

ESSAY REVIEW

Some Reflections on Parapsychology, Stimulated by the Publication of a New Handbook of Parapsychology

Parapsychology: A Handbook for the 21st Century edited by Etzel Cardeña, John Palmer, and David Marcusson-Clavertz. McFarland, 2015. 424 pp. \$65 (paperback). ISBN 978-0786479160.

Handbook of Parapsychology edited Benjamin B. Wolman. Van Nostrand Reinhold Company, 1977. 967 pp. \$25 (paperback). ISBN 978-0442295769.

As fields of science go, parapsychology is miniscule. Yet with more than a century of research behind it, it long ago needed a handbook to orient new researchers, and recently a new *Handbook* was published.

When I was asked to review the new *Handbook*, I regretfully said no, I didn't (and still don't) have the needed time to give a very important book like this the kind of thorough, chapter-by-chapter review it deserves. Asked again, I thought about it and said okay if I could, as someone who has devoted a major part of my career to parapsychology for half a century, instead give an overall impression of the field and its *Handbook*, and this was okay with the editor. To start, I envisioned holding the old *Handbook* (to which I had the honor of contributing a chapter on drug-induced, altered states of consciousness) in one hand, the new one (no chapter by me) in the other, and sharing some general reflections on what's happened in the past three and a half decades. That's the position I will take in this brief essay.

They weigh about the same to my hands, but inside . . .

I imagine a lot of people will see some confusion in the title of a book that calls itself a handbook of parapsychology. At one extreme, parapsychology has long been a popular term (too) widely used to mean *anything* weird and apparently impossible by conventional scientific standards, with weirdness being foremost and questions of scientific quality of evidence given little weight. For those really interested in science, or in promoting the field of parapsychology as a science, this popular, indiscriminate mixture drives us crazy!

We've worked so hard to develop parapsychology as a branch of *science*. And that's the other extreme: A very small number of us who use

levels of scientific methodology and standards typically higher than in most conventional areas of science, are convinced we've discovered several human faculties or processes, *psi phenomena*, as definitely existing, such as "telepathy" or "precognition," and yet find that far too many people who work as scientists in other fields a priori deny the very existence of this evidence, much less its quality, for what can only be assumed to be *irrational*, rather than scientific reasons. A possible psychological dynamic behind these irrational attacks is that parapsychological phenomena, especially if we use the older and wider scope of investigation termed *psychical research*, rather than "parapsychology," are about things that can be extremely important to human beings, raising questions as to whether there is a reality to a spiritual side of life or not. Many people now take a totally materialistic view of the universe, as if this philosophy were Revealed Truth, and vehemently attack studies that claim there is scientific evidence that the universe is bigger than we know, bigger than the current materialistic view, and may have vital spiritual aspects to it. I call this an implicit philosophical stance, rather than a scientific one, as its proponents apparently know a priori there **cannot** be any psi phenomena, so they don't bother to even read the evidence for psi. **Real science always, always puts evidence ahead of convictions.**

I've been involved in scientific parapsychology for more than half a century, starting with my first experiment (1957) while still an undergraduate engineering student at MIT, trying to induce out of the body experiences (OBEs) with hypnosis (Tart 1998). With the wisdom of hindsight, my design didn't have an adequate, a priori chosen evaluation method, but it was pretty good for a college sophomore. But a lot of high-quality research has occurred since my youth, so, looking at the new *Handbook*, and drawing on my experience, where have we gotten to?

Trying to write this review for a scientific journal, my feeling is that it should be tight, logical writing, drawing almost exclusively on the scientific data. But my cat, leaping up into my lap and sitting down on my two handbooks of parapsychology, waiting to be rubbed (the cat, not the handbooks), reminds me quite strongly that we're not dealing merely with abstract scientific "anomalies," but with material that can be emotionally extremely *important*. And that's why I primarily define my scientific specialty nowadays as *transpersonal psychology*, with parapsychology as a technical specialization within that. Yes, I want to know what's likely to be real psi effects versus delusions, correlations, and mechanisms, etc., with precise lab work as a foundation, but I also want to know about what psi means *to* people and what it means *about* people.

So, two handbooks of parapsychology. The first is the one edited by Benjamin B. Wolman, published in 1977, and has 967 densely packed

pages. Although I've only occasionally dipped into it for reference and for leads to a literature that I otherwise knew well, it has held an honored place on my bookshelf these many years. The new *Handbook*, published in 2015, comes along 38 years later and makes me wonder, have we made much progress?

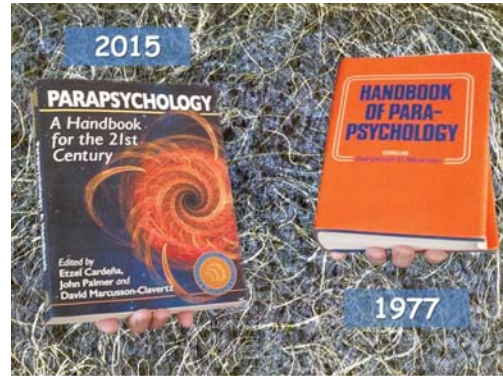
There's 414 pages in the new *Handbook*, but it's an attractive, larger format book, and certainly contains a huge amount of both standard information any serious investigator should know, as well as much new material. And I can tell just from the list of the editors, Etzel Cardeña, John Palmer, and David Marcusson-Clavertz, that this will be high-quality material. I may be a little bit prejudiced here, for Etzel Cardeña was a graduate student of mine many years ago, and I sometimes think that what I did to support him was one of my greatest gifts to parapsychology, hypnosis research, and the field of consciousness research in general. Not that he needed much support from me, he was moving along quite nicely by the time he arrived in our psychology graduate program at UC Davis! Cardeña now holds the endowed Thorsen Chair of Psychology at the University of Lund in Sweden. John Palmer is an old friend and colleague who worked with me at UC Davis for a couple of years on studies to try to increase ESP ability by providing immediate feedback training, and is now the director of research at the Rhine Research Center and editor of the *Journal of Parapsychology*. David Marcusson-Clavertz was a graduate student of Cardeña's working on the preparation of the book, which tells me immediately he must be very bright!

So have we made significant progress in the almost 40 years between these two handbooks?

"Progress," is, of course, a very general term. To answer my question would require a detailed evaluation of each chapter in the new *Handbook* and a comparison with what we knew as it was summarized in the old *Handbook*. But in general, as someone who has both been very much inside the field of parapsychology for a major part of my career, but also coming from a wider perspective of studying the nature of consciousness, particularly altered states of consciousness and transpersonal psychology, my general impression is that, except in certain areas, we haven't really made much progress, and I'll look at some of these negative aspects first.

As it was decades ago, parapsychology is still a minuscule field of research with hardly any resources, and too much of the effort is still caught up in the question of proving whether there is any kind of reality to psi phenomena. You might think that parapsychologists would've learned decades ago from the kind of irrational attacks continually launched by those I call *pseudo-skeptics* that while you can think about the existence of any kind

of psi as a rational, scientific question, in point of fact most of the pseudo-skeptics' reactions to parapsychology seem to come from an emotional level, and allow them to frequently disregard ordinary rules of evidence. For example, in 1955, I found this all too readily expressed in a feature article in *Science* (Price 1955), one of the most prominent



scientific journals on the planet. The author, G. R. Price, a chemist if I remember correctly, who, as far as I knew, had never actually done a single experiment dealing with parapsychology, wrote, in essence, that no intelligent man could read the evidence for ESP and doubt that it existed, but, *since we knew ESP was impossible*, we had to conclude that all of this evidence was due to error and fraud. A powerful statement of faith! Published in *Science*? A good reminder that we scientists *try* for objectivity, it's essential to the scientific process, but we don't always achieve it . . .

The forces behind this kind of attitude of the pseudo-skeptics are still very active, and some of my parapsychologist colleagues are still focused on producing higher and higher quality evidence supporting the existence of psi, evidence whose general quality long ago surpassed that required for more conventional phenomena. I have no objection to routinely using the highest-quality scientific procedures, double-blind methods, e.g., in parapsychological studies. As well as methodologically necessary, I think that such rigor also plays an important psychological function of conveying to would-be psi percipients that ordinary sensory and logical information gathering is of no use here: Psi, ESP, is required. Part of this focus on rigorous evidence and controls though, has been, I suspect, to avoid the emotional implications of psychic phenomena, which may trigger irrational resistance in the pseudo-skeptics. "Look how pure our methodology is!" But let's face it: Most of the "miracles" cited in various religious scriptures, and frequently used to "prove" the reality of those religious views, are apparent examples of kinds of psi, ESP, and psychokinesis, so parapsychology seems to be being seen, on some mental level, as bringing religion back into a materialistic world, and this is treated as if it were heresy!

I'm proud of the fact that we have such exceptionally high standards of scientific procedure in parapsychology, but insofar as we refuse to

acknowledge the covert emotional issues within the controversy about psi, and continue to waste our efforts in providing better and better evidence for the existence of psi that will be irrationally ignored and rejected, we're not getting very far. *We need to get on with studying the nature of psi, applications of psi, and what that nature means for our understanding of the universe.* Not that we should relax our scientific standards, of course. I'm proud that in scientific parapsychology we have such exceptionally high standards (see, e.g., Sheldrake 1999), and I cannot repeat often enough that such standards should be a standard part of any kind of parapsychology study, but *we need to get on with facing the emotional, spiritual, religious implications associated with parapsychological phenomena and deal directly with them, not ignore them* and assume that somehow these pseudo-critics who are bothered by these things won't notice any religious implications of psi. I've suggested some useful approaches on this to parapsychologists (Tart 2002) and to transpersonal psychologists (Tart 2004).

In the new *Handbook*, for example, there is much use of the phrase "anomalies" instead of older terms like ESP and psi. Anomalies is a scientific-sounding word and perhaps stimulates less immediate resistance than "psychic" or "psi" or "ESP," but the people whose materialism seems to act like a dogmatic religion, and who are fighting against the heresy of parapsychology aren't fooled by words like anomalies. Not to mention that the word "anomalies" typically carries the implication of small-scale, probably trivial phenomena, or errors that need to be corrected, even if intellectually interesting. As I argued in my own final summing up of my view on parapsychology, spirituality, and consciousness (Tart 2009), the data of parapsychology can support an openness to (a) some aspects of spirituality as being about real things, and (b) it's rational for a person to be *both spiritual and scientific* in their approach to life, but remembering this is an attitude that must also take into account that (c) nonsense exists in all areas of life and in our own mental processes, nonsense and error that we must be careful of.

As I said earlier, ". . . my cat, leaping up into my lap and sitting down on my two handbooks of parapsychology and waiting to be rubbed, reminded me quite strongly that were not dealing merely with abstract scientific anomalies, but with material that's emotionally extremely *important*." I love objectivity—or at least striving for as much of it as we can get—as a tool for acquiring and refining knowledge, but true objectivity is not helped by pretending something does not have emotional, meaningful aspects. Yes, religion has been used as a major force in manipulating people (as has politics, etc.), but we humans have (without attempting to define "spiritual" here, which would take us too far afield) important spiritual needs, and

I've often made the point that (scientific) parapsychology is to spirituality as physics is to engineering. Physics provides us with basic knowledge about materials and their properties, and engineering, using this knowledge, creates useful structures and processes. Parapsychology, at this stage of our (still primitive) knowledge, tells us there is more to the human mind than is explicable in current physical terms, so a wholesale denial of any reality to spirituality because it doesn't make physical sense is not a scientifically valid conclusion: Religions and spiritual paths may be pointing to and constructing useful processes and ways of living.

I wrote about progress above: “. . . my general impression is that, except in certain areas, we haven't really made much progress . . .,” and I would like to balance that with a few outstanding examples of progress, but I'll limit myself to one in the space available here. A handbook must, of course, cover a whole field, not just the parts I find most promising and interesting, but . . . The outstanding progress, in my personal opinion, has been the development and application of the remote viewing procedure.

There are many things that are obvious in retrospect . . . but it took us a long time to think of them. Trying to use psi to identify abstract symbols with no direct meaning—cards, numbers—which has been the procedure in various forms for most of the field's history is, if you think about it, pretty boring. Indeed I find it rather amazing that percipients can attach enough temporary meaning to success in guessing cards or numbers to score significantly above chance. But, of course, it's a very convenient way to study psi in the laboratory and precisely quantifiable. Too, parapsychology, like psychology, is, as I often half-tease colleagues, the study of the college sophomore by former college sophomores for the benefit of future college sophomores, and you don't make it through college without being able to, at least temporarily, believe in the importance of abstract symbols and numbers. . . . But, insofar as we are products of our evolution and history, abstract symbols are very late comers in human history, and what's always been really important to know is *what might be around the next bend in the trail?* Something you can hunt and eat? Something that's liable to hunt and eat you?

Remote viewing, trying to describe with words or sketches, some hidden place or process that's going on or will be going on (precognitive remote viewing) around that metaphorical next bend in the trail, is much more like what's important to us. Fortunately, blind matching tests now let us give relatively objective probability estimates of how successful a given study is, and we now have many laboratory demonstrations of how often remote viewing can work and work well. That work, initially focused at the Stanford Research Institute (now SRI International) by physicists

Harold Puthoff and Russell Targ, and continued by physicist Ed May and colleagues, has given us many rigorous demonstrations of this form of psi (see Targ & Puthoff 1977, Tart, Puthoff, & Targ 1980, Tart, Puthoff, & Targ 1979 as examples). Also very impressive to me has been the practical application of remote viewing technology, independently developed around the same time by Stephan Schwartz for archaeological work (Schwartz 1978, 1983). Asking several remote viewers to find the location of certain types of artifacts in Egypt while they are in the Western Hemisphere, e.g., separating signal from noise by averaging, doing this on an increasingly smaller scale and looking for areas of agreement, and then going to Egypt or other distant sites and successfully digging up such artifacts is—a scientific term is not sufficient here—mind-blowing!

Similar remarkable successes occurred in the Army's applied remote viewing program, inspired by the earlier research. Quite aside from all the statistical evaluations, one example I often think of is two Army remote viewers (Joseph McMoneagle and Hartleigh Trent) who were simply given a set of geographical coordinates. This was before everybody had Google Earth or other mapping systems on their cell phones. The coordinates were somewhere in Siberia, a very, very big place with hardly anything in it, to put it mildly. The viewers correctly described some factory buildings. The intelligence agency that tasked this viewing said that was correct, they could see that from satellite photos, but they wanted to know what was in the buildings. The viewers remote viewed again and described a gigantic submarine being built, three times as big as any existing submarine.

The tasking agency considered this nonsense. Building such a gigantic submarine was not feasible, and besides these factory buildings were well back from the ocean. McMoneagle (personal communication 2016) tells me the remote viewing unit got a note back from Robert Gates, Secretary of Defense, saying "Total fantasy." Angered, McMoneagle said "They will launch the total fantasy 112 days from today." He added to me, "They launched it 114 days out." It was indeed the world's biggest submarine, literally three times as big as others, and satellite imagery showed it was launched through a canal that had been dug from the factory to the Arctic Ocean.

That politics was allowed to cancel U.S. government support for remote viewing research strikes me as a major tragedy, for it was indeed a very useful source of intelligence, and intelligence tends to deter aggressive military actions. If you know they're waiting for you around that bend in the trail, you'll probably take a different path. If they know that you may know they are planning a surprise attack, they will probably not do it, having lost the advantage of surprise.

To my disappointment, remote viewing is only one topic of many in the new *Handbook* and it tends to be treated in a relatively abstract way rather than presenting mind-blowing examples like this. . . . But, as I said, a *Handbook* is obligated to cover a whole field, there is only so much space, and within these limits it is an indispensable guide and first class work! Despite little research funding and irrational barriers to scientific acceptance, a lot has happened in the almost 40 years between the publication of the two handbooks.

New Directions?

I do not believe that the *only* way to make any progress in understanding reality is through the strict application of logic and with an overwhelming physicalistic bias in science. I've argued, for example, that the development of state specific sciences (Tart 1972), giving us other ways of perceiving and thinking about the world, may lead to important discoveries and understandings. I also think the hidden psychodynamics that people have with respect to psychic phenomena produces strange effects in the field that inhibit real progress in parapsychology.

As a specific example, in the 1970s I was continuing classical parapsychological research on multiple-choice guessing, as was so well-embodied by card-guessing tests, but adding an element of immediate feedback so there would be an opportunity for *learning* to use psi abilities. My analysis of standard card guessing, done without immediate feedback in many studies over the years (Tart 1966), was that it was exactly the same as standard psychological *extinction paradigms* for any ability, so it was not surprising that the *decline effect*, lower and lower scoring down to chance with repeated testing, was common in parapsychological experiments. My initial results (Tart 1976, 1983) were quite encouraging, but within a couple of years, after hearing about the SRI remote viewing research, I basically gave up that line of research. The more successful examples of remote viewing from SRI that I had heard about, although not capable of being well-quantified, suggested a much higher level of routine psychic functioning than you get in multiple-choice tests. I then spent a year consulting on the SRI project, and never really went back to multiple-choice guessing, even though I think it has some value.

While I was speaking with Russell Targ, one of the originators of the SRI remote viewing paradigm, he once mentioned his previous work as an engineer/physicist in developing lasers. Particularly that while most researchers could only get extremely low power outputs from lasers, his team developed a laser that would drill a hole through a firebrick! This was a jump way above everything else in laser research, and other laser researchers

quickly began to copy and further develop his techniques. So surely, since the remote viewing procedure was routinely producing so much more psi than almost all other forms of ESP research, most parapsychologists would become involved in using the remote viewing procedure?

To my surprise, only a few other investigators took it up, and that included very few who came from what we might call the orthodox style of parapsychological research. Since I had argued for years that the low reliability and very poor signal-to-noise ratio in ESP prevented real progress in understanding its nature and applying it, I couldn't believe that most people wouldn't have an intense interest in something that markedly raised the level and reliability of psi functioning.

That's still the case today. There is little remote viewing research, even though I think it's proved its viability (given the right experimenters) and its practical application.

If I were a skilled psychoanalyst and had done extensive psychoanalysis with all the active researchers in parapsychology (not very many, sadly), I suppose I might have some pretty specific clues as to the dynamics of this avoidance of success. I've hinted at some of these factors (Tart 1984, 1994), but they are just guesses at this point in time, parapsychologists have not been tested with in-depth psychological assessment techniques.

I'm not an psychoanalyst, of course, and, as I mentioned above, while the resistance is beginning to lesson a little, by and large most parapsychologists seem to believe in the objective experimenter who has no particular part to play in experiments with psi. Resistance to the idea of the experimenter as a potential independent variable, a possible source of bias, is very strong in mainstream psychology, too. This simply does not compute for me. You can't do a psi experiment without postulating as a working hypothesis that there is an unknown information transfer channel between people that we know little about, have no idea of how to block, and which can certainly transfer information back and forth between the person designated as the "experimenter" and the person designated as the "percipient" or "subject." So if you don't "calibrate" the experimenters and take those factors into account, how can you hope to begin to understand what affects the functioning of psi?

So as I said at the beginning of this essay, there's certainly been significant progress in parapsychology, but it's still a long way from a satisfactory understanding of psychic functioning. The new *Handbook* covers most of the tools needed to research psi, but it does not deal much with the question of the experimenter. I'm hoping things will change by the time the next handbook is published.

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