family” bonds were stressed in several ways. I believe that although it was mostly unconscious, our accustomed cooperative and collaborative energies were diverted and absorbed by interpersonal issues. This speculation is consistent with experimenter effects, but it is not clear whether it might best be interpreted as an ordinary conducive environmental frame for the operator's psi or as an effect (loss of effect) of experimenter psi.

*Jahn, et al. (2000) Mind Machine Interaction Consortium: PortREG Replication Experiments, Journal of Scientific Exploration, Vol. 14, No. 4, 499–555 (pp. 541)

Question 9: Both Dr. Solfvin and Dr. Modell have conducted remote influence studies (on animal models, respectively random event generators; Solfvin, 1982; Modell, 2012; also see <http://www.wholistichealingresearch.com/distanthealing.html>) in which participants' expectation seemed to dominate the outcome. In the first case, animal handlers were told that half of their assigned mice were inoculated with babesia and half with sterile saline, and that half of each group would receive remote healing influence from an accomplished healer. In reality, all mice were inoculated with the same dose of babesia, and there was no remote healer. In spite of this, significant differences were recorded between “inoculated” and “control” groups, as well as between “healer” and “control” mice – which, the paper concluded, could only be attributable to handlers' expectations. In Modell's study, where a random event generator (REG) was set up to arbitrarily shut off the power to another, sequence-recording REG, eventual loss of interest by the experimenters invariably resulted in the initially spectacular PK effect size dropping to non-significance levels.

Are you aware of similar experiments corroborating these results? Can you think of a way to isolate the experimenter expectation effect from the overall outcome? How significant do you think

experimenter expectations may be in mainstream clinical trials? Could a reduced level of emotional trepidation/ expectancy build-up on the part of principal investigators in post-marketing drug trials, when compared to pre-approval phase, mirror the steep decline noted with Modell's 2-REG experiments? What makes a system more susceptible to experimenter expectation?

BRIAN MILLAR My reading of the evidence is that the few very successful Experimenters (Type I) are people with strong Psi selected out of the general population in the course of the academic "survival of the fittest". Under strong Psi the CONTROLS built into a parapsychological experiment are blown wide open. The consequence of insufficient blinding on non-Psi experimental results is sufficiently known: the Experimenter generally gets the results he EXPECTS/HOPES. This "Pygmalion" (or Rosenthal) effect is well-known in psychology. Parker cites Johnson's DMT work as a salutary example in parapsychology.

An Experimenter (E) who obtains even a single significant experiment may reasonably begin to wonder whether he is a "Psi-suspect": for an E who obtains many such results the plot thickens. Consider a butler in whose service with several successive families the household silver mysteriously disappears. While circumstantial this is something which no conscientious investigator can ignore and I would be reluctant to employ such a butler. On the OTs Psi operates on the probabilities of chance events, so that every operation NOT pre-determined by the experimental design but instead left to chance is a potential locus for "unwanted" Psi. On the OTs it is, to say the least, foolhardy to have a "Psi suspect" conduct any selection operation in an experiment intended to register the Psi of OTHERS.

I am inclined to believe that almost the whole of parapsychology to date is little more than a series of idiosyncratic results due to particular Experimenters: Zener cards due to Rhine and associates, Sheep/Goat due to Schmeidler, RNG-PK due to Schmidt etc. It is virtually impossible for the gifted experimenter to avoid the insidious snare of this PSI-BASED artifact. In my view E-Psi Artifact (EPA) is so pervasive that it has derailed mainstream parapsychology and brought long-term stagnation to the field. To try to measure objectively what proportion of the effect is due to Experimenter and Subject I have recently published a number of OT-based "Forensic" tests (Millar, 2012): these have as yet to be put to practical use.

Does the "toy" domain of parapsychology have any relevance to the real world? If I am right about the strength and ubiquity of E-Psi artifact, many experiments in the purely psychological literature as well as in mainstream clinical drug trials must be at least infected and possibly entirely subverted by E-Psi. About the only resource mainstream researchers have to try to get rid of non-drug effects is to pile on yet more blindings: if this works well and good. If (as I suspect) this proves ineffectual then (due to the international scope of such work) drug trials potentially provide more evidence of Psi in a year than all the efforts of parapsychologists put together. (And all the more persuasive to mainstream workers because it is done by "our own folk"). Conversely if there is no E-Psi to be found in drug trials it weakens the case for the reality of Psi.

Are there any features of the current drug-trial malaise which are characteristic of E-Psi? Psi effects would be expected to be especially strong in the initial enthusiastic phase of testing a new drug and drop off with the hum-drum routine of post-marketing trials. According to the OTs, diagnostic of E-Psi in parapsychology is that if the experimental group goes Up, the control group simultaneously goes Down. However, for parapsychology both E and C scores are (in the absence of Psi) determined by chance alone. In drug trials there is a deterministic component, the real physiological effect: if there is any deterministic component at all in placebo trials it is considerably smaller. Psi works only upon the random noise which remains after the deterministic component is removed: E-Psi thus has more of an effect on the placebo

than the drug trials. It is consequently likely that any E-Psi in drug trials causes the placebo to improve rather faster than the drug declines. This is, at least, consistent with the empirical findings.

In parapsychology only a minority of Experimenters have strong Psi themselves and produce results in accordance with their expectation: this is something of a blessing for drug trials. A method for minimizing unwanted psi effects is to eliminate teams who have previously obtained significant results in drug trials. This (as in parapsychology) represents a direct inversion of normal practice. A good strong dose of OT may be needed to cure these ills.

MARTY ROSENBLATT I believe that expectation of all participants is very important in all studies involving human beings. Precognitive RV can be viewed as a type of "remote influence" since the feedback session can be intended and expected to be influencing the viewer remotely in time with the correct target information...we like to say, "precognition begins with the feedback session".

HIDEYUKI KOKUBO Experimenter effects exist. However, in bio-PK studies, the magnitude of experimenter's bio-PK power is considered as smaller than ones of well-skilled healers. I suppose that we will be able to discuss the magnitude of main effects separated from experimenter effects if we use a suitable index calculated from only physical or physiological values, for example, I usually use J value as an index of magnitude of controlled healing power; J value is defined as the natural logarithm of the ratio of physical values of experiment and control samples ($J = k \ln (E/C)$, k is coefficient).

In Solfvin's 2nd experiment, average babesia counts were 3.3 – 6.5 and showed significant or marginally significant results. However, those average babesia counts were similar to the results (2.0 – 6.4) of Handler J in the 1st experiment (it seems to be caused by Handler J's handling manner of mice). Fluctuation of average babesia counts in 2nd experiment is considered to be caused chiefly by handling manner of mice. It suggests that the biological magnitude (average babesia counts) of experimenter effect is same as one of handling effect, and that this experimenter effect is a problem of choosing. I think we should discuss whether the biological magnitude of healing effects is larger than one of handling effects.

KEAN HIN OOI It is the intent – the information – that brings the changes, without the intent or a lower intensity of the intent the results will be affected negatively.

Can you think of a way to isolate the experimenter expectation effect from the overall outcome? Very difficult, to me it is almost impossible, the mind knows no boundary.

What makes a system more susceptible to experimenter expectation? When there is no opposing information or intent.

LYN BUCHANAN Sure. The "first timer's effect" is well known. The "two neighbors" analogy can be used to describe the process quite well. Basically, the analogy is that two neighbors have a brick wall between their yards and have never really gotten to know each other. (*That is, the conscious and subconscious minds*). One day, they meet and decide that they like each other, and that they would like to work and spend time together, so they should tear down the wall. The more they get to know each other, the more they like each other and the wall comes slowly down. (*They meet when you first start working*

CRV, because it forces you to work with your subconscious mind. The conscious mind learns to appreciate what the subconscious can do, and the subconscious appreciates the chance to do new work, have responsibilities, stop being considered "an inner child", etc.) So, they start, each on its own side, removing the bricks. (As you do your ideogram drills and practice sessions, the two minds get to know each other and learn to work with each other. What most people don't realize is that the practice doesn't just train your conscious mind to do the work - it also trains the subconscious mind how to do its work, too.) But then, they become familiar enough with each other to notice "quirks". (This happens between people, and it happens between the parts of your mind, as well.) They have their first argument, and stop working together. (That's when the initial success rates drop.) If they never speak to each other again, there is no growth in the friendship, and it is gone. (That is, if you see your scores drop and just give up - your time as a successful viewer is over.) But, if they decide to continue working together - even if it is to try to build the wall back up again, they start accepting each other, become friends again, and the wall will eventually come all the way down. (That is, if you just slog your way through the "pig slop" sessions which follow, the two minds become friends again, after which your scores will rise - usually to a level above where you were before. It may take 10 "pig slop" sessions, or it may take 25, but if you just keep going, it keeps them working together, and that is the key to success. Don't worry about the scores and the really screwed up sessions, total misses, etc. Just keep the two busy working together.) As they learn to be friends with each other and work together to get "the job" done, each will make mistakes along the way. If they learn to laugh about them and try again, the two new friends become extremely good friends. (That is, you will "jump targets", miss targets, get everything right but mess up the summaries, get everything in the session wrong and have 100% correct summaries, have displacement problems, etc. etc. etc. There will be lots of screw-ups along the way. But if you don't beat yourself to death over them, and if you treat each one as an opportunity to learn something about yourself and laugh about the mess-ups, everything will work out. The mistakes will slowly go away as you learn to live with and understand each other's quirks.).

Those things are there in all of us, and as your two minds learn to trust each other, they will begin to work those more personal things out. Like I say, when they do, you will notice that they are working on something else than your CRV sessions, and your scores will drop. Afterwards, though, both your sessions and your life will improve. It's a natural part of "know thyself", and it's a good thing. So, when it happens, don't let the bad scores bother you, and above all, never let a bad score make you stop practicing. Just understand that this is one of the reasons why we keep telling you: "Never forget that the real purpose of a practice session is not to learn something about the target. It is to learn something about yourself."

Question 9B: Can you think of a way to isolate the experimenter expectation effect from the overall outcome? Since it seems to be a natural phenomenon, then I doubt that there is ever going to be a way to completely isolate the two.

Question 9C: How significant do you think experimenter expectations may be in mainstream clinical trials? I suspect that it plays a large part, but that other information can still be gleaned from an experiment, if it is properly designed with that factor in mind.

Question 9D: Could a reduced level of emotional trepidation/ expectancy build-up on the part of principal investigators in post-marketing drug trials, when compared to pre-approval phase, mirror the steep decline noted with Modell's 2-REG experiments? Yes.

Question 9E: What makes a system more susceptible to experimenter expectation? The proper/improper design of the experiment, the proper/improper purpose in mind for even having the experiment in the first place, biased/unbiased analysis of the results, and even the experimenter(s) him/her/themselves. There is not a simple, easy answer to that question.

At the first public remote viewing conference, several leading researchers were arguing at the time that the CRV method of viewing and analysis used by the military was not effective. They decided to have a test which would be judged and scored both by researchers, using the SRI research method (which simply compares the overall results to a pool of randomly selected pictures, to see whether or not the correct one is clearly identifiable), and by operational analysts, using the military operational method (which is concerned with detailed information, so compares each and every single perception to the actual target, scoring each as correct, incorrect, or "can't feedback"). A pool of five targets in sealed envelopes was provided by the researchers so that none of the viewers would have any chance of finding out what the targets were. The viewers did their sessions, and turned them in. Before the scheduled time of judging, the researchers met and opened the envelope, which held a picture of the interior of a queen's bedchamber. They immediately threw out all the CRV sessions, saying that someone had told them that military viewers can only view outdoors targets (which is absolutely untrue). One of the researchers even told me that they scanned through one of the sessions, and found that it had "apparently correct" information, but since they knew that the viewer had to be viewing something outdoors, any apparent accuracy was probably only coincidental. They didn't bother to look at the rest because of their knowledge that, since the target - which they had provided for the experiment - was indoors, the viewers would have missed it, anyway. Without waiting for the standardized operational analysis, they got up at the first break time and announced to the conference that they had proven that the military trained remote viewers were not capable of success, and therefore more research was necessary. A later review, at the scheduled time, by the operational analysts showed that two of the 8 viewers had very accurately described the room, providing accurate informational details and even sketches of the ornate bed, the color of the carpet, walls decorations, etc. Three other viewers had significantly accurate information which would have also clearly identified the target from the others in the target pool, had that test been made according to the researchers' method. The other 3 viewers did not produce enough information for a clear identification of the target, even according to military standards, but none of the viewers provided information that was incorrect. This was the clearest and most blatant example I have seen of post-session bias, where it was not the viewing, but the announced report of the experiment that was polluted. I would suspect that many experiments are carried out with success, some even revealing paradigm-changing information, but then have to go through the deliberately deadly minefield of researcher and reporter biases, desires, and "job protection defenses" before anyone ever sees the final report. Those reading a final report rarely ever question the report's accuracy, thinking that any reported deficiencies were the result of the experiment, instead. It bothers me to think that this may be a factor on more research and operational studies than we might realize, but it is definitely one very strong factor to answer the question, "What makes a system more susceptible to experimenter expectation?"

Question 10: Like the REG/DMILS studies above, the Schlitz/Wiseman experiments (Wiseman and Schlitz, 1998) suggest that the ganzfeld process is susceptible to experimenter expectation. However, these correlations are not consistent - successful remote viewing and PK have also been achieved in the presence of skeptics. Is there any supporting evidence for experimenter expectation in the GCP data or in other field-REG studies? Do you feel that some psi processes may be more robust in the face of experimenter expectation – for example, that the spontaneous mass emotional response typically associated with the major events registered by the Global Consciousness Project is more likely to dominate the outcome than the motivation of a typical operator trying to affect a bench top random event generator in the classical REG experiment?

BRIAN MILLAR The Global Consciousness Project (GCP) is one of the two major "living" parapsychological investigations (the other is the work of Bem). It is consequently of great importance for contemporary parapsychology. GCP looks a little like a standard RG-PK experiment; but Ss who get feedback directly from the RG are dispensed with and a world-wide network of synchronized RGs (EGGs) is employed (Bancel and Nelson, 2008). Significant correlation is reported between these spatially separated RGs in the aftermath of events which emotionally involve many people (e.g. disasters and celebrations).

If the results of Psi experiments are primarily determined by the Experimenter's dream world then the mythologies comprising the childhood of our kind will be strongly represented. The name of the project has drawn fire since it implies just such a "theory", formerly only known in religion and science fiction. This draws righteous fire from those who stigmatize parapsychology as a back door for the recrudescence of superstition. In all fairness it must be said that the director of the project Roger Nelson himself regards the idea with ambivalence. He frames his hypotheses directly in terms of correlation rather than "global consciousness". This "neither fish nor fowl" approach is a source of wide-spread confusion.

If the project is really about "Global Consciousness" it is reasonable to expect that some aspect of "consciousness" is actually measured; otherwise it might as well be the "Global RG Correlation" Project. The current procedure is limited to crude (though blind) time stamping of disasters and celebrations; correlations are then tested within these (6 hr) periods. No systematic attempt has been made to compare the time course of spread of information about the event with the changing behavior of the machines: only incidental material has been reported. If the graph of the number of people who hear about the event in a given minute really turns out to parallel the corresponding Z-score (of the correlation) for the same minute then this would be persuasive evidence that these people are actually involved in producing the effect.

If (say) 100 000 people hear about the event a marked enhancement or cancellation of the Psi effect might be expected. But the results obtained do not seem to be out of line with a single person sitting in front of an RG. This could be formally investigated by appropriate measures of effect size (not the standard "effect size" which is based on the trial).

In an incisive discussion of Experimenter Effect Palmer (1997) suggested, on purely psychological grounds, that "field REG" experiments in general are strong candidates for explanation in terms of E-Psi. Schmidt (2009) pointed out that from the viewpoint of the OTs the results of GCP are impossible unless these are brought about by people who actually observe feedback from the EGGs i.e. laboratory personnel or surfers of the web-site. GCP has highly emotionally involved people who directly experience disasters or celebrations and less involved but much more numerous people who hear about them. However,

neither group observes feedback from the EGGs and so, according to the OTs cannot affect them. It is rather like taking the microwave oven on a picnic, where one cannot plug it in: GCP has all the right ingredients but scrambled.

The methodological quality of the experiment is such that it puts the bulk of purely psychological work to shame. However it incorporates one apparently small weakness: the selection of the (6 hr) target period of an event is not entirely fixed by the declaration of the event but depends on a somewhat subjective judgment of when it should begin. In most cases this was done (blind) by Nelson himself. While he does not consider himself as a particularly gifted Experimenter, he is widely regarded as such by other parapsychologists. On the OTs this is a vulnerable point for leakage of E-Psi into the system.

According to Parker (2013), the Type I Experimenter Spottiswoode earlier proposed the "sidereal time" hypothesis, which was amply confirmed in every analysis he did; but failed to replicate in different hands. Perhaps this sensitized him to E-Psi effects by other Experimenters (takes one to know one). At any rate May and Spottiswoode (2011), using DAT, a model related to the OTs, suggested that the real source of Psi in GCP is Nelson himself and performed an analysis they thought proved the point; but this turned out inconclusive because of insufficient statistical power. (Further work by Bancel is eagerly awaited.) They also noted that there was a significant difference between the events signed by Nelson (plus others) and entries not bearing his name: Nelson (2011) replied with what he considers to be a more accurate reassignment of primary responsibility in a slightly extended data set: on this basis the difference, though suggestive, is not significant. This does not however explain why the original data displayed such a highly significant scoring difference in favor of display of the Nelson name.

There are mere hints of E-Psi in GCP, nothing conclusive. A unique feature casts some doubt on explanation in terms of E-Psi. The experiment has now been going for over a decade and the combined significance continues to grow steadily. Psi almost always declines over such an extended period. It would be short sighted, as well as unsporting, to assign the results to E-Psi without more ado. Rather, GCP may more fruitfully be approached as an ongoing test case. While Nelson is by no means receptive to the idea that he may be doing it all himself, intellectually he does not entirely reject the possibility. Furthermore the GCP website displays an exceptional openness: the accumulating data is available in detail for analysis by all who are interested.

The crux is whether similar results can be obtained in the absence of Nelson. Years ago I used to enjoy the facial expressions of Type I's when I mentioned I was interested in attempting a replication of their work: from extensive personal experience I suggest that If I were to take Nelson's place for (say) 3 months the GCP effect would vanish. Perhaps I am just a "big bad (Psi) wolf" but how about unselected psychology students? If similar results were to be obtained by student Experimenters, while Nelson is rigorously cut off from feedback, this would go far to bolster the objective reality of the GCP effect.

ROGER NELSON My best guess about the source of psi effects is that we should be looking not for one source, but at the likelihood that psi effects arise as a function of several interacting sources. The challenge, which several of the colloquium participants accept, is to identify the candidates and then to develop methods for distinguishing and weighting the various contributors. My list includes 1) the nominal source, which is the operator in MMI experiments or the viewer in RV experiments; 2) the experimenter(s) who set the context and may also contribute by way of experimenter psi; 3) the nature of the question, which partly determines the possibility and the nature of answers. (I think there is a fourth contributor as well, but I see no way to work with it experimentally: 4) the "Coyote" symbolizing the universe laughing at our attempts to reach closure.)

The approach required to make sense of this complex of possibilities is to use experimental designs and analytical questions, and ultimately to create models that can be tested against the data. With regard to the question about robust psi processes, I'm agnostic, but I suspect it may not be the right question. We need to keep separate accounts for what are likely to be quite different anomalous effects as we go from laboratory to field to something like global consciousness. The long history of psi research has trained most of us to think in terms of agents and targets and intentional efforts to achieve anomalous effects. The Field research by design explicitly loses "intention". The data are a history of random numbers corresponding to an event, and the analytical question is whether there is any structure that should not be there; no intention involved. (I imagine a quibble along the lines, "but the Experimenter has intentions, which may be unconscious" but this verges on the unfalsifiable.) This applies equally to the GCP data and analysis, though it is much more complex and includes possibilities for not only autocorrelation but intercorrelation of multiple data streams. The GCP data, because of the experimental design, allow a number of questions to be explored beyond the simple one common to intention and field experiments – is there an anomalous deviation? Because there are multiple temporally synchronized data sequences and because the RNGs are spatially separated, we can make predictions and test models that address several dimensions unavailable in other consciousness anomalies experiments. Does distance matter? Can we discover a time course for anomalous effects? Is there autocorrelation in the separate data sequences, and is there inter-correlation among the geographically separated devices? Are there other correlations in the data? What about correlations with other data streams or independent measures of psychological and sociological or physical variables? Many of these questions have been explored, and they show promise for allowing us to distinguish between models. Peter Bancel and I have alluded to preliminary but promising results in this vein in the Journal of Scientific Exploration.*,+,#

Brian Millar also commented on this question, quoted and annotated by RDN below (in italics; quotes underlined)

Millar The Global Consciousness Project (GCP) is one of the two major "living" parapsychological investigations (the other is the work of Bem). It is consequently of great importance for contemporary parapsychology. GCP looks a little like a standard RG-PK experiment; but Ss who get feedback directly from the RG are dispensed with and a world-wide network of synchronized RGs (EGGs) is employed (Bancel and Nelson, 2008). Significant correlation is reported between these spatially separated RGs in the aftermath of events which emotionally involve many people (e.g. disasters and celebrations).

Nelson: *The standard RNG-PK experiment has a target and an agent (subject/operator) and it is designed to test whether human intention can affect a random source. Intention is definitional, and the analytical question is whether data deviations correlate with the assigned intentions. I don't think it is correct to say the GCP looks like such an experiment, differing only by dispensing with the Ss. (That is hardly a casual or minor difference.) In any case, there are no subjects, and there is no intention in the FieldREG protocols. There is, of course, experimenter expectation in a very general sense – an expectation that there may be deviations, – embodied in pre-specified hypotheses. This is common to any experiment in any field – there can be no experiment without an experimenter and an experimental question.*

Millar: If the results of Psi experiments are primarily determined by the Experimenter's dream world then the mythologies comprising the childhood of our kind will be strongly represented. The name of the project has drawn fire since it implies just such a "theory", formerly only known in religion and science fiction. This draws righteous fire from those who stigmatize parapsychology as a back door for the

recrudescence of superstition. In all fairness it must be said that the director of the project Roger Nelson himself regards the idea with ambivalence. He frames his hypotheses directly in terms of correlation rather than "global consciousness". This "neither fish nor fowl" approach is a source of wide-spread confusion.

Nelson *It is strange to be labeled “neither fish no fowl” as a result of other folks' readings, and I'm sorry my correlational approach causes some to feel confused. The GCP was originally called the “EGG Project” because its physical instantiation bore some resemblance to an EEG, suggesting it could be thought of as an ElectroGaiaGram. We changed the name to something more immediately meaningful, reflecting the idea that we might be able to detect effects of consciousness on a global scale, but from the beginning of the experiment, what we were actually doing was made clear. We sought evidence of data deviations correlated with events that could be expected to produce synchronized emotions in large numbers of people. Only by arguable implication could this work represent “global consciousness”. But the allusive name has indeed confused people. Paraphrasing Wittgenstein, it is obvious that “language bewitches intelligence” and this is a good example. I didn't and I don't expect to prove such a thing as global consciousness exists. Instead I have given my main energies to the conduct of a clean, well-defined experiment testing completely specified hypotheses in a series of independent replications. They all address a general hypothesis which can be regarded as an operational definition of the “global consciousness” in the experiment's name. Here it is:*

Periods of collective attention or emotion in widely distributed populations will correlate with deviations from expectation in the data from a global network of physical random number generators.

Breaking this down and filling in the assumptions, the operations are

- A. maintain a global network of physical random sources*
- B. archive continuous synchronized data from network*
- C. identify events in the world (e.g., via news reports)*
- D. limit events to those that relate to human interests*
- E. select events which stimulate or garner attention and emotion*
- F. specify analysis parameters for event (time, duration)*
- G. test correlation of event with statistical deviations in data*

All this seems a little clumsy to most of us, but such care is needed to make sure we are doing something that will be understood by anyone who looks into the process. That can't be guaranteed by ordinary verbalizations of what we mean by consciousness in general or global consciousness in particular.

Millar If the project is really about "Global Consciousness" it is reasonable to expect that some aspect of "consciousness" is actually measured: otherwise it might as well be the "Global RG Correlation" Project. The current procedure is limited to crude (though blind) time stamping of disasters and celebrations; correlations are then tested for correlation within these (6 hr) periods. No systematic attempt has been made to compare the time course of spread of information about the event with the changing behavior of the machines: only incidental material has been reported. If the graph of the number of people

who hear about the event in a given minute really turns out to parallel the corresponding Z-score (of the correlation) for the same minute then this would be persuasive evidence that these people are actually involved in producing the effect.

Nelson *It isn't about "global consciousness". I have no problem with calling it the Global RG Correlation Project if someone prefers. As noted, my interest is not in proving existence of global consciousness (though I think we could use some). In response to the other points, we have done substantial work on the time-course of effects, with interesting results. There is a rise time (~30 min) and peak persistence (~2-3 hours) that can be discovered by averaging across events. As for the "time course of spread of information about the event with the changing behavior of the machines", I will be happy to do comparisons with quantitative information of this kind as soon as someone produces it. Because we have a low signal-to-noise system I would not hold out promise of anything but crude suggestions based on averages across many events. Addressing the N-people question, there is a substantial correlation of effect size with the estimated number of people engaged by the event. (This is addressed in work by Peter Bancel, still in progress. It is also shown in my own categorization analyses.)**

** Nelson RD. Emotions in global consciousness. Proceedings of the 7th Symposium of the Bial Foundation, Porto, Portugal, 2008;97-114.*

Millar If (say) 100 000 people hear about the event some enhancement of the Psi effect might be expected. But the results obtained do not seem to be markedly out of line with a single person sitting in front of an RG. This could be formally investigated by appropriate measures of effect size (not the standard "effect size" which is based on the trial).

From the viewpoint of the OTs the results of GCP are impossible unless these are brought about by people who actually observe feedback from the EGGs i.e. laboratory personnel or surfers of the web-site. GCP has highly emotionally involved people who directly experience disasters or celebrations and less involved but much more numerous people who hear about them. However, neither group observes feedback from the EGGs and so, according to the OTs cannot affect them. It is rather like taking the microwave oven on a picnic, where one cannot plug it in: GCP has all the right ingredients but scrambled.

Nelson: Yes, the structure in GCP data (comprising not just the primary reported effect but half a dozen secondary measures) do present a problem for OTs. The jury is out and will be for some time, but on the face of it, an OT explanation of not one but two orthogonal/independent correlations, an effect of distance (separating the RNGs) and a couple of time-related elements has to be so general as to be non-falsifiable. Hardly anyone other than Peter has "observed" the structural elements of GCP data in detail. I have some cognizance by way of personal communication, and Peter has described some of the material in small symposia. I would love it if there were a laboratory with personnel all observing the data, but that's a pipe dream. Surfers of the website know and observe results only in terms of the primary measure. None of the secondary material has been published except for brief mentions in the JSE articles previously noted. Millar's idea that "GCP has highly emotionally involved people who directly experience disasters or celebrations and less involved but much more numerous people who hear about them" seems necessarily to refer to exactly the "widely distributed populations" we (the GCP) name in the general hypothesis.

Millar The methodological quality of the experiment is such that it puts the bulk of purely psychological work to shame. However it incorporates one apparently small weakness: the selection of the (6 hr) target period of an event is not entirely fixed by the declaration of the event but depends on a somewhat subjective judgment of when it should begin. In most cases this was done (blind) by Nelson himself.

While he does not consider himself as a particularly gifted Experimenter, he is widely regarded as such by other parapsychologists. On the OTs this is a vulnerable point for leakage of E-Psi into the system.

Nelson *Circular – Nelson is regarded as a particularly gifted Experimenter because the GCP has a small but reliable effect and a few striking examples of anomalous correlations. What other evidence have other parapsychologists provided for this claim? As for the specifications, a large proportion of the events are fixed by the time of occurrence, or by precedent. For repeating events, previous instances are used as a model for the current specification (e.g., New Years, Kumbh Mela.)*

Millar According to Parker (2013), the Type I Experimenter Spottiswoode earlier proposed the "sidereal time" hypothesis, which was amply confirmed in every analysis he did; but failed to replicate in different hands. Perhaps this sensitized him to E-Psi effects by other Experimenters (it takes one to know one). At any rate May and Spottiswoode (2011), using DAT, a model related to the OTs, suggested that the real source of Psi in GCP is Nelson himself and performed an analysis they thought proved the point; but this turned out inconclusive because of insufficient statistical power. (Further work by Bancel is eagerly awaited.) They also noted that there was a significant difference between the events signed by Nelson (plus others) and entries not bearing his name. Nelson (2011) replied with what he considers to be a more accurate reassignment of primary responsibility in a slightly extended data set: on this basis the difference, though suggestive, is not significant. This does not however explain why the original data displayed such a highly significant scoring difference in favor of display of the Nelson name.

Nelson *This is addressed in the Nelson response to May and Spottiswoode article (notes above). It is not hard to imagine that experience (learning, feedback) should make it easier to successfully predict what events might be worth investigating – a good bet for producing correlations. Nelson has lots of such experience and all the results as training feedback. Other people don't.*

Millar There are mere hints of E-Psi in GCP, nothing conclusive. A unique feature casts some doubt on explanation in terms of E-Psi. The experiment has now been going for over a decade and the combined significance continues to grow steadily. Psi almost always declines over such an extended period. It would be short sighted, as well as unsporting, to assign the results to E-Psi without more ado. Rather, GCP may more fruitfully be approached as an ongoing test case. While Nelson is by no means receptive to the idea that he may be doing it all himself, intellectually he does not entirely reject the possibility. Furthermore the GCP website displays an exceptional openness: the accumulating data is available in detail for analysis by all who are interested.

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Nelson *I would be happy to retire and let someone else take over – maybe that lab full of personnel mentioned earlier. But there are some qualifications to meet, and they make finding a replacement a bit difficult. Not, mind you, because that person needs to be a gifted E-psi operator, but because doing what I do is a full-time volunteer operation. It involves dedication, persistence, diplomacy and tact maintaining a network involving 60-80 people who are all volunteers, motivated by mysterious forces like curiosity or commitment to an idea like "global consciousness" despite that the idea is widely rejected. Running the GCP requires a fairly sophisticated level of computer and networking skills and of statistical understanding – or, as in my personal case, an ability to find other people with such skills who are*

willing to help.

MARGARET MOGA The ‘experimenter effect’ may be due to the experimenter’s “feeling” or emotional tone at the time of the experiment, rather than to “expectation”. In Bengston’s experiment with 2 biology students as healers (Bengston and Moga, 2007), the students were uneasy and embarrassed in the laboratory while treating their mice. These particular mice died, while the mice they treated in private (at home) survived. Psi may be more susceptible to “negative emotions” like fear and embarrassment, than to calm skepticism.

MARTY ROSENBLATT Who is the experimenter in the GCP? The experimenters are really spread out all over the world causing the entanglement energy/forces with any one "experimenter" to be quite diffused. This might provide important information when that data is compared to long-term ARV data where a classical "experimenter" could be better defined, but also not too well defined because of all the subconscious entanglements.

In ARV work, I believe all the viewers are experimenters as well. For example, we encourage them to view their sessions as opportunities to learn how their own sub communicates. So here there is also a vagueness on how the individual tasker-experimenter interacts with each individual viewer-experimenter. We have a complex interaction between the personal consciousness of each participant/experimenter within the ARV group.

Working with multiple human non-local consciousness changes and weakens the usual meaning of an experimenter who is working with only the physical-objective aspects of our universe.

KEAN HIN OOI The remoTe viewers were trained personnel – higher ability to stay mindful and focused – stronger intent. Perhaps they should try and see what happens when someone intentionally sends in the intent to disrupt the viewing.

LYN BUCHANAN *Question 10A: Is there any supporting evidence for experimenter expectation in the GCP data or in other field-REG studies?* Of course.

Question 10B: Do you feel that some psi processes may be more robust in the face of experimenter expectation – for example, that the spontaneous mass emotional response typically associated with the major events registered by the Global Consciousness Project is more likely to dominate the outcome than the motivation of a typical operator trying to affect a bench top random event generator in the classical REG experiment? That seemed more like a leading statement than a question.

Question 11: In “*The Possible Role Of Intention, Attention And Expectation In Remote Viewing*”(May and McMoneagle, 2004) the authors argue that the sharply focused attention of *all* unit personnel on the one assigned task while doing operational remote viewing was likely responsible for the exceptional level of data produced. This seems to be corroborated by a series of experiments (Watt, 2003) in which subjects’ focus on a given task was shown to be significantly enhanced by a remote “assistant” concentrating their supportive attention on the operators. If these

findings are correct, then it would seem that attention itself is a cumulative network phenomenon. Could that joint mass focus on the event being studied be a factor in the remarkable consistency of GCP results?

LYN BUCHANAN Yes, it could. It could also be some other factor, such as one of the viewers being known to have a higher accuracy rating than the other, and subsequent "telepathic overlay", where the other viewers, because of that respect, unconsciously view the one viewer's findings instead of the actual target. This has been known to happen when the one viewer is wrong - resulting in the others being wrong, too. The bottom line is that you are stating a premise and then asking if it could be true. Sure, it could, but that doesn't prove that it is. It could also be a false positive, based more on judging the results by a belief system rather than by data on all possibilities.

KEAN HIN OOI This is common in ZQ, in the creation of qi field, we create the bond intentionally to bring better results.

MARTY ROSENBLATT For the long-term in ARV, the amount and quality of the attention to the task at hand does seem quite important because, after a while, we often see a decline that is most likely related to boredom as well as "OMG this is real and look at the implications". In the GCP results, many people's attention is focused on a major event without any intention to entangle with the random number generators. This is in contrast to the ARV attention being purposefully and intentionally directed toward entangling the RV and FB sessions. A study comparing ARV with GCP statistical results might be valuable for quantifying, or at least advancing our appreciation, of the individual contributions of intention, attention and expectation.

ANNA ARAGNO I would definitely agree that the more intense and communal the concentration on an assigned task the more likely will the 'quotient' of pooled attention and intent favor the outcome.

Question 12 (from B. Millar): Are there effects known in physics where three or more initially separate systems become quantum coupled or entangled? Do these have any consequences for remote mind-mind and mind-matter interactions?

ULRICH MOHRHOFF There is no theoretical limit on the number of systems that can become entangled, but experimentally it's a tremendous challenge. The present record stands at eight entangled photons (<http://www.nature.com/nphoton/journal/v6/n4/full/nphoton.2011.354.html>, <http://arxiv.org/abs/1105.6318>).

Do these have any consequences for remote mind-mind and mind-matter interactions? None whatever.

RE: "What is even more remarkable is the fact that 80.5% of the control mice, who did not receive the healing-with-intent cure, also demonstrated remission – leading the authors to formulate the hypothesis

that under certain conditions, macroscopic entanglement ("resonant bonds") can form in an experimental setting, potentially resulting in a proliferation of Type II errors." Talking about entanglement makes sense in the context of quantum physics, and talking about resonant bonds makes sense in the context of chemistry. The aforementioned hypothesis is meaningless unless the sense of these terms is spelled out in the context of experiments with mice.

BRIAN MILLAR In 19th century physics there was only one way of influencing the world, by means of a force, kick or more generally push/pull it. The crowning invention of classical physics was the "field", by which the kick travels with a given speed to distant objects via the field. Come the 20th century and quantum physics it was slowly realized that there is another, radically different way, of affecting the world. The first proposal for non-local coupling was contained in a paper by Einstein, Podolsky and Rosen (EPR), in the course of Einstein's tilting at the windmills of QM. Practical implementation had to wait some decades. What EPR showed was that systems of (two) particles which have interacted in the past can continue to behave, in some respects, as a single entangled state even though the two constituent particles are now far apart. The two retreating particles have to be treated gently e.g. a good vacuum must be maintained: if they interact with gas molecules along the way the entangled state breaks up into two classically separate particles (decoherence).

Physicists such as Walker and Schmidt proposed that Psi phenomena too are non-local effects. However this is a new sort of non-locality which depends on the FUTURE state at Observation rather than the PAST history. It is important to note that with entanglement no information is transferred, only a correlation is set up. A transmitted signal can be enhanced by various methods, including standard statistics, which in general will not succeed with non-local coupling. No message can be sent (directly) by non-locality.

The big down side of non-locality is that it is delicate: almost any interaction with the noisy environment induces decoherence. To understand parapsychology it is necessary to take into account BOTH members of the dynamic duo: non-locality and decoherence. According to this view the (naive) attempt to use Psi is practically useless. Non-locality is (barely) adequate to assemble local displays of impressive significance, so long as these do not have any real impact; if, however, these draw sufficient attention, decoherence takes its toll and the effect declines. The attempt to use a non-local correlation as if it were a signal and change the world with it automatically kills the effect. Dream the result of a horse race and hug it to your own breast - result happiness; trumpet the dream and bet your life savings on it - result misery.

While the basic equations of QM have been known for a long time it is only now that the practical technology is becoming generally accessible. Until recently the production of entangled photons has been restricted to cumbersome and inefficient parametric down-conversion in special crystals: by incorporating quantum dots into LEDs this problem has been overcome in the laboratory, although it may take a decade before such ELEDs become commercially available. Under this kind of stimulus all sorts of novel effects and applications have been discussed. A good modern but non-technical introduction is available (Siegfried and Saunders, 2010). Under "Quantum Weirdness" the authors treat double-slit, delayed choice (in which a single particle interferes with itself) and the quantum Zeno effect: under "Quantum Weirdness in Action" they introduce quantum cryptography, quantum teleportation and quantum computing.

A theme running through many of the questions in this symposium is how the various people involved in an experiment interact by means of Psi to produce the final result. I suspect (based on the small number of Type I Experimenters) that the proportion of the general population who are Psi-capable is quite low, maybe 1 in 1000. If this is so then an experiment with 100 unselected subjects is quite unlikely to have

even a single one who is Psi-capable. But on the OTs Psi warps probabilities and to get a good score overall E-Psi has the side-effect of Psi-augmented selection of other Psi-capable people as subjects. The Psi-challenged Experimenter is unlikely to see any Psi at all while his Psi-gifted brother may see it more widely sown. Only under conditions of selection (normal or Psi-based) is it likely that there is more than a single Psi-source in the system at one time.

But how do Psi sources combine? Both Schmidt and Walker thought Psi effects augment (though to different degrees). On applying this to large numbers of Observers, however, the assumption led to apparently intractable physical/math problems (divergence). If the earth lies directly in the path of a large asteroid how far will the combined Psi of the 7 billion humans on earth deflect it? I am rather confident that the asteroid will not be moved. The universe is sublimely indifferent to large scale extinctions. I suggest that the conventional laws of chance are the limit of Psi influence with a very large number of Observers. On a large scale Psi effects cancel out due to the decoherence effect of the noise in the conventional information channels involved.

This is fine as far as it goes: but it does not explain how new Psi sources come into the world. An (unstated) rationale for augmentation is that noticeably strong Psi sources must be built from a collection of negligibly weak Psi sources (micro PS). Each Psi source, regardless its strength may be regarded as a pure PS (entanglement) plus channel noise (decoherence). *It is plausible that micro PS sub-units have very little associated channel noise as compared to the macroscopic "noise" involved in (say) publication of an experiment: they act nearly as nearly pure Psi-sources.* If these were isolated some augmentation rule might be expected to apply. It is unclear at what level the microscopic enhancement reverses to cancellation.

Consider magnetization. In familiar magnetic materials there exist microscopic domains which are magnetized in one particular direction. In the bulk material, however, these domains are arranged randomly and cancel each other out. A strong external magnet can pull them in the same direction and so a new magnet is born (multiplication of magnets). In magnetic induction the fixed magnet induces a permanent magnetic field in the previously unmagnetized metal. The magnetized bar is metastable with respect to its non-magnetic state and if subject to sufficient noise (hammer it) reverts to an unmagnetized state.

Even within such a rudimentary Observational Theory as Schmidt's mathematical model Psi circuits can be set up to demonstrate an analogous form of "Psi Induction". A strong Psi source can induce Psi in a system which initially shows no (external) sign of it and scoring is maintained (for at least some time) after the strong Psi source is removed. The basis of the effect is that external Psi spills over into reordering the (noisy) connections of micro Psi sources and once reordered this new connection pattern can be retained. The new composite acts as a relatively strong Psi source with small channel noise.

A psychic is metastable with respect to a non-psychic ("wound up" by the influence of the now departed original PS): (metabolic?) noise eventually disorders his internal micro Psi sources once more and his powers decline over time. Biologically this kind of system might well be implemented by neural nets, which "learn" by changing the "weighting" of connections between layers.

Millar (1979, p95) predicted Psi induction and reviewed the rudimentary evidence for "transfer of Psi" at that time. The potential of this method for multiplying Psi sources seems since to have been overlooked. If Psi Induction exists strong E-Psi not only selects existing psychics but may even create them.

I am indebted to Burns for calling my attention to recent work with "entanglement swapping" (Cho, 2013). Starting with two pairs of entangled photons ((1a,1b) and (2a,2b)) it is possible further to

entangle one of each pair (say 1b and 2a). It turns out that this manipulation entangles the remaining pair (1a and 2b) without them ever interacting directly (an attractive scheme for "relays" in a quantum computer). This remains true even if the first photon (1a) is already "dead" (absorbed by a detector) before the second photon pair is ever generated. This impacts the simple intuition that an entangled system is an indivisible physical system, since there is nothing material in common between the final pair (1a and 2b), only (formal) information. It is too soon to tell whether (and where) this fits into the puzzle of Psi.

Under special circumstances (cryogenic temperature is usually required to minimize disturbing thermal vibration) the quantum nature of the world has consequences for the large-scale macroscopic world with an extremely large number (something less than 10^{23}) of cooperating parts such as in superconductivity, superfluidity etc. For reasons of frequency noted above I strongly doubt these have accessible Psi analogues.

Question 13 (from J.Burns): We know through abundant evidence that ESP can travel without any physical signal to carry it. Up until recently the only way known, according to physical laws, to make a connection with no physical signal was through quantum entangled states. This possible method for the travel of ESP has the problem that quantum entanglement does not allow the transmission of information, but only correlations between certain events. However, it is thought that perhaps the extension of currently known quantum mechanics, which describes the interactions of matter, to incorporate interaction with consciousness might then provide an explanation.

However, recently a method has been proposed in which, according to the presently known laws of quantum mechanics, information can be transferred without a physical signal <<http://physicsworld.com/cws/article/news/2013/apr/16/alice-and-bob-communicate-without-transferring-a-single-photon>>. It differs from the latter method in that it uses the Zeno effect, which is produced through multiple instances of decoherence, such as wave function collapse or interaction with the environment.

Which method do you favor as a means by which ESP can travel? Why? If you favor a third method, please describe.

ULRICH MOHRHOFF Does ESP travel? I don't think so. The spatiotemporal relations that exist between physical events (such as emissions and absorptions of photons) constrain only the behavior of physical systems, not the subliminal communications underlying ESP. As long as we depend on physical instruments, our communications are subject to constraints on these instruments. But our subliminal selves are capable of (i) direct knowledge, which does not depend on physically generated neural representations, and (ii) direct action, which does not depend on our physical bodies.

JEAN BURNS I asked Lian to include this question as a way of calling attention to a newly discovered method in quantum mechanics, different from entanglement, by which information can be transferred

(new method) or correlations made (previously known method) without using a physical signal. Some theories of ESP invoke quantum mechanics to explain the independence of distance of results, as well as supportive effects and/or interference from participants at a distance. Such theories now have a new method (based on repeated collapse of the wave function) that can be invoked, as well as the previously known one (based on entanglement).

KEAN HIN OOI In ZQ we have the hypothesis based on big bang (everything started from it and connected together), that the mind is all over the universe and information near or far can be picked up, but it depends on how well one could stay mindful and focused. Can't validate this yet, too big a topic too....

BRIAN MILLAR Normally in physics a state (quantum or otherwise) is measured in a brute force way by poking it with something else. "Interaction-free measurements" do the job much more subtly and are promising tools for quantum computing. In the article cited by Burns for this question the quantum Zeno effect is used, which basically says that a watched pot never boils. When a quantum state, which is evolving, interacts with a massive object (observation) it is reset back into the original state (at least if it hasn't gone too far). A radioactive atom will never decay if observed sufficiently frequently. The observation is a strong interaction with the noisy environment and causes decoherence.

The apparatus is built from mirrors and a beam splitter (like a partially silvered mirror); there is also a photon detector. There are two sides to the apparatus Alice's and Bob's. Alice, who will be the receiver, starts the ball rolling by directing a photon at the beam splitter; the photon "starts off" as a wave; some is reflected back to Alice while some goes through the beam splitter and travels further towards Bob. Before a mirror is the photon detector which Bob can set either OFF or ON. If OFF nothing novel happens: the wave reflects off the mirror back to Alice's side, where it interferes with the original. If, however, the detector is ON the photon is absorbed and this destroys the interference on Alice's side. But left to itself the detected photon has a (small) chance of evolving into a wave so it is necessary to "observe" it again and again so a chain of similar units is used (keep watching the pot).

The upshot is that if Bob has all his detectors OFF then Alice has an interference pattern but if he switches them all ON then Alice only has a single photon bouncing back and forth and the difference is detectable. But wait a minute, where did that single photon come from: wasn't it absorbed by Bob's detectors? Actually it wasn't, though it could have been: if the number of units is large enough then the chance of physically detecting it on Bob's side becomes negligibly small. This is an example of confinement (on Alice's side) by observation, an effect which is well-known elsewhere.

If Bob switches ON his detectors this produces a change on Alice's side, even though no single photon traverses the conventional Alice/Bob communication channel. So what carries the information if there are no particles? A commentator remarks "that a key challenge will be in quantifying precisely how many photons or fractions of photons are actually transferred from Bob to Alice". Probably what he is thinking here is that no apparatus is 100% perfect (due e.g. to Heisenberg uncertainty) so there will always be a small fraction of "duds" transferred from Bob to Alice: if this represents more information than Alice gains then there is no problem. This would undoubtedly be neat but there is nothing I know of in QM

which says information must be carried by particles, even though this is what "common sense" insists. I suspect this may be a case in which a physicist, who actually knows better, just can't resist making a "billiard-ball" model in his head. Indeed the essence of Interaction-free measurements in general seems to be particle-free "measurement". But taking the set-up at face value one might conclude that a functional conventional Alice/Bob communication channel is essential even though no message actually passes through it.

Similar situations are familiar in the OTs of parapsychology. Consider a Schmidt-type PK experiment, in which the chance probability (p) of a "1" is very small: the subject goal is to decrease the frequency of "1s" still further. Given a strong Psi source it is possible to arrange p and the number of trials (N) such that a significance is obtained even though no single "1" is (likely) seen in the course of the experiment ! A feedback channel is necessary even though there is no feedback ! This is because the OT, like QM itself, is a probability calculus. What is primarily affected by Psi is the probability, which is only secondarily reflected by events.

Is it possible at this time to make a purely physical Zener-card guesser based on the current bag of QM effects, either on paper or preferably a working model? I had initially assumed this was not possible: now I am not so sure. It would certainly seem worth while to make a determined effort along these lines. Success would set parapsychology firmly among the sciences. Failure, on the other hand, could shed light on what kind of feature might be missing in current QM. A successful ESP machine, even though it were to use quite un-physiological components, could provide proof of principle long before it is possible to determine the detailed biological mechanisms involved in the human organism. Even with a working Psi machine, however, it is to be expected that decoherence effects follow on publication etc. thus reproducing the gamut of declines observed in parapsychology.

Are parapsychologists doomed by decoherence perpetually to display new significances which do not repeat? A museum of historic astronomical significances holds little of scientific interest. A more promising line of attack is to ask *"If Psi effects cannot be used directly, can decoherence be deliberately manipulated such that Psi CAN be made to do something useful?"* This is basically the same problem faced with quantum computers. And here the quantum Zeno effect (and the anti-Zeno effect) play an important role.

It used to be thought that anything "warm and wet" was instant death to non-locality. Recent calculations on the (standard) Radical-Pair model of the bird compass suggest that "superposition and entanglement are sustained for a period exceeding that achieved in the best comparable man-made molecular systems". This is so unexpected as to cast doubt on the calculation, even though it is rather standard fare. If no error is found then decoherence is not well understood even for bird brains. The OTs began with Walker and Schmidt proposing a novel kind of non-locality as the basis of Psi effects: they thought a new sort was necessary because such effects appear on a macroscopic scale and with enormously slow decoherence. If the avian compass calculation is right then this gap begins to narrow.

While decoherence has been thoroughly investigated in typical laboratory physics measurements, for more complex systems decoherence theory is itself a work in progress as well as an area of vigorous

controversy (see e.g. Schlosshauer, 2005). Gell-Mann and Hartle represent the "consistent histories" approach. Gell-Mann (1994) explains this in simple language in Chapter 11 of his popular book "The Quark and the Jaguar". He considers the case of an almost human Observer (IGUS), which brings about decoherence by Observation: "fine grained" micro-histories are lumped together to "coarse grained" ones which constitute its perception of the world. However, there is in general, not just one way of doing this mapping. He goes so far as to hint (half seriously) that men and women LITERALLY see a different world because of differing brain structure, which does the mapping in different ways. Gell Mann makes liberal use of the freedom to speculate granted to eminent physicists .

The OTs assert that if the signal from a quantum-based RG interacts with a specific complex macroscopic apparatus (i.e. observed by S1) the outcome may differ from the 50% expected. In terms of decoherence the RG itself is already a substantial system and standard theory implies that any trace of a wave nature is long departed before the human S ever looks at the output of the machine. While the display is already fully "collapsed" and registered this does not preclude the possibility that a non-local correlation may nonetheless statistically exist between it and the later state of the observer. Entanglement between an already registered outcome and a later measurement is clearly demonstrated in the entanglement swapping experiment described above. It is difficult to imagine how anything (however complex) which is tacked on AFTER the display could have any effect on the display probabilities; but this is likely just another failure of the imagination in an area which is notorious for violating common sense.

ANNA ARAGNO It appears to me that "emotion," "information," "knowledge", "ideas" and any other such mental or *mind-created* human products must have their own form and quotient of energy which, in its essential breakdown, is composed of atomic particles of meaning. Human meaning, whether expressed in ideas or images, is a force or intelligence unto itself, unknown to quantum or any other physics because it is completely non-material. Because 'meaning' is often expressed in imagery, or appears through forms, in accordance with Sheldrake's concepts, as mentioned above, I refer to its mode of apprehension as "morphic sentience." (Aragno, 2008)

Question 14: If PK is goal-oriented, independent of an operator's understanding of the complex physical or biological mechanisms involved in achieving the desired effect, then should we assume that the operator is essentially interacting with the target at a future point in time, with causality apparently flowing backward to the present, to affect the target and all those connected to it ? Does the universe we share then find its probability course like a stream shaped by the resultant landscape of our collective intents, beliefs and expectations?

LYN BUCHANAN No, we should not make that assumption. We should seek data. Besides, even the statement is faulty. What if PK is not independent of an operator's understanding? What if it does not involve physical or biological mechanisms? What if it is actually done present time, rather than being future-oriented and then flowing back to the present? And does it always affect the target and/or all those connected to it? Sorry, but that is an extremely biased question which blocks other possible answers.

Question 14B: Does the universe we share then find its probability course like a stream shaped by the resultant landscape of our collective intents, beliefs and expectations? You are asking for a definitive statement here, based on the assumption. "IF PK is....". I would not feel good about even answering that.

HIDEYUKI KOKUBO I think that the process of bio-PK can be separated to several parts. In our studies on the spatial distribution of bio-PK field around a healer, I have found that the spatial distribution of bio-PK field can be approximated by equations. It suggests that bio-PK have properties which are similar to well-known physical phenomena. Final anomalous effects are caused by consciousness possibly, but some processes of bio-PK seem to follow their own physical laws, at least in Space. As same, I expect that bio-PK follows some physical laws in Time.

KEAN HIN OOI In the work of removing gallbladder stone: depending on the level of practice of the practitioner. At elementary level the focus on the mind is the end result. At a higher level, it is perceiving the target and giving the command that makes the move.

Does the universe we share then find its probability course like a stream shaped by the resultant landscape of our collective intents, beliefs and expectations?

With the emergence of human consciousness there are now two forms of information driving the changes of the universe. The natural information is one (e.g.: dictates the sun comes up and down; driving the natural order of changes) and the other one is conscious information: we build and destroy through our intention.

Question 15 (B. Millar): Eminent parapsychologists are almost unanimous that understanding experimenter effect is crucial for the field. All this lip service has resulted in remarkably little experimental action. Why is this and what can be done to improve matters?

JEAN BURNS It is generally recognized in parapsychology that the experimenter effect is important. However, until Brian Millar made his proposals for objective partitioning of psi results into Subject and Experimenter components, nobody had made this type of proposal. Earlier ideas have focused on personality analysis of Experimenters, to learn what type of traits are most apt to produce psi. But such analysis would have entailed a lot of work for uncertain results and has not been done.

MARGARET MOGA We need to look both inside and outside the experimenter to study the experimenter effect. Inside the experimenter: For example, heart rate variability and/or mobile EEG of the experimenter could be studied as the experimenter runs their own experiment. Perhaps the successful psi experimenter is in a quasi-meditative or resonant breathing state, as compared to his/her less successful colleagues. Outside the experimenter: For example, environmental variables (e.g., magnetic field activity, temperature) in the laboratory could be measured while the psi experiment is being done. In experiments studying the effects of consciousness on physical matter, Tiller and colleagues (Manek and Tiller, 2011) observed changes in environmental variables in the laboratories doing this type of research. They found that the laboratory experimental space became changed or "conditioned". Perhaps successful psi laboratories are conditioned? Measuring environmental variables in the laboratory may be

a means of detecting the experimenter's fingerprint in what Millar has described as forensic parapsychology (Millar, 2012).

ANNA ARAGNO It is very difficult to conceive of a controlled "experiment" without an "experimenter"! The isolating context and very premise set up their own dynamics, *a priori*, automatically and inevitably. Experimenters may benefit from a self-analysis of their Ucs fantasies about being an experimenter...their role, control-over, expectations, relationship-to "a subject" etc etc... maybe the stereotypical white-coat, sterile environment, and fiction of the "objective" scientist, lingers in the Ucs, generating a resistance to examining this problem and an unwillingness to delve into the *unconscious meanings* of being an experimenter, or what the experiment means for the experimenter, what's at stake. A thorough analysis of the stance is the only way I can think of improving matters.

LYN BUCHANAN It is a common practice among humans to accept something so thoroughly that nobody further questions it. The problem is compounded by the fact that further experimentation only proves it to be true, because (like the questions of this paper) there is enough experience and data to back up the belief's position. What generally breaks such a belief system down and opens it up to other considerations is when some "rogue" experimenter stops saying, "let's prove it to be true" and asks, "What if the cause is possibly something else, instead?" and starts experimenting with that. What can be done to improve matters? I hate to use the hackneyed phrase, but someone needs to start "thinking outside the box". You have not proven one theory to be right until you have proven all its alternative theories to be wrong.

KEAN HIN OOI When the ability to focus has reached a very high level (for instance reaching the ability to focus onto the tip of a needle for a few minutes) then the selectivity ability of the mind will also go up to a high level. At that level the info given by the experimenter will not affect the control. But then it is very difficult to train a big group of people to reach this level.

BRIAN MILLAR On the standard world-view, inherited from psychology, E-Psi is anathema, while it is entirely natural on the OTs. The burden of proof is different from these two perspectives: for the conventional one, the Subject (S) does it unless strong evidence implicates the Experimenter (E). For the Observational Theorist, on the contrary, E is the prime suspect. If the Observational principle is accepted, with a little additional effort, it could make sense of the current state of parapsychology: in particular the persistent failure of experiments to replicate with different Experimenters. On the contrary, for many (skeptics and "believers" alike) Psi makes no sense at all within the conventional world-view: it is no more than a list of apparently unrelated anomalies. At the moment the choice between the two world views is primarily esthetic: *de gustibus non disputandum*. This is a wholly unacceptable state of affairs which can only be resolved by experiment: it is greatly to be deplored that quite remarkably little systematic research has been done into E-Psi.

A surprising number of eminent parapsychologists have put on record that E-Psi is THE central problem and then gone on to ignore it. If Type I's react with scorn to the suggestion: "Your life's work may be self-delusion !" this is surely understandable. I am at a loss to conceive of a way of saying this which is not perceived as offensive. For the most part Type I's have slowly and methodically worked their way through a maze of fine detail to defend their work from skeptics: a new wave of criticism now descends

and that from "believers". While the suggestion that the Experimenter is more important than the Subjects can be drawn from different background theories (or indeed supported on purely empirical grounds) my own approach is via the OTs. And it may, with some justice, be said that OT is so counter-intuitive that the psychologist must initially "screw his head on backwards" to understand it.

Practically, to perform incisive research into E-Psi requires access to strong consistent Psi, which is a (vanishingly) rare commodity, only available to Type I Experimenters. For their part they are almost exclusively interested in pursuing their own idiosyncratic notions. There is a palpable "disconnect" between Observational theorist and Type I Experimenter. It takes a strong character indeed to turn aside from this siren lure and pursue research which runs the risk of demolishing cherished ideas. Schlitz must be lauded for "putting her life on the line" in a Remote Staring experiment with Wiseman to see if the two experimenters would get different results. (They did, at least in the first experiment but not in a follow-up. The first (successful) was methodologically crude; since the experimenters doubled as senders, it is not impossible the difference was simply due to Wiseman being a bad sender.)

This is one of the very few experiments to address the question in the 30 years I have been out of the field: has parapsychology fallen asleep? It is difficult to avoid the impression "there are none so blind as those who do not want to see". Many Type I's do seem to suspect that they are not just passive observers but active players in their own experiments: a (justified) fear is that if too much attention is paid to the role of E then Psi might just go away. For many experimenters too, being exposed with a Psi finger in the pie sounds shockingly like a cashier being caught with his fingers in the till. McCrone (2006) has suggested that ditching E-psi was part of the historical detente (in the late eighties) between the upper echelons of parapsychologists and skeptics.

There are powerful pragmatic reasons for avoiding the issue (in public at least). Imagine a Type I Experimenter who declares: *"Of course these results are probably just a consequence of my momentary psychological state and don't necessarily say anything whatever about the nature of Psi: I do not expect the same results will be obtained by other experimenters"*. This is surely a recipe for professional suicide!

A contributory factor to the willful neglect is an exaggerated esteem for psychology: in the extreme case parapsychology is thought of as a subdivision of psychology. This is perhaps not surprising since most of today's parapsychologists are by training psychologists. When there was enough research money to go around, a few psychology departments offered limited haven to parapsychology: in today's economic climate psychology rejects parapsychology because the very existence of Psi raises uncomfortable questions about the validity of mainstream research. Psychology is impotent to deal with E-Psi artifact. Experimental psychology is a second order science based on what is understood of physics and this perception has not changed substantially since the beginnings of psychology as a science. Only physical speculation such as the OTs offer any hope of being able to deal with this kind of artifact in both in the limited area of parapsychology and in the more extensive field of psychology itself.

Question 16: We are currently operating under the working assumption that any such consciousness-related anomalies are peripheral to our routine activities and small enough to be absorbed by the tolerances built into our systems. Is that a correct assumption – and if not, which areas do you think are most susceptible to these poorly-understood effects? How critical could they become?

LYN BUCHANAN The important question here is to find out whether or not that working assumption is correct. Only then can the other questions asked here be evaluated.

MARGARET MOGA If “thoughts are things” and capable of affecting experiments in the laboratory, then everyday thoughts of people and places are probably having a profound, unseen effect in the world.

KEAN HIN OOI Yes, the assumption is correct. The mind has selectivity (Thee Level Theory of Matter, TLTom) which varies from person to person. And the specificity and strength of selectivity depend on the ability to remain mindful and focus. Generally the information from the surroundings is not strong enough to affect the consciousness-related anomalies. The exception is when the study is done within an existing qi (information) field or consciousness field that carries the information which is strong enough to precipitate anomalies. (e.g. : fieldREG studies)

and if not, which areas do you think are most susceptible to these poorly-understood effects? How critical could they become?

Just like the smaller a weight the easier it can be lifted: the easier an anomaly can be precipitated, the “smaller” the information that is needed – of course it is difficult to measure the strength of information.

ULRICH MOHRHOFF Who is “we”? The mainstream “we” operates under the assumption that no such anomalies occur. If “we” includes researchers like Jahn and Dunne, then I don’t see how “we” assume that consciousness-related anomalies are “small enough to be absorbed by the tolerances built into our systems.” If this were the case, how could we have evidence of such anomalies?

Question 17: If consciousness and the mind-brain paradox are indeed the great challenge of XXIst century science, then what is to become of Science past that event horizon? Can you conceive of a way to meaningfully integrate subjective and objective exploration tools?

LYN BUCHANAN Once a truth is finally determined and is no longer an assumption, the only challenge is to those who will fight it because it isn't "what is in my book" or to those who live by the mantra, "We've never done it that way before." The truth tends to provide the answers which open new pathways. It doesn't cause any other challenges than the need to adjust our understandings, our activities, and our paradigms. If that assumption is true, then the only challenge is the changes that will naturally come.

Question 17B: Can you conceive of a way to meaningfully integrate subjective and objective exploration tools? Of course, I can. I'm not a laboratory researcher. I live in the real world, where the two are integrated in a constant give-and-take, learn-by-doing-and-learning-from-the-results day-to-day struggle to muddle our way through. In the real world, we integrate the two all the time.

ULRICH MOHRHOFF Making sense of quantum mechanics is another such challenge. If we had any clear idea about the science of the future, it would already be part of present science. The characteristic of an event horizon (why these many irksome and misleading physical analogies?) is that we can't see

beyond it. I can conceive of only one meaningful way to integrate subjective and objective exploration tools: to enter into and explore the subliminal reaches of consciousness, by overcoming our present exclusive concentration in our surface minds (see my piece “Towards understanding anomalous correlations”). This opens the door to an internal laboratory, where we can learn to use mental tools as effectively as we have learned to use physical tools.

KEAN HIN OOI Science of consciousness – qigong science.

What is the mechanism of action of external qi or an intent? We proposed TLTom - and Sano et al. have proven that information can be converted into energy. Subjectivity of the mind will bring objective changes: direct creation of energy by the human intent (consciousness information).

ANNA ARAGNO Good question!!

A final comment about the concluding remarks regarding the placebo effect: it does seem that once “information” or knowledge reaches critical thresholds it not only promulgates throughout a population but spreads and transfers form context to context joining universal “pools” of communal knowledge (carrying and swaying Ucs’ly toward certain assumptions) which produce effects in and of themselves. The advent of the “pill, a tiny “thing” administered by “Dr’s” who read physical signs that invisibly affects things “inside one’s body” must have an enormous impact on the human psyche from early on habituating to eliciting expectations which in today’s “highly suggestible-prone” atmosphere would render placebo responses more likely. The “pill,” I suspect, also generates powerful Ucs fantasies. The placebo effect must also be strongly influenced by Ucs ‘doctor’ transferences.

In response to “Which means that consciousness information becomes almost impossible to hide.”(L.Sidorov): in my Manhattan neighborhood, very high up, and painted in bold large letters into the bricks of a building, is written, “Depression is a fault in chemistry, not character”. It has been there for *years and years*, and has to have *subliminally* seeped into the minds of millions of people passing that area. (The psychoanalytic understanding of depression is that it is an emotional *disorder of rage* turned inward against the self, naturally creating underlying neuro-chemical imbalances). Tampering with the apparent neuro-chemistry and abating the emotional symptoms does not eradicate, but only placates, the condition. Nevertheless, the general assumption is such, and the readiness to take a “pill” the effects of which are soon felt without personal effort, is too seductive to resist, for most. So, in my opinion, it is not *conscious* information that is impossible to hide, but precisely *subliminal and unconscious* knowledge that renders so susceptible as to govern desirable effects that are expected.

In an age when we are bombarded with more and more sensationalist media-filtered adverts, images, and information, all fed “magically” via inanimate screens (that cannot be interrupted, questioned or tested) and all received relatively “passively,” it is not surprising that the

population, in general — already predisposed to self-medication-- is becoming more, not less, prone to ‘self-conditioning.’

PS. A recent French film “Augustine” takes place at the Salpêtrière, in late 180’s Paris, where the famous Charcot studied and ‘hypnotized’ his many “hysterical” cases all of whom exhibited a plethora of formidable symptoms, typically, paralysis of body parts or entire sides; hysterical blindness; epileptic-like fits; inability to speak, swallow, walk, etc etc...but without *any* organic abnormalities. All these cases were extraordinarily susceptible to hypnotic suggestion. The film reveals, at the end, the powerful underlying transference origins and implications and why Freud, who studied with Charcot, was soon to unveil an “interpretive method” that relieved symptoms.

Question 18: Any final comments? Where do we go from here?

LYN BUCHANAN I would only comment that the experimenter effect has definitely been shown to be real. But to try to make that the final and only answer for everything is to turn a blind eye to other possibilities, and that is not only non-scientific - it is also not smart.

KEAN HIN OOI We have many studies that show that the human intent could bring changes to the physical world. We also have experiment (by Sato et al) that shows that information could be converted into energy and we all know energy could be converted into physical matter. Perhaps the next step is to study how the mind would bring bigger changes to the outside world. We say it is the ability to remain mindful and focused which is the core in qigong practice and this can be measured with an EEG.

ULRICH MOHRHOFF *RE: “Specifically, what we wish to address here is the issue of interference: what determines which of the available information in a network of experimental participants (principal investigator, subjects, experimental animals or other human subjects, etc) reaches the target and comes to dominate the outcome?”* According to Sri Aurobindo, every single intentional thought (a wish, a hope, a desire, a fear, etc.) becomes a quasi-independent mental formation, which is added to the mix of myriads of active mental formations. That’s why one has to be careful with one’s thoughts. A wish once formulated acts independently toward its fulfillment, even when it’s no longer harbored by its author. Needless to say, what results from the mix is beyond our control, although thoughts with strong emotional content carry a greater weight.

HIDEYUKI KOKUBO PK or bio-PK can be measured using biological or physical detectors now, and we can expect to obtain more suitable sensors for PK in future. However, we have not had physical or bio sensors for ESP yet. Statistical indexes such as effect size are useful, but they are not enough to study physical or biological mechanisms of psi. If we succeed to develop suitable sensors for ESP, we will reach a new horizon. Development of detecting technology for ESP is important.

Conclusion

Sheldrake's and Mahlberg's experiments seem to indicate that once a critical threshold is reached, usable information tends to propagate through a population even in the absence of direct contact between its members. In a follow-up (post approval) drug clinical trial, the previous advertisement (often on an extensive mass media scale) of a drug would naturally raise expectations of therapeutic success in both experimental and placebo cohorts, if those patients were aware of which drug they were supposedly being administered. So what if the name of the drug were hidden from patients, with only a general disclosure regarding purpose and possible side effects of "drug X"? At first sight, this strategy would appear to be sufficient in order to bypass the advertisement conditioning. However, the data presented above suggests that subconscious information can "jump" between individuals who have never had direct contact with each other, on the basis of another common element. This possibility is reinforced by McMoneagle's discussion of error-correcting features in remote viewing scenarios (see statement A). *Information, in the context of nonlocal communication, does not appear to be a matter of vocabulary and coordinates; instead, meaning seems to emerge as a function of network correlations*, with attention facilitating, but not indispensable to the process. Which means that conscious information becomes almost impossible to hide.

In "L'accord telepathique", Warcollier lists several additional factors that, in his experience, have been shown to enhance the sharing of mental images: situations where several individuals concentrate on the same object or person; situations where several persons perceive different, but similar objects; and cases where several persons share the same preoccupations or aspirations. At the same time he notes that "an agent working with several percipients [will not succeed in] influencing only one of them at the expense of the others" - sometimes the entire group will receive the image and sometimes only several members who were not the designated targets.

If information can "network jump" blindness barriers and also exhibits a certain facilitation effect as evidenced by Sheldrake, Mahlberg and Pavlov's critical mass studies, then regardless of subjects' conscious blinding with respect to the drug, one cannot hope to insulate the subjects *as a whole* from the knowledge of the experimental investigators and any other network participants, including those to whom the drug has been marketed before. Subconscious effects, including therapeutic and other (side) effects, may percolate through the system simply as a result of multi-point correlations and cognitive entanglement. Therefore an understanding of relative information pressures and resultant phenomena (amplification, interference, displacement) is important in order to tease out real from placebo drug effects.

On the other hand, we realize that this entire discussion is based on relatively few data points, so that any conclusions are to be treated, for now, only as preliminary research leads. It is our hope that the important implications of these observations are recognized beyond the borders of experimental parapsychology and that the proper studies are set in place to confirm and expand our understanding of experimenter expectation and subconscious information flow.

L. Sidorov

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