

## BOOK REVIEWS

**The Tunguska Mystery** (Astronomer's Universe) by Vladimir Rubtsov. Springer (Heidelberg/London/New York), 2009. 318 pp. \$29.95 (hardcover). ISBN 978-03877565730.

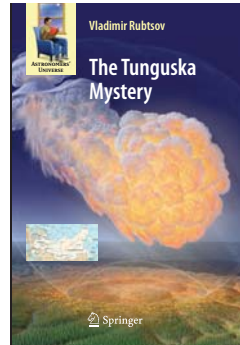
Hundreds of articles and dozens of books have been written on the Tunguska mystery, offering a variety of solutions to the nature of the phenomenon that occurred over central Siberia in the early morning hours of June 30, 1908. This book differs from others on the subject in key respects: It is interdisciplinary in nature, the author is a Ukrainian schooled in Russia and thus able to present a detailed synthetic view of Russian research on the subject over the last century, he is technically competent yet has a broad background in the philosophy of science, and he has no apparent axe to grind, despite flirting with the extraterrestrial spaceship hypotheses as part of his admirable plea to take into account all possibilities. After a century of research on the subject, including 35 years of his own personal research, he believes a definitive answer has not yet been found to the cause of the explosion, but that we are coming ever closer to an answer if only the proper effort would be applied.

Any solution, he argues logically, must be based on the empirical evidence, not on theoretical calculations. What is certain from the numerous accounts is that a fiery object was seen entering the atmosphere accompanied by loud sounds but no smoky trail, and that the object exploded with a force up to 40 to 50 megatons, equivalent to 3,000 Hiroshima bombs. The explosion, heard more than 800 kilometers from the epicenter, leveled 2,100 square kilometers of landscape with millions of trees extending from the epicenter, where partially burned tree stumps were found. No primary crater or debris has ever been found, despite numerous expeditions to the area beginning with those of Leonid Kulik, a meteorite specialist from the Russian Academy of Sciences, in 1921 and 1927. In the 1930s the British astronomer Francis Whipple (not to be confused with the American comet expert Fred Whipple) suggested an exploding comet as the cause, and in 1946 the Russian engineer and science fiction writer Alexander Kazantsev (1906–2002) first hypothesized it was an exploding spaceship in his story “The Explosion.” According to Rubtsov, one of the stranger phenomena not widely known is that the skies of Europe and Russia were anomalously illuminated for three nights preceding the explosion. More explicable are the observatories, including the Mt. Wilson Observatory, that reported a decrease in atmospheric transparency for several months after the event. Rubtsov also describes the results of Russian investigations showing that local geomagnetic

effects were associated with the explosion. In addition, the explosion registered on seismic stations across Eurasia. Thus, as Rubtsov points out, we are left with three traces of the explosion, mechanical (felled trees), thermal (burnt tree remnants) and magnetic, along with some lesser clues that he examines in detail.

For the last 60 years, opinion in the former Soviet Union has been divided into two camps, those favoring natural versus those favoring artificial explanations such as the spaceship hypothesis. The latter has virtually no following in the West, where, following the work of Chris Chyba and others, an airburst of a stony meteorite is the leading interpretation. For some reason, Rubtsov does not mention Chyba's work, published in 1993. In any case, he is skeptical of the general meteorite interpretation, arguing (p. 252) that neither the cometary nor asteroidal hypotheses can explain the event, mainly because neither a crater nor debris have been found. However, in 1999 an Italian team of scientists led an investigation to Lake Cheko, some 8 kilometers north of the epicenter. Rubtsov gives only one sentence to the Italian expedition (p. 103), probably because its results were only announced in 2007 and published in 2008 as this book was in production. But the findings were spectacular: Seismic reflection profiles showed evidence of a dense, meter-sized rocky object at the center of the lake, which the scientists determined fills a space shaped like an inverted cone rather than the usual flat lakebed. They hypothesize this is a small fragment from the main colliding body, whether asteroidal or cometary. Another expedition returned to the site in 2009, and plans are under way to drill at the center of the lake—no small task in central Siberia.

If the cause of the Tunguska event was the entry into Earth's atmosphere of a Near Earth Object (NEO), it is incentive for more study of these objects, a plea that Rubtsov makes at the end of his volume. NASA (the U.S. National Aeronautics and Space Administration) has devoted considerable research to the problem, and maintains an NEO program at the Jet Propulsion Laboratory (JPL). With events like Tunguska in the background, many believe that funding needs to be increased on the search for NEOs and on possible deflection strategies. Indeed, to some visionaries (including Michael Griffin, the recent NASA Administrator) one of the motivations for spaceflight is the ability to remove a few representatives of homo sapiens from the home planet, in case of a catastrophic event that would cause a mass extinction and require starting life over with the slime of 3.8 billions years ago. Although a long shot, it would seem a small price to pay to hedge our bets, and it is not so far-fetched considering the recent confirmation that the Chicxulub crater in Mexico was



caused by a large asteroid 65.5 million years ago, resulting in one of the three largest mass extinctions in the last 500 million years.

Moreover, we continue to have frequent, if small, reminders of the dangers to the Earth from space, most recently the object 2008 TC3, a meteoroid 2 to 5 meters in diameter that burned up over the Sudan on October 7, 2008, having been detected the prior day, resulting for the first time in an accurate impact prediction and a warning from JPL's NEO program. Unlike Tunguska, in this case 8.7 pounds of 280 meteoritic fragments were found, raising the question: Even if the Lake Cheko object is confirmed, why have no other fragments been found?

In the end, this book, well-written and meticulously referenced, is a laudable attempt to look at the available evidence while keeping an open mind. In many ways the Tunguska event is similar to the UFO debate, with too little evidence giving rise to too many speculative hypotheses. But in the Tunguska case, all agree there is physical evidence that the event actually occurred and was not just an aberration in the mind of the observer or a psychosocial phenomenon. With the Lake Cheko evidence, the intriguing century-long mystery of Tunguska seems finally to be yielding its secrets to science. Should that prove to be the case, it will reemphasize the importance of Carl Sagan's dictum that extraordinary claims require extraordinary evidence. And it raises the question: What are the limits of an open mind?

STEVEN J. DICK  
21406 Clearfork Ct.  
Ashburn, VA 20147

**Witness to Roswell: Unmasking the Government's Biggest Cover-Up** by Thomas J. Carey and Donald R. Schmitt. New Page Books, 2009. 318 pp. \$16.99. ISBN 9781601630667.

There are hundreds or thousands of unexplained UFO sightings reported by people from all walks of life. If taken literally, these reports suggest that nonhuman intelligences (NHI) are traveling in machine-like craft through the atmosphere, landing and taking off from the ground and entering and leaving bodies of water. These reports are strongly suggestive, but they are not "hard evidence," in the sense of a piece of unknown material ("unknownium") or an alien creature's body.

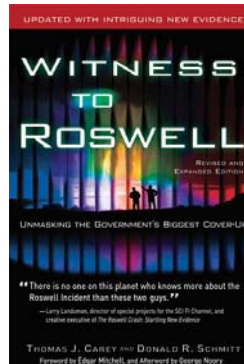
And then there is Roswell.

Anyone who hasn't heard of Roswell (New Mexico) has been living on another planet or in a cave or underwater or in the air, suspended by a Mogul

balloon, for the last three decades. Quite possibly the longest running UFO investigation of all, the Roswell case began in July, 1947, took a break for about 30 years, resumed in late 1978, and continues to this very day, with the book reviewed here as the most recent summary of what is known. Although the original version of this book, published in 2007, contained a lot of information from witnesses, I strongly recommend that the reader obtain the 2009 version which contains witness information as recent as late 2008.

The Roswell crash first became known to the general public shortly after noon, July 8, 1947, when the Roswell Army Air Force Base issued a press release that said the Army had acquired a flying saucer. A few hours later, General Ramey at Fort Worth, Texas, under pressure from the Pentagon to “get the press off our backs,” announced that it was only a weather balloon. Years later, in 1994, the Air Force admitted that it wasn’t simply a weather balloon. Instead, the Air Force claimed that it was a “Mogul balloon.” Further, in 1997, the Air Force announced that any bodies associated with the Roswell crash were actually “crash dummies,” anthropomorphic, six-foot-tall mannequins that were designed to test survival techniques for pilots ejecting from high-flying aircraft and manned satellites. (This is what I call the “dummy drop” theory of Roswell.) One problem: The dummies weren’t dropped until 1953, and they were not dropped in the places where Roswell wreckage was found.

People who have not followed the most recent Roswell research will probably be surprised, or maybe even astounded, at the mass of testimonial evidence. No one now doubts that *something* unusual crashed in the desert outside Roswell. The question now is, what was it? The United States Government and skeptics in general have settled upon the “Mogul Balloon Train Hypothesis” (MBTH). Other proposed explanations have been superseded by the MBTH. The reader of this book will have plenty of information on which to base his/her conclusion as to whether or not the MBTH could possibly be correct. As for me, when I learned of the testimony of Jesse Marcel, Jr., the Roswell base intelligence agent, I decided that any explanation based on ordinary balloon materials, including the MBTH, was insufficient. Skeptics argue that the Mogul project was highly classified and Marcel had no “need to know” about the project so he wouldn’t be aware of the large amount of ordinary balloon material associated with a crashed Mogul balloon. However, the key here is “ordinary.” The Mogul balloon device consisted of many ordinary balloons plus an ordinary radar reflector. It is very difficult to imagine that Marcel, trained in radar techniques, would fail to recognize ordinary balloon material and ordinary radar reflector



material. And, if Marcel were to fail to recognize the material, surely other people at the base would have.

Of particular interest in this regard is Captain Sheridan Cavitt, in charge of counterintelligence at the base. According to Marcel, Cavitt accompanied him to the crash scene along with the farmer who had found the material, Mac Brazel. When Cavitt was first located in the 1980s by investigator Bill Moore, Cavitt would not admit to anything. However, when interrogated by the Air Force as part of the 1994 Air Force investigation of Roswell, Cavitt admitted that he had gone with Marcel, and, furthermore, he claimed that he recognized the material immediately as a weather balloon (not a Mogul Balloon). So, why didn't he tell Marcel? Cavitt's testimony is about as solid as a Swiss cheese. You can read about Cavitt's testimony in the book, but for a more detailed analysis read "Cavitt Emptor" at <http://www.brumac.8k.com/CavittEmptor.html>.

One of the witness stories in the book is that of Dr. LeJeune Foster, an anthropologist. As I read her story I was reminded of what I was told by Isabel Davis, the secretary of NICAP (National Investigations Committee on Aerial Phenomena) in the 1960s and cofounder of the Fund for UFO Research in 1979. One day in the 1970s (I cannot now recall exactly when this was) she told me the following story which I will recite to the best of my ability after hearing it more than 30 years ago. Isabel was "into" UFO research in the late 1950s at a time when she met a lady scientist (she would not tell me the name) who had a high level security clearance and who said she had been asked to do an anatomical study of a "creature." According to Isabel, this lady had been taken by the government to a secure laboratory in the Washington, D.C., area. Before entering the room with the creature she had to take off all her clothes and put on some special laboratory clothing. She was told to walk through several doors, such as would form an airlock, and was then inside and alone. She found the body of the creature and all the necessary instruments and devices she needed to make her study of the body. It was clearly not human, she told Isabel. She wrote her impressions and conclusions in a notebook that was in the room. When she was finished she took nothing with her and exited through the multiple doors. She was told to keep quiet about what she had just seen and done and was then transported home.

Clearly, by telling Isabel, this woman had violated the security requirement that she not tell anyone. I asked Isabel, why did this lady dare to say anything about it? Isabel said she asked the lady that same question. The lady said to Isabel something like this: It is only a story, and I have no hard evidence that this happened; furthermore, if confronted I will deny that it happened.

Over the years I often wondered who that lady scientist might have been, and then I learned of the story of LeJeune Foster. Could she have been the lady scientist? Unfortunately, Isabel Davis died many years before Foster's story

was uncovered so I had no way of confirming the identification.

This is just one of numerous witness stories in this book. Anyone seriously interested in the Roswell research should read this book to find out just how much testimony is available. Lots of people had a “piece of the action” and when these pieces are put together the stories point to one thing: An object/craft crashed near Roswell and alien creatures were found and the government has tried to cover it up.

BRUCE MACCABEE  
*brumac@compuserve.com*

**The Roswell Legacy: The Untold Story of the First Military Officer at the 1947 Crash Site** by Jesse Marcel, Jr., and Linda Marcel. New Page Books (Franklin Lakes, NJ). 2008. \$14.99 (paperback). ISBN 978-1601630261.

It may not be an exaggeration to say that somewhere in the world at every hour, details of the crashed object at Roswell, New Mexico, are discussed, broadcast, or printed in one form or another. It is also an unusual story in that even though it was national news when it was first reported, it never really became popular until more than thirty years later. At this time, witnesses began to reveal a variety of accounts of their personal knowledge of a “flying disc,” as the press called it early on, that the Army Air Force (AAF) retrieved and displayed to reporters on July 8, 1947. Within a matter of hours after that exposure, the “disc” was relegated to being merely a weather balloon and the story passed into obscurity.

The first person known to have contradicted the official dismissal of Roswell was former Major Jesse Marcel, Sr., the base intelligence officer who retrieved debris for the AAF after being notified by a witness, civilian rancher “Mac” Brazel. Marcel surfaced after a TV station manager in Baton Rouge, Louisiana, informed UFO researcher Stanton Friedman in 1978 that he heard Marcel tell the story of Roswell being more than just a balloon. Friedman contacted Marcel and helped to initiate modern publicity about the alleged extraterrestrial nature of the event. This in turn led to others coming forth, creating an ever-enlarging Roswell snowball.

After the spate of books and articles on Roswell since 1980 by numerous authors, *The Roswell Legacy* comes from the family of the original witness who had essentially revived a dead controversy. Jesse Marcel, Jr., the son of Major Marcel, is a Veterans Administration doctor in Montana who has had a lengthy career in the military, as did his father. Before passing away in 1986, the father struck an agreement with his son to make the true story available to the public.

This meant of course the story as the Marcells had seen it. Yes, the Marcells, because Jesse Marcel, Jr., wasn't just the author of his father's involvement but was an active participant. He and his mother were shown a box of debris gathered by his father and brought home after the first field trip to inspect the crash site at the Foster Ranch. The authors, Jesse Marcel, Jr. (hereon referred to as "Jesse Jr.") and his wife Linda, go into considerable detail about the debris. They described plastic-like material, small "I" beams, and an abundance of foil-like material. Jesse Jr. thought the material was "interesting", but at the same time felt (p. 53) "I didn't really understand what all the excitement was about. It surely did not seem to be anything worth getting up in the middle of the night to see." This may have been due to the fact that Jesse Jr. was only 11 years old at the time and flying saucers were a relatively new topic.

Questions could certainly be raised about the accuracy of an 11-year-old's recollections, especially in light of how his father was seen to be very excited and told Jesse Jr. that these were parts from a "flying saucer" (p. 53). In that this was perhaps the most important part of the book with respect to demonstrating whether or not debris of a possible spacecraft was recovered, the question in my mind was whether or not the story told by the Marcells was convincing.

Nothing resembling computer electronics, or even machine parts, was evident in the debris. The bulk of the pile seemed to be foil-like sheeting with plastic "I" beams displaying nondescript symbols. There was no context for how the debris may have fit together. The pieces were part of a structure of some sort, and in the mind of Jesse Marcel it was a flying saucer. Seeing the description and photos of Roswell debris in various accounts, I found it difficult to think that a ship from another planet could be made from such flimsy building material. Maybe I just don't know a spacecraft's engineering structure the way I should! But looking back upon contemporary accounts of the original story, W. W. Brazel told reporters that what he found consisted of "large numbers of pieces of paper covered with a foil-like substance and pieced together with small sticks, much like a kite" (*Las Vegas [New Mexico] Daily Optic*, July 9, 1947). The largest piece was said to be three feet across, and the debris, including small pieces of gray rubber, were scattered over a 200-yard area.

Once again, this description, not unlike how Jesse Jr. described his view of the debris he saw, doesn't give the impression at all of a technology from outer space. One exception offered in the book though is Jesse Marcel's explaining how one of the men at the base tried to hit a piece of the debris with a sledgehammer, only to see the tool bounce off of the piece without doing any damage whatsoever. He added that he himself tried to crumple another piece in his hand which, when released, returned to its original shape with no evidence of crumpling. Unfortunately, Jesse Jr. did not see any of this happen with the debris in their home.



If there were smooth, undamaged pieces of the Roswell debris, as described by Jesse Marcel, they surely weren't evident in the scraps that were photographed by J. Bond Johnson, a *Fort Worth [Texas] Star-Telegram* representative who was present at a public display of Roswell wreckage in the office of the 8th Air Force commanding general, Roger Ramey, on July 8th (1947). Two photos by Johnson in the book give cause to wonder what became of the mystery smooth debris often cited in Roswell accounts. The authors give a rather confused explanation for this, saying that Johnson saw only a small portion of the "actual" debris and that he was allowed to observe wrapped-up "real" debris from a distance so his camera wouldn't get good detail of it. They wondered, "Does this mean that there was a mix of genuine debris with debris from a weather balloon?" (p. 69). Answering their own question, the authors say, "This is indeed what happened", not seemingly concerned with why real debris would be mixed in with unreal debris at all if a grand coverup of the truth were under way.

More confusing still is that after the first contact with Jesse Marcel by Stanton Friedman, Friedman's partner at the time, William Moore, interviewed Marcel, with the interview ending up in the book Moore wrote with Charles Berlitz in 1980, *The Roswell Incident*. We see this on page 68 regarding the Ramey office debris:

General Ramey allowed some members of the press in to take a picture of the stuff. They took one picture of me on the floor holding up some of the less-interesting metallic debris. The press people were allowed to photograph this, but were not allowed into the room to touch it. The stuff in that one photo was pieces of the actual stuff we had found. It was not a staged photo. (Marcel quoted in *The Roswell Incident* by Charles Berlitz and William L. Moore, Grosset Dunlap, 1980)

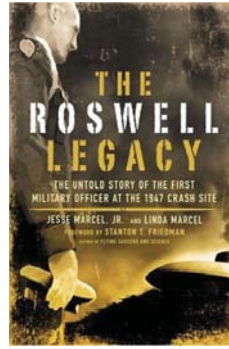
He went on to say that this wreckage was cleaned out and replaced with substitute wreckage for other photos taken, while the real debris was sent out to Wright Field. Looking at the photos of Marcel with the debris and others with the debris in the Marcells' book, it didn't seem that the pieces were different in the respective shots.

There is a brief discussion of a strong odor of something burned from the pieces in the Marcel home. This may be a reference to the decayed rubber fragments that had been in the desert sun for an extended period of time. Such pieces were also present in General Ramey's office. The authors argue for the debris on Ramey's floor being different from what Jesse Jr. saw partly because he recalled no odor from the pieces gathered by his father and shown to his wife and son. Rereading the book's description of the pieces, the authors make no reference to the decayed rubber fragments, though his father must have seen



them and picked them up since they were mentioned by Mac Brazel in his initial discovery of the pieces on the ranch. A simple explanation is that Jesse Marcel did not include the rubber in the wreckage brought home because they did smell. A coverup conspiracy can't be built on such an omission.

It is pretty clear that flying saucers were on the mind of Jesse Marcel from the first moment of his viewing of the site. The authors tell us that he made a number of statements early on to this effect, referring to it as an "unearthly craft" and a "flying saucer" and suggesting that the Marcel family were among the "first humans to see it." But the authors hint at a bigger picture. Jesse Jr. observed (p. 61),



It seems he had seen other things that convinced him that this was not human manufacture. I didn't know what made him so strong in his beliefs, but because I had seen some pretty unusual features in the debris myself, and I trusted my father's expertise, it didn't take much to convince me that he was right.

This suggests the realization that the debris by itself was not convincing enough as evidence of a flying saucer, but instead it had to be tied to other accounts. To be that convincing, some of the tie-in stories would have to include the rumors of large saucer wreckage and bodies of aliens not evident in the original reporting in 1947. It is an odd fact that of the dozens of reports of observations of bodies and vast amounts of debris, the first documented witnesses out to the scene reported seeing neither. Why wouldn't the base intelligence officer know about alien bodies when a civilian Roswell mortician, Glenn Dennis, allegedly did? Or why, when wreckage and bodies were supposed to have been packed and flown out of Roswell, did the pilot and crew know about this but Jesse Marcel didn't? These are bothersome questions that the book doesn't clarify.

More bothersome still is this. As the base intelligence officer, Jesse Marcel was in his way responsible for preserving top security for a unit that was the only atomic bomb group in the country. He knew the ropes on how to deal with secrecy matters for a surprise development, such as the crash of a flying saucer. The book is emphatic that he believed this was a flying saucer. But instead of following security procedures and taking the wreckage immediately to a secure location, he brought it home to his wife and son first! Supposed pieces of an alien spacecraft was spread around the Marcel kitchen and handled with bare hands with no concern for any biological or radiological contamination. Then every last piece was gathered back together with the exception of small fragments

on the kitchen floor that were eventually swept away with a broom and never kept or seen again. Marcel was conscious enough of proper procedure, having gone to intelligence school, to return all the material to the base for reasons of national security, but security had already been breeched in bringing the classified materials to a private residence.

The rest of the book contains the usual defense of Roswell-as-real using a good deal of what might be considered stretched information. For example, even though he didn't see this in the debris, Jesse Jr. cited the son of Mac Brazel as having seen strands of what looked like fiber in the portion of the debris that he saw. Shining a light on one end of the line revealed that the light appeared at the other end. Linda Marcel said Jesse Marcel told her, though he apparently didn't tell his son, that he saw the fine strands as well. It was inferred through third party information that the strands were a form of fiber optics, impressing technology onto the pile of debris by the inference. Of course the source of this claim did so more than thirty years after the event and no one saved a single strand of this material. Nothing can be demonstrated. A point well stretched.

The Ramey memo controversy is cited as supporting the mystery. The "memo" is a piece of paper held by Roger Ramey in one of the J. Bond Johnson photographs of the debris that appeared in the newspapers on July 9. The paper is at the edge of resolution in the photo and many conflicting attempts have been made to decipher it. These attempts have been reported in *JSE* (see *Journal of Scientific Exploration*, 16(1), Spring 2002, 45–66). Jesse Jr. seems to accept one of the decipherments discussing "victims" as a preferred reading, something by no means assured as an interpretation. It is not even embraced as a consensus among the various analyses of the image. In fact, there is evidence in the photograph suggesting that the "memo" is simply a teletype newswire from the offices of the *Fort Worth Star-Telegram*. Another point well stretched.

A full chapter is spent on a mysterious government official contacting Jesse Jr. to lend support to the story. Part of the support was stating that the Whitley Strieber novel *Majestic* was not fiction. *Majestic* deals in large part with endorsing the notorious "MJ-12" documents hoax of the 1980s, a story that has been thoroughly exposed as specious. With support like this, who needs debunkers? Stanton Friedman, the author of the book's Foreword, remains one of the last prominent defenders of MJ-12 being authentic. Jesse's contact sounds more like an enthusiast of government UFO secrecy than one knowledgeable on inside saucer information. The authors though do not spend much time on MJ-12 beyond this.

Considering the plethora of information on the Roswell crash over the past thirty years, readers are now looking for not just another Roswell book. They want information close to the story, meaning from those who were directly involved in it. And it has to be done quickly, since the pool of those directly

involved grows ever smaller with the passage of time. *The Roswell Legacy* provides this perspective, so as such it should be read more so than the average Roswell volume. It sets out to do two things. It is a chronicle of Major Jesse Marcel's career and involvement in the saucer story, and it is an advocacy that a spacecraft was wrecked in the desert. It succeeds at both explanation and advocacy. But while it helps the reader to understand who Jesse Marcel was and the details of his version of Roswell, it doesn't prove extraterrestrials landed here nor does it mitigate the controversy. There are far too many issues that remain problematical.

BARRY GREENWOOD  
*uhrhistory@comcast.net*

**Art, Life and UFOs: A Memoir** by Budd Hopkins. Anomalist Books (San Antonio, TX), 2009. 438 pp. \$19.95 (paperback). ISBN 9781933665412.

*Art, Life and UFOs* is Budd Hopkins' autobiography. The author is probably best-known to readers of *JSE* as the quintessential proponent for the reality of alien abductions. He is the person most responsible for bringing worldwide attention to the phenomenon, his seminal work on the subject having built the foundation upon which the alien abduction experience is still understood. But Hopkins' first passion was as an artist in the Abstract Expressionist movement during the 50s and 60s, and this side of him continues to be as much a part of his personal sense of identity as his work with abductees. In this candid, fascinating, intimate, and often touching memoir, Hopkins chronicles the life and times of the man, the artist, and the abduction investigator. The reader will come away from *Art, Life and UFOs* feeling he knows Budd Hopkins as if he has been a lifelong friend.

As an artist, Hopkins hobnobbed with such contemporaries as Franz Kline, Willem De Kooning, Mark Rothko, Robert Motherwell, and Jackson Pollock, all the while developing his own artistic style in painting and sculpture. His works have earned considerable recognition during his career, and have been displayed at such museums as the Guggenheim, the Hirshhorn, the Museum of Modern Art, and the Whitney. But Hopkins can also paint great pictures with his words, and the tales he tells of life during the "Cedar Bar" years in New York City (named for the Cedar Street Tavern, an artist hangout in Greenwich Village) provide vivid imagery of the art world and its personalities during this period.

Hopkins reflects on his complex personal history with considerable

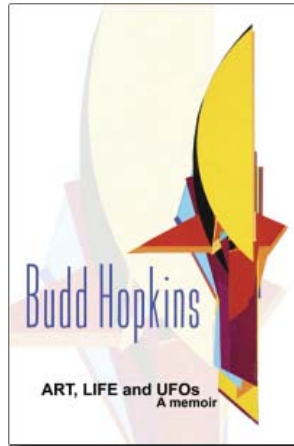
introspection, weaving self-analysis throughout the tapestry of his life, the evolution of his art, and his emergence as the pre-eminent investigator of alien abduction cases. For example, an early battle with polio imposes restrictions on a normal childhood, nurturing a creative drive that serves a “need to invent my own private symbolic world”, a world which “rely[ed] more and more on the inventive richness of my inner life”. A childhood wonderment with nature portends a lifelong curiosity, a “need to know, to tell the false from the true”, and to tell others the truths he has learned. As witness to the cruel and compassionless behavior of his boarding school classmates, Hopkins becomes a sensitive, caring supporter of tormented souls, a person who “befriends the untouchables”.

These traits can be seen as essential to Hopkins’ success in later years uncovering the abduction phenomenon. But to his detractors, these same traits are credited as fundamental to his creating an abduction belief system that has no actual basis in fact. For example, Philip Klass (the infamous debunker), noting that “fantasies of the mind are the source of most modern art and ... Hopkins’ trade”, held him responsible like no other for (as Klass saw it) the damage done to experiencers from the false beliefs instilled in them by abduction investigators. He called the abductees’ affliction the “The Hopkins Syndrome”.

Klass’ opinions notwithstanding, Hopkins himself takes pride in the fact that “the discoveries I’ve made and published over the past 27 years collectively provide the foundation upon which abduction research has been built”. We cannot know how history will ultimately treat this legacy, but Hopkins’ assessment of his impact is unassailable, not just with regard to abductions but for ufology per se. Indeed, abductions have surpassed UFO sightings and Roswell as the most familiar and studied facet of ufology. On the down side, this has given ufology’s debunkers the latest cause célèbre around which they cheerfully rally. On the up side, Hopkins’ abduction scenario offers a *raison d’être* for the UFO presence, and answers the proverbial question of why they do not “land on the White House Lawn” (as he points out, the desire to keep such a nefarious operation secret is an understandable rationale for “the covert nature of the UFO phenomenon”).

Paradoxically, in another of his books (*Witnessed*) Hopkins argues for the functional equivalent of the White House landing—in a case tantamount to an abduction on the United Nations Plaza. Of course, reports of apparently surreptitious behaviors conflicting with apparently ostentatious activity have long been part of UFO lore, and remain a puzzle for which ufology’s proponents still have some explaining to do. Hopkins seems to think that the events he chronicles in *Witnessed* were designed as a deliberate warning to the authorities of just what the aliens are capable of (while remaining clandestine in most other

respects). The more conventional wisdom holds that UFO activity reflects an orchestrated plan to gradually reveal alien presence to the world, and to make the world receptive to that revelation. The reader can decide if either attribution fits in the context of UFOs' rather flamboyant arrival on the scene in the 1940s, their unabated presence in our skies and (as often reported) on our military's sensing devices for at least the last 60 years, and/or the apparent absence during this period of an increasing acceptance of UFO reality (in fact, if anything there may be a decreasing trend. A 1966 Gallup poll found that 48% of respondents felt UFOs "are something real [as opposed to] just people's imagination". This figure was 49% in Gallop's 1987 survey. According to a 2008 Harris Poll, only 36% surveyed "believe in UFOs").



Whatever dynamic might account for the reported behavior of UFOs, Hopkins' initiation into issues ufological began as a consequence of his own UFO sighting of a "daylight disc" in 1964. This Cape Cod event involved a multiple-witness observation of an apparently metallic lens-shaped object exhibiting aerial maneuvers not possible by conventional craft. The experience (and his innate curiosity) led Hopkins to plunge into the UFO literature and, as a consequence, realize that "these reports constituted a mystery I could not leave alone".

A second pivotal event in Hopkins' eventual emergence as abduction investigator came from an account told to him in 1975 by the proprietor of his neighborhood liquor store. He regaled Hopkins with a story of a close encounter with a 30-foot craft hovering just off the ground in North Hudson Park, North Bergen, New Jersey. As he was watching this object in amazement, a group of small humanoids descended from the UFO and proceeded to carry out an operation that appeared to be one of soil sample collection. The case was a classic "close encounter of the third kind", including landing traces, corroborating testimony, supporting ancillary evidence, etc. Hopkins' investigation, which he published in the *Village Voice*, received considerable media exposure at the time, and was later described in detail in his first book, *Missing Time*. In the book currently under review, Hopkins reveals a new wrinkle that, as with many UFO cases, just adds to its strangeness. He describes how seven years prior to the reported event, he visited the building across from the park where it took place—in order to deliver a painting commissioned by one of its tenants. It was the only apartment building in New Jersey he had ever been in until he returned

to work on this investigation. To compound that synchronicity, the building's doorman, a witness who provided testimony corroborating the liquor store proprietor, remembered Hopkins from his visit years earlier. Hopkins describes his reaction to learning this:

If the North Hudson Park UFO landing case had been unnerving before, the shock I felt now had doubled. What were the odds that I would have known both witnesses to this bizarre incident long before it took place? Neither had ever met the other, but I knew them both. In advance! So upsetting to me was this micro-coincidence, that I have never before made it public.

As his own sighting opened Hopkins' mind to the general idea of UFO visitations, this close encounter case got him thinking more and more about the UFO occupants, and what their agenda might be. Prominent abduction cases like those of Betty and Barney Hill, Calvin Parker and Charles Hickson, and Travis Walton began to shape his interest in abductions, as did a possible abduction case involving a personal acquaintance. Before long Hopkins was investigating abduction cases in earnest, embarking on a path that would make him the foremost investigator of alien abduction of humans in our time. His work showed that abduction experiencers report events that have many features in common (discloser: Hopkins and I, along with Don Donderi, have shared credits on several conference papers analyzing some of these commonalities), that the events they report often involve corroborating testimony from multiple witnesses, and that the reporters of such encounters seem reliable and sincere. As incredible as the implications of his investigations seemed to be, for Hopkins the cumulative evidence was so compelling that he "no longer had the luxury of *disbelief*" (his emphasis).

These initial forays into abduction research established the essential framework that he would so effectively promulgate in the ensuing decades:

Alien control of abductee motor function, facilitating their being taken against their will

Missing time: Unaccounted-for periods following intact memories of an initial close encounter (or sometimes just a vague sense that "something happened")

Hypnotic regression as a tool for retrieving memories from these periods of missing time

The revelation of repeated abductions throughout an experiencer's life

Screen memories masking actual alien encounters

Paralysis and psychological manipulation (fear, etc.) of the abductee

Examinations and other physical procedures conducted during the abduction

The ultimate centerpiece of the abduction scenario, the hybridization program, would evolve later in Hopkins' thinking. This first took shape during

his investigation of the “Kathie Davis” case, chronicled in his second book, *Intruders: The Incredible Visitations at Copley Woods*. The experiences reported by Davis left Hopkins with

only one conclusion [to] draw. Apparently the central purpose of the systematic alien program of human abductions is the creation of genetically altered beings—part alien, part human hybrids.

As his investigations and writings gained increasing attention, Hopkins’ newfound celebrity brought him into contact with such media personalities as Oprah Winfrey, Larry King, Bryant Gumble, Regis Philbin, and Matt Laurer, and set the stage for a notable telephone interview with Walter Cronkite. He also gets to know other luminaries making up the ufology/abduction landscape: J. Allen Hynek, David Jacobs, John Mack, Carl Sagan, Whitley Strieber. A vignette about a meeting with Shirley MacLaine (herself a proponent of alien encounters) is particularly intriguing.

All in all, Hopkins has enjoyed a very interesting life, while making significant contributions to art, popular culture, the contemporary psyche, and our awareness of one of the most provocative phenomena of this or any other time. For those unfamiliar with his story, or just curious about his personal take on it (this is the only true autobiography by any major figure in contemporary ufology), *Art, Life and UFOs* is highly recommended.

STUART APPELLE

*Dean, School of Science and Mathematics  
The College at Brockport, State University of New York  
Brockport, New York, 14420  
sappelle@brockport.edu*

**Bigfoot: The Life and Times of a Legend** by Joshua B. Buhs. University of Chicago Press, 2009. 304 pp. \$29.95 (hardcover). ISBN 9780226079790.

**Anatomy of a Beast: Obsession and Myth on the Trail of Bigfoot** by Michael McLeod. University of California Press, 2009. 238 pp. \$24.95 (hardcover). ISBN 9780520255715.

Joshua Buhs explains that *Bigfoot: The Life and Times of a Legend*

picks up where the folklorists stopped, trying to understand how Bigfoot became prominent in American culture, why some people believed the creature existed, the function that such belief served, and how the debate over the existence of wildmen fit into twentieth-century American culture.



As early as page four, he establishes his perception of bigfoot as nonexistent in the caption of a wildman drawing from 1490, noting that “Bigfoot is a modern example of a well-known mythological archetype.” Additional examples from wildman literature develop his view of the sasquatch or bigfoot as exclusively mythical: “First, this book shows how the modern myth of Bigfoot emerged out of, and diverged from, traditional wildman tales. . . . Second, this book connects these modern tales of wildmen to concerns over the maturation of mass culture and consumerism.” Buhs explains his preoccupation with the mass media as follows: “Bigfoot was born of the mass media, spread on the mass media, and its vitality came from the fear of mass media and consumerism.”

At one point in the book, Buhs appears to hedge his bet regarding the existence of bigfoot, conceding that “Indeed, it’s not impossible that an actual Wildman may someday be caught.” In the last paragraph, however, he categorically concludes that “. . . Bigfoot did not exist . . . (the skeptics were right.)”

His attempts to lead readers to this conclusion consist of descriptions of the best-publicized events and activities related to bigfoot investigation during the past half century: conferences, expeditions, and database formation, focusing on the personalities involved. It is well documented and will be of interest to those curious as to why the subject has been ignored by most scientists in the larger scientific community.

Not surprisingly, Buhs is most aware of the charismatic and outspoken proponents of bigfoot, those investigators with the greatest media presence. Consequently, the picture painted is not flattering to bigfoot investigation. On the other hand, the book provides an interesting and enlightening read, bringing to light the background of many episodes in bigfoot investigation. Examples of mismanaged expeditions, personality clashes, inappropriate—even rude—behavior at conferences, and errors in methodology are described at length.

A potential problem arises in that Buhs appears to have accepted the foibles, inappropriate behavior, and character flaws of some investigators as not just entertaining, but also as a basis for his conclusion regarding the nonexistence of bigfoot. Undiscerning readers might do the same. For example, a *Publishers Weekly* review of *Bigfoot: The Life and Times of a Legend* (2009) included the following praise: “Buhs is at his amused best when following the exploits of Bigfoot’s human handlers, the colorful band of true believers, hoaxers, and pseudo-documentarists who constructed this greatest of all shaggy dog stories.” Perhaps the reviewer’s previously held views were affirmed by this book, or possibly they result in part from the descriptions of how bigfoot has been investigated and by whom.

Although Buhs cannot be held responsible for comments such as these, they show that, while being enlightened and entertained, at least one reviewer got the

message that investigators collecting and documenting sasquatch tracks and eyewitness descriptions are *pseudo*-documentarists. Serious investigators may chafe at this designation, but they may be even more disconcerted by being lumped in with hoaxers—those individuals who have so effectively contributed to the taboo nature of sasquatch research, negating its validity as a subject of scientific study and repelling scientists who are already skeptical.

\*

If Buhs found the efforts of amateur investigators in the past 60 years to be merely amusing, Michael McLeod appears to have found them positively offensive. In *Anatomy of a Beast: Obsession and Myth on the Trail of Bigfoot*, McLeod explains that “Bigfoot is more than just a silly slice of history. The beast’s appearance on the national scene marked an important milestone: the first widely popularized example of pseudoscience in American culture.” Indeed, “The increasingly common use of pseudoscience—junk science—has transformed public debate, as reflected in the anti-intellectualism now sweeping the country. This book makes the case that it all began with Bigfoot.”

Emphasizing his disregard for the acceptance of bigfoot as extant, McLeod asks rhetorically: “If people can delude themselves into believing in the existence of an eight-foot tall ape man, what on earth might they be thinking about truly important matters?”

While Buhs’ writing hints of smugness as he describes expeditions gone awry or his perception of gullibility in an investigator, McLeod leaves no such doubt in his descriptions of investigators, their goals, and activities. Buhs reserves a tiny window of doubt regarding bigfoot’s existence: “I still don’t think that bigfoot exists—indeed writing this book actually gave substance to what was before only a vague kind of skepticism.” McLeod, however, gives the impression that people who do not agree with him are themselves deluded. Since neither author appears to consider the possibility that there could be readers who do not share their viewpoint, they consequently express their confident assertions as if “preaching to the choir.”

\*

A quote from *The Critical Historian* by George S. R. Kitson Clark may explain their tone of certainty:

When a conflict is over, historians are too inclined to take the case for one side and all its partisan stories straight into the canon of history without looking at the evidence, or trying to find out what the other side may have had to say. (Clark, 1967)



Both Joshua Buhs and Michael McLeod appear to have concluded that any conflict regarding whether or not bigfoot is an extant mammal is over. And, not surprisingly, they perceive the supposed conflict as over, in favor of bigfoot as merely a cultural phenomenon, particularly as a hoax.

But any supposed “conflict” is far from over, and—in the eyes of a small minority of scientists—has yet to take place. What Buhs and McLeod have written about is far from representative of what “the other side” has to say. Both authors largely ignore the existence of the small, persistent cohort of scientists who, along with an equally dedicated and much larger group of amateur investigators, are quietly at work collecting and archiving evidence which only occasionally attracts the attention of scientific colleagues or the media. Although Buhs lists several scientists, he does not discuss their work in any detail, nor does he mention ongoing research. The reader is left to wonder if he is aware of it and just chooses not to discuss it. Although such scientists might be described by McLeod as having “deluded” themselves, there is a growing number of scientists with an undisclosed interest in the subject, some of whom quietly support sasquatch research.

If read carefully and critically, these books reveal much of interest. They elucidate in considerable detail why some people may have dismissed the possible existence of bigfoot on the basis of how it has been investigated and by whom. In fact, both of these authors imply that such reasoning has influenced them to “throw out the baby with the bathwater.” Fallacious reasoning such as this is, however, the very hallmark of pseudoscience. Consequently, it may be especially ironical that McLeod identifies the study of bigfoot as not just an example of pseudoscience, but as the iconic beginning of a pseudoscientific trend.

JOHN BINDERNAGEL

*Author, North America’s Great Ape: The Sasquatch: A Wildlife Biologist  
Looks at North America’s Most Misunderstood Large Mammal (1998)  
johnb@island.net*

### References

- Clark, George S. R. Kitson (1967). *The Critical Historian*. New York: Basic Books. pp. 51–52.  
(2009). Review of *Bigfoot: The Life and Times of a Legend* by Joshua Buhs (Chicago: Chicago University Press). *Publishers Weekly*, March 2, 2009.

**Philosophy in the Flesh: The Embodied Mind and Its Challenge to Western Thought** by George Lakoff and Mark Johnson. Basic Books (New York), 1999. 624 pp. \$24.95 (paperback). ISBN 9780465056743.

This *magnum opus* of so-called “second-generation” cognitive science begins with the bold declaration that “three major findings” have brought to an end “[m]ore than two millennia of a priori philosophical speculation” (p. 3):

The mind is inherently embodied.  
Thought is mostly unconscious.  
Abstract concepts are largely metaphorical.

Fleshing out innumerable implications of these findings, the authors advance a new approach to philosophy, dubbed “embodied realism” (pp. 95, 74–93). While the truth of these findings may be unassailable, grounded as they are in empirical fact, most of the book defends the thesis that embodied realism is “at odds with” *all* past approaches (p. 548), requiring philosophy to begin anew. This polemic fails for two main reasons.

First, the authors’ many extreme claims cannot be substantiated by the (often impressive) empirical evidence presented. For example, proving that “reason is not, *in any way*, a transcendent feature of the universe” (p. 4), simply because we inevitably use embodied metaphors in reasoning, would require adopting the very disembodied standpoint that is being denied. In place of such dogmatic declarations, humbly confessing ignorance regarding what (if anything) transcends the embodied mind, driving us to employ metaphors, would be more defensible. Apparently unaware of this fundamental lesson of Kant’s critique of reason, the authors focus their most vehement attacks on Kant; denying validity to this (and every other) classical philosophical system proves only their weak grasp of the philosophical tradition they aim to supplant.

The second reason the authors fail to reach their stated polemical goal is that they portray the claims of past philosophers through oversimplified, uninformed caricatures that already assume what embodied realism sets out to prove. Thus, they dismiss as mistaken countless legitimate achievements that could buttress their own position, were they not so intent on portraying second-generation cognitive science as the only correct philosophical method. (This “second generation” of cognitive scientists rejects “the fundamental tenets of traditional Anglo–American philosophy” (p. 75) as mistaken “on empirical grounds.” The authors admit this empirical “evidence” is really a disagreement over basic—a priori!—“methodological assumptions” (p. 78). No wonder they often use words such as *argues* (p. 81) where they mean *assumes*.) A short review cannot mention all the instances of these errors in such a lengthy book—

it could have been considerably shorter than 600 pages had the authors not adopted an annoyingly repetitive style. Instead, I shall focus on the authors' treatment of Kant, whose *defense* of a priori knowledge they never actually consider.

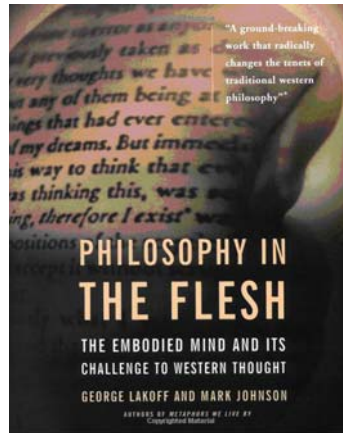
That Kant's failure is crucial to the authors' success becomes apparent when they *declare* him mistaken in the opening pages (p. 5): "There exists no Kantian radically autonomous person and a transcendent reason that correctly dictates what is and isn't moral. Reason, arising from the body, doesn't transcend the body." They impute to Kant a theory of "absolute freedom" that Kant decries as a transcendent (*unknowable*) idea; moreover, they show no awareness of the fundamental thesis of Kant's first *Critique*, that "All our knowledge begins with experience." Whereas Kant infers a priori forms as necessarily *arising out of* our embodied experience, the authors somehow *know* that "There is no a priori" (p. 5)—a patent absurdity to anyone who "gets" Kant's a priori. The authors assume (a priori) that we have no a priori knowledge, the "validity" of philosophical theories being dependent on "empirical confirmation" (pp. 7, 256). They claim (my emphases) that "our conceptual systems draw *largely* upon the commonalities of our bodies" (p. 6), such that "abstract thought is *mostly* metaphorical" (p. 7) and "answers to philosophical questions have always been, and always will be, *mostly* metaphorical." Yet they provide no explanation for the "more" (the formal grounding of embodied knowledge) implied by these claims; their a priori rejection of the a priori prevents them from doing so.

Part I's refutation of "classical metaphysical realism" is correct, though naive from a Kantian perspective. In their search for "basic-level categories" (pp. 26ff), the authors conflate intuition (embodied input) with conception (mental processing of that input). Showing their ignorance of Kant (and others), they claim that in the "faculty psychology" assumed by "the Western philosophical tradition" (p. 36)—as if only one such tradition exists!—"no aspect of perception . . . is *part* of reason" (p. 37). But Kant's threefold synthesis, wherein all perception first occurs, *is* a rational process of understanding, not raw sensibility. By neglecting Kant's epistemology, the authors lose a golden opportunity to affirm how a major player in "the tradition" developed a system that dovetails nicely with cognitive science. Assuming such issues must "be settled in experimental neuroscience, not in the arena of philosophical argumentation" (p. 43), the authors never defend their empirical bias with reasons; demonizing opponents as "conservative", they base their rejections on wild generalizations (often without citing relevant literature), such as that in analytic philosophy "all concepts are literal and there are no such things as metaphorical concepts" (p. 87). Such ad hominem attacks make good rhetoric, but will not fool anyone who sees through the deceptions of self-referential arguments—the claim to

have “no a priori commitments” (p. 80) itself being an a priori commitment. They repeatedly employ the same non sequitur: Because human knowledge consists of *some* A (e.g., metaphors), it therefore *cannot also* consist of some  $\neg A$  (e.g., non-metaphorical reality).

The authors rightly affirm the (Kantian) insight that the stability of science does not require believing “that science provides the ultimate means of understanding everything” (p. 89), but wrongly infer that this entails rejecting *all* a priori philosophizing. Their fundamental assertion, that “we never were separated or divorced from reality in the first place” (p. 93), does not preclude Kant’s proof that the embodied mind employs a priori forms that can be regarded (through abstract reasoning) as distinct from the world “in the second place”. Few have held the extreme positions the authors impute to past philosophers; most (like Kant) would *agree* with the authors’ affirmation of “distinct ‘truths’ at different levels”, with “no perspective that is neutral between these levels” (p. 105). Fortunately (but inconsistently?), they claim their brand of physicalism, with its tracing of all past philosophical theories to “folk theories” grounded in metaphor, is not “eliminative” (pp. 109–114). Unfortunately missing is a discussion of the *coherence* theory of truth as an alternative to the correspondence theory they refute (e.g., pp. 98–102, 165–166, 199); instead, they misleadingly call their quasi-Kantian position “an *embodied* correspondence theory of truth” (p. 233).

Chapter 14 demonstrates that much of our common moral reasoning is essentially metaphorical (e.g., relating the good to health, wealth, or family relations), asserting that the “structure and logic” of moral theories “come primarily from the source domains that ground the metaphors” (p. 329). The authors summarize the major moral philosophies in terms of how they use (or *could* use) a basic “family” metaphor that conveniently favors their own (liberal) “Nurturant Parent” position—a bias that could carry weight only if the metaphor is structured by some pure, a priori concept. Their structuring assumption is (paradoxically) that ascertaining the “universality” of such metaphors requires “cultural research” (pp. 311–312), there being “no pure moral concepts” (p. 328). Insisting the choice of moral principle “is an empirical issue” (p. 332), they confidently label a whole range of moral theories as simply “wrong” (p. 331). Must our moral reasoning *end* in metaphor simply because it begins there?





Chapter 20 explores how a network of moral metaphors undergirds Kant's moral philosophy. Here, as throughout Part III, the authors exhibit masterful eisegesis, employing what we might call (using their own tactic against them) an "Unconscious Assumption Is Making Use Of" metaphor to "demonstrate" that metaphors operate even when no textual evidence supports the claim. To justify their rejection of deontology, they (mostly) paraphrase selective passages that exhibit so-called "Strict Father Morality", entirely ignoring texts such as *Religion within the Bounds of Bare Reason* (1792), where Kant affirms the authors' preferred "Nurturant Parent Morality" (pp. 416–417). Anyone who has actually read Kant will find the "Kant" presented here—who allegedly grounds evil in the body (pp. 426–427, 433–434), for example—virtually unrecognizable. While the authors point out some interesting metaphors operating in Kant's texts, nobody should read this chapter for insight into what Kant *meant*; for this "Kant" is mostly a figment of the authors' fertile imaginations, a product of *their* folk theory of meaning, that Metaphors Cause Theories. Yet it is just as plausible to assume metaphors merely *correlate* with relevant theories. Apparently unaware that Kant's whole project (not unlike their own) was to *critique* the power of pure reason (pp. 539–540), the authors' argument boils down to a mere repetition of their folk theory that *empirical* evidence somehow disproves the a priori: "cognitive science . . . invalidate[s] the central thrust of [Kant's] theory" (439) because "pure reason . . . does not and cannot exist."

Many of this book's 25 chapters (especially Part II) provide illuminating summaries of recent research in cognitive science, naming numerous types of basic metaphorical relation; but to portray this web of empirical relations, the "cognitive science of philosophy" (p. 338), as *itself* a form of philosophy capable of "assess[ing] the adequacy of philosophical theories" (p. 340), is a major category mistake—as if naming a coherent system of metaphors magically constitutes access to ultimate reality! This leads to absurd, elitist claims, such as that we must "understand our unconscious moral systems" in order "to act morally" (p. 341)! What the authors *meant* to say, hopefully, is that acting morally requires *attunement* with this unconscious (noumenal?!) system—precisely Kant's position. They claim, inconsistently, that *because* "Kant's morality . . . is irreducibly metaphoric", we must "abandon Kant's claim that morality issues from a transcendent" source (p. 345). Yet they themselves elsewhere affirm a form of agent-causation (p. 224) not unlike Kant's metaphor of "noumenal" causality. Is perspectival reasoning allowed only for cognitive scientists?

Those chapters focusing on past philosophers (mainly Part III) will not convince those well-versed in the positions being attacked. Unconsciously employing what I call the "Analyzing Metaphors Is Empirical Research"



metaphor, the authors respond to opponents not with reasons, but with force (p. 71): “The answer is a loud ‘No!’” The chief lesson to learn from this book’s failure to supplant Western philosophy is that appeal to empirical facts (such as the admittedly metaphorical nature of most philosophical concepts) is no excuse for sloppy reasoning. Philosophy would not exist if all truth were *merely* as the authors say it is. In casting aside the *structuring* function of the a priori, the authors delude themselves, claiming to present a philosophy that is “close to the bone” (p. 8), when in fact what they provide is *only* a “philosophy in the flesh”, sorely in need of a skeleton, such as that offered by Kant or the numerous other genuine philosophical systems they claim to refute.

STEPHEN R. PALMQUIST  
*Department of Religion and Philosophy*  
*Hong Kong Baptist University*  
*Kowloon, Hong Kong*  
*stevepq@hkbu.edu.hk*

**Neither Brain nor Ghost: A Non-Dualist Alternative to the Mind–Brain Identity Theory** by W. Teed Rockwell. MIT Press, A Bradford Book (Cambridge, MA), 2005 (hardcover), 2007 (paperback). 253 pp. \$20.00 (paperback). ISBN 978-0-262-681674.

**Radical Embodied Cognitive Science** by Anthony Chemero. MIT Press, A Bradford Book (Cambridge, MA), 2009. 272 pp. \$30.00 (hardcover), \$22.95 (paperback). ISBN 9780262013222.

Eighty-five years ago in his major work *Experience and Nature*, the American philosopher John Dewey wrote the following:

At every point and stage . . . a living organism and its life processes involve a world or nature temporally and spatially “external” to itself but “internal” to its functions. (Dewey, 1925:278)

This succinct idea carries within it the originating premise of the Hypothesis of Extended Cognition (HEC) and the Hypothesis of Radical Embodied Cognition (HREC), cutting-edge theories of cognitive science held by W. Teed Rockwell and Anthony Chemero, respectively. The argument is that the world outside the body does not consist merely of *objects of cognition*; instead, these “external” factors are *internal to the self*. As such, they are functional elements of any cognitive system and are indispensable to such systems. In other words, the dominant paradigm of the nature of mind and cognition is called into question.

HEC and HREC reject the mind–brain identity theory (MBI). Consciousness resides instead in a dynamic field that includes the brain, the body, and the world: “Even the most private, subjective, qualitative aspects of human experience are embodied in the brain–body–world nexus” (Rockwell, p. 158). Rockwell refers to this as a “behavioral field.” He pulls no punches when it comes to following out this hypothesis to its inevitable conclusion:

At any given time, there is a region within my world . . . within which everything is ready-to-hand for me. . . . And this region, I maintain, is *me* in the most unambiguous sense possible. (Rockwell, p. 106)

This *region* (which is on that theory a person) does not include the entire world. It has flexible boundaries depending on the range of activities and interests marking out the interrelations of an individual brain–body system with the world (Rockwell, p. 107). Since it is a dynamic field of processes, Rockwell and Chemero both believe it may be theoretically described by means of Dynamic Systems Theory (DST). Rockwell sketches the main outlines of DST, and Chemero’s book goes into greater technical detail on this point.

As the entire discussion resides in a fomenting interface between philosophy and cognitive science, it is desirable to recall what issues, scientific and philosophical, lie in the background.

### **Critique of Presuppositions in Cognitive Science**

Rockwell and Chemero argue that the field of cognitive science abounds in the design of experiments and interpretations of experimental results based on presuppositions that do not stand up under serious analysis. Rockwell presents multiple examples of these sorts of difficulties beginning with pointing out the impossibility of separating the cognitive role of the brain from that of the nervous system as a whole.

The theoretical separation of the brain from the nervous system assumes that the brain is a CPU-like controller, while the rest of the nervous system functions merely as sets of convenient cables carrying input to the brain. It is in the brain where actual cognitive functions take place, in the form of computational manipulation of representations of the outer world—what Chemero refers to as “mental gymnastics.”

The brain-as-CPU theory is what would be left over after Descartes’ idea of a disembodied soul mysteriously connected to the brain is disavowed. Rockwell refers to this as Cartesian materialism. Rockwell cites researcher Patricia Churchland as asserting unequivocally that the “mind is the brain” (P. S. Churchland, 1986:ix); then Rockwell shows that actual research results as well as interpretations by researchers do not support the separation of the brain

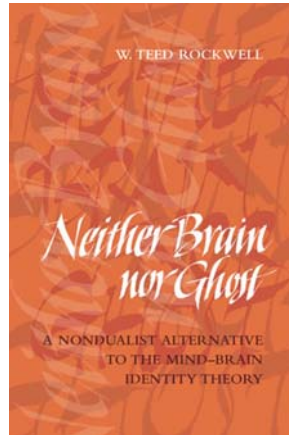
from the rest of the nervous system with respect to cognitive functions (Rockwell, p. 23).

Rockwell's ultimate goal is to show that just as one cannot draw an absolute line between the brain and the rest of the nervous system, or between the brain-plus-nervous system and the body as a whole, so it is not possible to make a valid separation of the brain-body system from the world. In the course of his effort he constructs a variety of fictional scenarios illustrating some point or other about what we do or do not mean by key concepts in use in interpretive conclusions. Thus we find him talking at length about "zombies," "pink ice cubes," and "twin Earths," in scenarios that may strike impatient (non-philosophical) readers as absurd, tedious, or simply irrelevant because of references to impossible situations.

However, such philosophical excursions are sometimes necessary to make a point. Rockwell is struggling here against bias among mainstream cognitive scientists (as well as many others in other fields and even in the general public, where MBI is commonly accepted). So he takes the risk of seeming too esoteric and repetitive in favor of a very real need for persuasion in a matter that in essence demands a paradigm shift across the whole spectrum of our understanding of mind.

One more direct analysis that Rockwell provides is his chapter on "Causation and Embodiment." Here he undertakes a careful critique of views of causality in relation to cognitive science. Rockwell points out that "Because there are many crucial things happening in the brain every time we feel or think, neuroscience naturally assumes that brain activity is the sole cause of mentality." This assumption, he notes, is because "the goal of neuroscience is to discover the brain events that participate in the causal nexus responsible for mental events." The common assumption is that those brain events are the *sole cause* of their mental correlates—the conclusion being that the mind resides wholly in the brain (Rockwell, p. 54).

Rockwell maintains that the notions of *atomistic causality* and *intrinsic causal powers* both support the dominance of Cartesian materialism in cognitive science. Atomistic causality proposes that "a single event produces a causal relationship with another single event, and this connection could be completely independent from any other fact in the universe." On that view, single events in the brain would stand in a direct causal relation to some single mental states. Against this, Rockwell cites Mill as holding that "causes cannot be separated from their context of conditions."



Rockwell's point is well-taken. Interpretations of results in neuroscience research abound in examples of such separation. Any portion of the brain that is active during some process, such as remembering, is automatically identified by the neuroscientist as the sole cause. Typical interpretations are that the "memory" is "encoded" in the active region of the brain.

However, even if atomistic causality is eschewed, it could still be argued that the brain is a system that itself possesses intrinsic causal powers (Rockwell, pp. 55–57). Against this, Rockwell argues that causal properties are "fundamentally relations, not monadic predicates." Rockwell concludes that "the causal nexus that is responsible for the experiences of a conscious being is *not* contained entirely within the brain of that being" (Rockwell, p. 58, his italics). This sort of holistic position, repeated many times over with respect to different aspects of MBI theory, is well-represented and constitutes a substantial portion of his book.

In critiquing the presuppositions inherent in much of mainstream cognitive science, Anthony Chemero takes a more direct approach. He describes a flawed logic, which he refers to as "Hegelian argument" (after the philosopher G. W. F. Hegel, 1770–1831). Hegelian arguments begin with a set of premises based on some predetermined conceptual framework without empirical foundation, and then conclusions are drawn from those premises contrary to empirical evidence. Hegel's argument, for example, was to prove that "no eighth planet can be discovered." (Chemero might include among such arguments the one sometimes attributed (perhaps falsely) to Aristotle, to the effect that flies must have four legs because two is not enough, three is an imperfect number, and more than four are unnecessary.)

At any rate, Chemero points out that most philosophers and scientists are wary of such conceptual arguments, but that ". . . this attitude has not made its way into cognitive science, where conceptual arguments against empirical claims are very common." Chemero goes even further. He says "Indeed, one could argue that the field [of cognitive science] was founded on such an argument" (Chemero, pp. 4–6). In other words, he holds that there is something *fundamentally* rotten in the state of cognitive science.

Chemero's first illustration of this claim is to show how a key argument of Noam Chomsky's commits this logical blunder. Chomsky's argument is "the first in a string of Hegelian arguments in cognitive science." Among these is the "systematicity argument" set forth by Fodor and Pylyshyn (1988) which Chemero characterizes as "one of the most important and influential in the recent history of cognitive science" (Chemero, pp. 7–8). Chemero's discussion of such logical flaws, which seem to amount to a kind of intellectual disease, is all the more powerful because of the clarity of organization and expression with which he presents his analysis.

Next, Chemero strikes at the heart of the matter by explaining what makes the HREC alternative, in broad opposition to MBI, *radical*. HREC carries the tenet of HEC that cognition resides in dynamic brain–body–world systems a step further by denying that cognitive processes within such systems operate by manipulating *representations* of the world. Thus to the degree that cognitive science is “representationalist” (and hence computational) it is on the wrong track. Formally, HREC is expressed as the claim that the tools for explaining embodied cognition, which include DST, do not require the positing of mental representations.

Chemero represents this view as descending from American naturalism as exemplified by Dewey and James, and from Gibsonian ecological psychology. These he says are *eliminativist* views (i.e. inner representations are eliminated from theory of cognition) (Chemero, pp. 29–30). Although HEC also invokes the brain–body–world nexus, HEC still may embrace some form of representationalism, and would thereby be committed to a form of computationalism in that cognitive activity is seen as manipulation of representations, but occurring somehow within a brain–body–world nexus rather than in the brain alone.

### Philosophical Considerations

Rockwell’s book has as its subtitle “A Nondualist Alternative to the Mind–Brain Identity Theory.” Rockwell rejects Cartesian dualism, but he also rejects Cartesian materialism, particularly its extreme form, “eliminative materialism.” This is the view that all so-called mental activity is nothing more than physical states of the brain, and therefore “there are no such entities as thoughts or sensations, and never were.” Those who think they possess a mind, or are a conscious thinking self, are suffering from a kind of illusory “folk psychology” (Rockwell, p. 5).<sup>1</sup>

One might wonder what form of madness could bring such seemingly adept thinkers as Paul Churchland (1989), as cited by Rockwell, to adopt such a view. In effect, anyone who espouses eliminative materialism is *denying his own denial*. It is, in fact, a separation of oneself from oneself, and is one of the adverse results of the dualistic view. Once a single absolute separation of one element of experience from another is accepted, the world *shatters* to the extent that a person cannot understand either who, or where, or what he or she is. This is a psychological concern and is not limited to theoretical issues in cognitive science. Ecological psychologist Robert Greenway, for example, refers to dualism as the “radical wound” caused by “distinctions that become disjunctions” (Greenway, 2009). If this dimension of the discussion is taken into consideration, to the degree to which cognitive science abets and perpetuates a dualistic separation of mind from world, it is on negative *ethical* ground.

From this standpoint, it is unfortunate that Rockwell's book makes no mention of this broader socio-psychological context. There is a suggestion of this context in Chemero's final chapter on the metaphysics of HREC, but it remains within an abstract philosophical discussion rather than that of an existential malaise. The fundamental reason for denying representationalism should be, in this present writer's opinion, that once the psyche of an individual personality is collapsed into the sphere of computational manipulation of pictures of the world, there is no longer a lived world, and the relation between an individual and his or her milieu can become destructive—so much so, in fact, that we have the absurdity of the eliminative materialist denying his own denial even as he is denying it.

Here we crash head-on into a problem with both HEC and HREC. The following questions raise their unpleasant countenances: First, whether "having" representations is the same thing as having a mind. Second, whether eliminating representations amounts to the eliminative materialist view that our sense of having a mental life of any sort at all is simply an illusion. Third, whether it makes any sense at all to talk about "representations" being "embodied" by either a brain *or* a brain-body-world dynamic system (choose whichever you prefer).

The competition between representationalist and nonrepresentationalist views of cognition is a rather loud echo of the kinds of philosophical clashes found throughout the history of both philosophy and science, such as that between nominalism and realism, rationalism and empiricism, or indeed the clash of form and matter. Is mind reducible to physical states of the brain, or of the brain plus body, or of a brain-body-world dynamic system, such that within any such system there exist, or do not exist, substructures that somehow "represent" other structures "outside" the system? And can any such physical system *be a mind* and not contain within itself any representational structures at all? This opens a philosophical/scientific Pandora's box, which both MBI theorists and HEC/HREC advocates are going to have a great deal of trouble shutting, if that is even possible. (At the risk of mixing metaphors, I'm tempted to start talking here about the Sorcerer's Apprentice, but let be).

The undermining presence of issues like those above are revealed at once. In Rockwell's discussion we have a confusion of terminology about what it means to say a *mind* is *embodied* in a physical system. There are two difficulties here: The first is how "mind" is adumbrated, and the second is how "embodied" is understood. On just two pages, Rockwell characterizes mind as "mental properties," "mentality," "a mental system," and "mental processes." So is mind a quality (mentality), a process, a property, or a system, or all of them at once? But as things go on, the favored characterization of mind is that it is constituted by a *set of properties* which might also be termed mental states.

Thus Rockwell refers to “our visual mental states,” by which he seems to mean something like “having a visual perception” or perhaps just “seeing something.” Included also are thoughts and beliefs, “knowing or remembering a fact about the world,” and so on, all of which either constitute the mind or are properties of a mind, or are properties of either the brain or a dynamic brain–body–world system, such that we say one or the other of these is, or has, a mind. (Rockwell, p. 71)

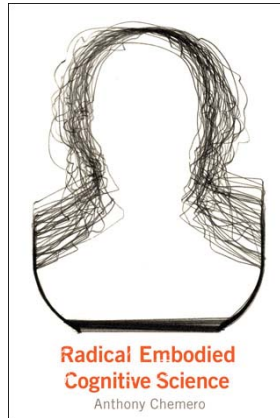
Now there is a reason that Rockwell shifts from (infrequently) talking about a mind to (frequently) talking about sets of properties. This is because of

his concept of what it means to say that mind is embodied. He seeks to resolve the question of dualism by determining how we can contain the concepts of mind and body in a single system. This must perforce be a physical system “embodying” a mind, the latter seen as a set of properties. But these cannot be physical properties, else we are committed to eliminative materialism. They remain mental properties—sets of properties of a peculiar sort called “mental.”

The underlying reason for this sticky philosophical position, which avoids the question of how any set of properties constitutes the mind of a conscious self, is that Rockwell believes the problem is solved by invoking the concept of “supervenience,” which is admittedly a “scrupulously downsized technical term with some similarities to both causation and identity.” (Rockwell, p. 69).

Thus if it is understood that the mind *supervenes on* the body, according to Rockwell the problem of dualism is resolved. And supervenience, in turn, has to do with sets of properties. So the convenience of supervenience is to view the mind as a set of mental properties, and then to assert that these supervene on a set of physical properties. By definition, this entails that any two individuals who are indistinguishable in their physical properties must perforce exhibit identical mental properties, and if two individuals possess different mental properties, they must also have different physical properties. But the relation is not symmetric: Two individuals may have the same mental properties but differ in their physical properties.

The relation of supervenience may cogently be asserted in certain kinds of physical situations. For example, it may hold among relations of the acceleration, velocity, and position of an object in space. But there are two problems with the assertion of supervenience as the relation between sets of mental properties and sets of physical properties. The first is that it is empirically impossible to determine whether it is true that “any two individuals indistinguishable in their physical properties have identical mental properties,” because there *are*





no two individuals who are indistinguishable in their physical properties—their fingerprints alone will testify to this (not to speak of DNA).

What Rockwell really has here is a premise, namely the premise that the relation of mind (as mental properties) to body (as physical properties) is that of supervenience. And that premise is purely conceptual with no empirical foundation. Any arguments Rockwell presents as following from such a premise are instances of Chemero's Hegelian arguments. Bluntly speaking, the invocation of supervenience as a solution to the mind–body problem is nothing more than a piece of philosophical thaumaturgy.

The second problem, which really brings us to the nub of the matter, is the use of the term *individuals* in the definition of supervenience. The utterly devastating difficulty of the entire enterprise has to do with the way it systematically uses, but systematically discounts, the nature of the self. For how do we determine if two individuals have, or do not have, the same properties, unless we presuppose that they are indeed individuals? And presumably to be individuals, it must be predetermined that they have minds.

So, for example, if we say that “the mind is a set of mental properties,” we have committed a logical mistake, because to know that a property is mental we must already know that it is a mind that has those properties. We have already encountered this difficulty in Rockwell's statement of what it is that he thinks he is. When he says “there is a region within *my* world in which *I* am engaged . . . and this region, *I* maintain, is *me*,” he presupposes that he is a *self* who can formulate hypotheses as to what he is (*my italics*). It is significant that Rockwell very seldom mentions “self” in his discussions but prefers to focus on mental properties instead.

A related case appears in Chemero's discussion of direct perception. He introduces the “problem of two minds” which arises when perceptions are direct, rather than mediated by internal representations. The problem is that if two separate individuals A and B *directly* perceive the same object X, the object will be part of both A's perception and B's perception, and thus at odds with the assumption that minds are private. The peculiarity arises when Chemero *agrees* that the minds involved must be private, and argues that since perception is a relation, and since the relations of A to X and B to X are different, so their perceptions “do not overlap.” Chemero is therefore unwilling to give up the alleged privacy of minds—but at the cost of now having two X's, the X that A perceives and the X that B perceives.

The problem here is the reverse of that in the Rockwell case. Instead of not taking into account the role of self in defining mind and consciousness, Chemero posits that selves are “private” and hence cannot share an object of perception with any other individual, on the ground that any perception is a unique relation between an observer and a thing observed. But this is to render

meaningless the entire enterprise of extending, or embodying, the mind into a system of interactions between brain-body and world, because the things in the world that are part of any such system are necessarily shared by multiple overlapping systems. Indeed, the very possibility of such human experiences as those of empathy, friendship, knowledge of others, and love, depend on some sort of shared, not private, self. Neither the privatized self implied by Chemero, nor the self-as-bag-of-properties advocated by Rockwell, can satisfy this profoundly necessary requirement.

The upshot of this discussion is that the less philosophy of mind occupies itself with the technological details requisite for creating a simulated intelligence, and the more it remains sensitive to the full spectrum of human experience, the better. The advocated use of DST in cognitive science may indeed have useful results of a certain limited sort; but it will almost certainly not solve the problems that center about the nature of the self and the presence of dualism in culture and psychology.

STAN V. MCDANIEL  
*Professor of Philosophy Emeritus,  
Sonoma State University  
Rohnert Park, California, USA  
stanmcd2@sbcglobal.net*

### Notes

- <sup>1</sup> The question arises as to why this reduction of “mind” to nothing but physical substance does not qualify as *nondualistic*; actually, eliminative materialism is not a genuine nondualist philosophy, because instead of reconciling properties of mind with those of matter, it simply denies the existence of mind in any recognizably ordinary sense. The aim of a nondualistic view is to *reconcile* consciousness with matter.

### References

- Churchland, P. M. (1989). *A Neurocomputational Perspective*. Cambridge, MA: The MIT Press.  
Churchland, P. S. (1986). *Neurophilosophy*. Cambridge, MA: The MIT Press.  
Dewey, John (1925). *Experience and Nature*. New York: Dover Publications Inc. (reprint, 1958)  
Fodor, J., & Pylyshyn, Z. (1988). Connectionism and the cognitive architecture: A critical analysis. *Cognition*, 28, 3–71.  
Greenway, Robert (2009). Interview in *Ecopsychology*, March 2009, p. 47.

**Synchronicity: Multiple Perspectives on Meaningful Coincidence** edited by Lance Storm. Pari Publishing (Pari, Italy), 2008. 358 pp. \$18.95 (paperback). ISBN 978-88-95604-02-2.

Is synchronicity exclusively an acausal event? Is it similar to psi? Can it be subject to experimentation? Is its phenomena best understood through the lens of quantum mechanics, as a product of the *Unus Mundus*, or as an emergent function of the Self on its compensatory drive toward individuation? Do divinatory practices such as the *I Ching* offer the potential to empirically capture its sporadic occurrence?

These are just a few of the questions raised in this collection of some of the more outstanding papers presented on synchronicity over the past 40 years. Compiled and edited by Lance Storm, they're organized into six sections, with each addressing synchronicity from a particular vantage point.

Storm states at the outset that he wants to revisit synchronicity, not "from a flight of fancy, but from the well-considered, well-developed ideas that spring forth from the fountainhead of those whose work comprises this anthology" (p. xv). In the Foreword, Robert Aziz likens the book to attending a conference on synchronicity consisting of presenters with "highly specialized and diverse professional backgrounds" (p. xix). I believe with this compilation of papers, Storm achieved his goal, and, fitting with the Aziz analogy, after reading them I felt that post-conference inspiration to integrate the many specialized viewpoints.

In the first section of the book, "The History and Philosophy of Synchronicity", Kenower Bash's Chapter 1, "The Improbable Jung", provides an overview of Jung's discoveries. Bash takes us back to Jung's brilliant essay as a schoolboy, his later research on word association, psychological types, and internal psychic processes. Throughout the paper, he shows how Jung's nature, experiences, and courage contributed to his discoveries of synchronicity.

In Chapters 2 and 4, David Peat and Marialuisa Donati examine the specific relationship between the Nobel physicist Wolfgang Pauli and Carl Jung. Peat discusses how Pauli's influence on Jung and additional contact with Albert Einstein provided him with the foundational scientific support for his evolving theory on synchronicity. Donati also addresses the collaboration between Pauli and Jung from a more personal perspective. She notes how Jung assisted Pauli to identify his feelings and dream images and integrate them with his very one-sided intuitive-thinking style. Conversely, she relates how Pauli helped Jung focus his attention on the ontological and archetypal character of synchronicity, going beyond its previously phenomenological and empirical emphasis.

Roderick Main's paper, "Religion, Science, and Synchronicity" (Chapter 3), explores the role synchronicity played in Jung's understanding of the

relationship between science and religion. He examines Jung's clerical family influences, his fascination with J. B. Rhine's ESP experiments, and how Chinese philosophy and the *I Ching* all influenced his conception of synchronicity. Main contends that Jung sought to restore meaning in science and to bring empiricism to religion.

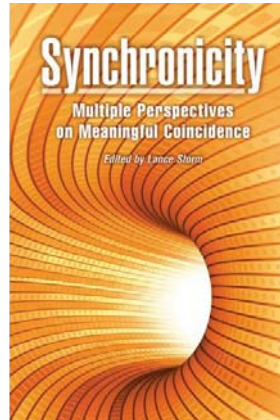
The second part of this anthology is labeled "Synchronicity in Practice". In Chapter 5, "Synchronicity and Telepathy", Berthold Schwartz shares some anecdotal synchronistic events arising from a clinical context. He discusses what appear to be telepathic components in those events, and how synchronicities in a clinical setting may be of therapeutic value. In the next chapter, "Synchronicity, Science and the *I Ching*", Shantena Sabbadini describes the relationship between synchronicity and the ancient divinatory process of the *I Ching*. She notes Jung described its contents as a "catalogue of sixty-four basic archetypal patterns" (p. 80), and viewed its process as synchronistic. Like Main, she also elaborates on the Chinese philosophy so critical to understanding the *I Ching* and synchronicity.

Last in this section is William Braud's Chapter 7, "Toward a Quantitative Assessment of 'Meaningful Coincidences'". There he describes two experiments that produced significant results for evidence of synchronicity. Despite his results, however, he questions if they might be explained by conventional forms of psi, suggesting like Schwartz a possible relationship between psi phenomena and synchronicity.

Following the section on practice, the third part of the book called "The Ontology of Synchronicity" consists of two significant papers by John Beloff and Charles Tart. In the eighth chapter, "Psi Phenomena: Causal versus Acausal Interpretation", Beloff distills synchronicity down to what he considers its critical ingredients. For instance, he states: "So far as Jung himself was concerned it was not just any old coincidence, however startling, that exemplified the principal of synchronicity, it was specifically those conjunctions which exhibited archetypal ideas" (p. 101).

In contradiction to Jung, Beloff resists the connection Jung made to J. B. Rhine's ESP research where psi and synchronicity are equated, with both considered acausal. Beloff's position is that a causal nexus must exist in synchronicities even if that cause may still remain hidden. That type of cause, he concludes, may resemble something more like Aristotle's formation or final cause.

In Chapter 9, "Causality and Synchronicity: Steps toward Clarification",



Charles Tart continues to examine the concept of causality. Beginning with perceptions in infancy, he distinguishes the initial temporal and proximal perceptions of causes in the physical world from causes determined psychologically. Tart lists and elucidates eight types of causality and two types of pseudo-causality. Tart further cautions that should experiments prove difficult to replicate when conducting psi research, we not give up seeking causes for evident psi manifestation. He believes it's "intellectually lazy" to relegate them to the acausal workings of synchronicity.

The fourth part of the book is titled "The Synchronicity Debate". In Chapter 10, Mansfield et al. analyze previously unavailable letters between Carl Jung and J. B. Rhine and examine the relationship between psi phenomena and synchronicity. They grant that in some cases, similar to Schwartz's telepathically facilitated anecdotes, psi phenomena may accompany synchronistic events, but they firmly believe the two phenomena are distinct. Mansfield states:

Parapsychological experiments are acausal in the Jungian (historical causality) sense, but exhibit "scientific causality", since repeatable connections between mental and physical events can be reliably established.... On the other hand, since synchronicity is a sporadic, nonrepeatable expression of the Unus Mundus, the unitary ground underlying both matter and psyche, it is both historically acausal and scientifically acausal." (p. 142)

Mansfield underscores what he calls the "*sin qua non* of a synchronistic experience" and that which further defines the difference between synchronicity and psi: its "archetypal meaning". This type of meaning, he suggests, is very different from the meaningful correlation of a statistically significant psi result. He speculates that possibly due to Jung's initial trepidation of coming out to the scientific community with a controversial idea such as synchronicity, he may have conflated synchronicity with the emerging positive patina of Rhine's parapsychological research.

Chapter 11 is Lance Storm's first paper in the book. Appropriately following the Mansfield et al. paper, it was originally written as a response to their position. It is entitled "Synchronicity, Causality, and Acausality". Storm first sets out to clarify Jung's notions of synchronicity, re-contextualizing some previously extracted and distorted attributions made to Jung. He then addresses a few other arguments that are typically employed to discredit the legitimacy of psi, and of synchronicity. Among these are the Law of Large Numbers, retrieval cues, and the philosophic semantic jockeying over words such as *meaning*, *cause*, and *contingence*.

Storm's central position differs from Mansfield's. He sees parallels between synchronicity and psi, and outlines phenomenological similarities between the two. For example, he draws a parallel between the archetypal contingencies of

a synchronistic event and the psi-permissive and psi-conducive contingencies of psi phenomena. He also points out that initially both psi and synchronicity are chance-like (acausal) in nature. And yet, because Jung and Braud succeeded in experimentally researching synchronicity, he believes psi and synchronicity share scientific causality. Lastly, Storm believes that beyond the statistical meaningfulness of psi research, psi phenomena can also produce meaningfulness similar to synchronicity, and it too can lead to personal transformation.

John Palmer continues examining the relationship between psi and synchronicity in Chapter 12. In his paper, "Synchronicity and Psi: How Are They Related?", he initially addresses the key ingredients that Jung states make up a synchronistic event: time and meaningfulness. With regard to time, he notes how Jung modified his own original position for the requirement of simultaneity of the synchronistic events, later allowing for a synchronistic event to be perceived prior to its occurrence. Palmer believes this shift opened the door for psi experiences such as precognition and telepathy to be included in synchronicities.

On the issue of meaningfulness, Palmer feels that it is nonsensical to say that meaningfulness is intrinsic in the corresponding events. He believes the meaning is subjectively projected by the individual and individual subjectivity can be diminished if the meaning is arrived upon by a consensus.

Palmer disagrees with Mansfield's suggestion that the volition employed in psi research further separates synchronicity from psi. In that regard he suggests not conceiving volition as causing synchronicity, but as accompanying it. Palmer also discusses two theories of psi called the transmission and correspondence models. He sees synchronicity most closely fitting the latter, particularly the conformance model of Rex Stanford. Finally, Palmer leaves open the possibility that with the proper perspective and controls, synchronicity like psi may be able to be empirically researched.

The next three chapters compose the fifth part of the book called, "New Conceptions of Synchronicity". In Chapter 13, Lila Gatlin presents "Meaningful Information Creation: An Alternative Interpretation of the Psi Phenomena". Her basic position is that there is no transmission of meaningful information in a synchronistic event. There is no carrier, or signal. She believes the information involved has not been transmitted, but rather created via the mechanism of synchronicity, and that this process has had and continues to have evolutionary implications for our survival.

Chapter 14 is written by Joseph Cambay and entitled "Synchronicity and Emergence". Cambay draws from Ilya Prigogine's work on the study of "complexity". A Nobel laureate in chemistry, Prigogine articulates how order can emerge out of chaos, and in a similar fashion Cambay believes the meaning in a synchronistic event is emergent. He further states: "Synchronicities can be

explored as a form of emergence of the Self” (p. 219). He also suggests that synchronicities offer “valuable clues” to the individuating psyche, but “they must be treated as value-neutral—that is, they do not in and of themselves convey direction to consciousness. Such direction can only come from reflective, ethical struggles with the meanings” (p. 229).

George Hogenson provides the last chapter in this section, “The Self, the Symbolic and Synchronicity: Virtual Realities and the Emergence of the Psyche”. While also referencing Prigogine’s notion of a “self-organizing concept in nature”, and influenced by Cambay’s articulation of emergence, Hogenson attempts to unify Jung’s concepts of The Complex, The Archetype, and The Theory of Synchronicity under a single dynamic principal. He discusses power laws, phase transitions, and the “symbolic” as “more than a system of representations, but rather a relatively autonomous self-organizing domain in its own right” (p. 242).

The sixth and last part of this anthology called “Summing Up Synchronicity” consists of three chapters and an Appendix, all provided by Lance Storm. Here he attempts to clarify and integrate much of the work that precedes him in the book. In Chapter 16, “Synchronicity, Science, and Religion”, he first picks apart the definition of synchronicity and examines ways where meaning may be created, misread, or mistaken. Storm reminds us that Pauli and Jung “arduously and ardently maintained a connection between science and religion” and that in his opinion their unification would come by way of integration with the psyche as the underlying factor common to both (p. 256).

In the next chapter (Chapter 17), Storm focuses on “Archetypes, Causality, and Meaning”. There again, he delves into the key components that compose and give rise to a synchronistic event. For example, regarding the argument of causal or acausal attributions made about synchronicity, he suggests employing the term *metacausal*, a blanket term for contingency, equivalence, and meaning, and one that also allows for an inconstant connection.

Finally in Chapter 18, “Synchronicity and Psi”, Storm elucidates the many ways these two phenomena are similar. He takes a firm position that like psi, synchronicity may be able to be empirically tested, and he even suggests in the following Appendix some potentials the *I Ching* may offer in that regard.

I agree with Storm on the potential for synchronicity to be empirically investigated. Along with him, Jung, Braud, and Palmer, I believe with proper controls its phenomena may be captured and better understood. I don’t agree with Beloff that attempting to do so would be a “fool’s errand”, or that it is “doomed to failure” as suggested by Sabbadini. Instead, I’m reminded that though Mansfield et al. initially doubted that synchronicity might reveal itself empirically, they ultimately backed off that position, suggesting that it may be possible if done “with the proper conditions and with sufficient rigor” (p. 150).

But conducting such empirical research would not only require rigor



and proper conditions, it would also require remaining true to Jung's basic definition of synchronicity. Critical ingredients such as archetypal content would need to be activated and employed. For instance, as suggested by many, a certain amount of emotional intensity would need to exist in order to catalyze the process and constellate an archetype. This may be achievable in a clinical context. Another critical ingredient such as meaningfulness would need to be controlled. Following Storm and others before him, this may be accomplished by using the *I Ching* and its sixty-four hexagrams. Jung considered the *I Ching*'s hexagrams loaded with "archetypal meaningfulness".

Ingredients found in parapsychological research might also be utilized in an empirical investigation of synchronicity. Hypnosis and other psi-conducive and psi-permissive techniques might prove helpful. Employing the *I Ching*'s process of throwing coins, for instance, allows for randomness.

Storm states that "synchronicity and psi are the same fundamental process" (p. 295). It appears, therefore, that synchronistic phenomena like psi can benefit from being empirically investigated. Should such efforts bear fruit with synchronicity, a better understanding of its phenomena may not only evidence an interconnectedness of intrapsychic conditions, psi processes, and numinous assistance, but also contribute to our psychological, emotional, and spiritual growth.

Such a goal may seem lofty, but if we are mindful of Tart's admonitions that we not let "intellectual laziness" lead us to give up finding causes, who is to say what we may yet discover. If your interests are simply to gain a fuller understanding of synchronicity, however, I could think of no better book to provide the depth and breadth of perspective found in this anthology.

FRANK PASCUTI  
*Licensed Clinical Psychologist*  
*Charlottesville, Virginia 22902*  
*frankpascuti@hotmail.com*

**Laboratories of Faith: Mesmerism, Spiritism, and Occultism in Modern France** by John Warne Monroe. Cornell University Press (Ithaca/London), 2008. 235 pp. \$35 (hardcover). ISBN 9780801445620.

Writing in a scholarly and elegant style, this author presents part of the history of French heterodoxy: movements between science and belief of Mesmerism, Spiritism, Occultism, and Psychical Research in France between 1853 and 1925. The author is now Associate Professor at Iowa State University, and this book is based on his thesis at Yale University in 2002 (for which he was awarded Yale University's Theron Rockwell Field Prize).

The book title refers to the development and maintenance of spiritual beliefs through observation or experience of tangible facts. This link between subjectivity and objectivity is valid for both orthodox beliefs (e.g., miracles and the Christian's extraordinary; Sbalchiero, 2002) and new marginal beliefs. Nineteenth-century France is itself a valuable observatory of the opposition between Enlightenment and counter-Enlightenment movements that united in claiming a scientific ground. Advances in scientific knowledge rendered obsolete metaphysical concepts, such as the immortality of the soul, that could not be tested in the laboratory.

For these believers, the only way to guarantee the continued validity of religion in the modern world was to radically change the texture of the human experience of the sacred. "Unique realism", in this view, had to come from a religious system that made the contemplation of the beyond into a scientific, empirical project. (p. 8)

French religious life has experienced a *crisis of factuality* which was solved by evolution in empirical evidence for some metaphysical propositions whose ramifications are still visible today (p. 3).

The book comprises five chronological chapters and an epilogue. Chapter 1 describes the 1853 arrival of American Modern Spiritualism in France. Many French had been intensely but for a short period fascinated by *turning* and *speaking tables*.

Chapter 2 returns to Mesmer's revolutionary therapy and occult science of animal magnetism, whose wonders and controversies since the late eighteenth century prepared the way for the reception given to Spiritualism. Monroe shows clearly how the Mesmerist movement has gradually been swept away by the vogue for Spiritualism, in part because the phenomena claimed by the Spiritualists were more stunning and persuasive than the magnetic phenomena. D. D. Home and other mediums from America acted as direct sources for the sacred, as missionaries for the new cause, and as scientific instruments of faith.

Chapter 3 shows the emergence in the mid-1860s and the rapid domination of the Spiritualist movement around its codificator Allan Kardec (Allan Kardec is the pseudonym for Hippolyte Léon Denizard Rivail). Kardec is a central figure in this book because he not only shaped the beliefs of his time but also the practices. His approach combining rigorous positivism and moderate anti-Catholicism is a powerful vehicle for a new vision of religious life, with both moral and political implications. The impressive sales of his writings and those of some of his disciples (Flammarion, Leymarie, Denis, and Delanne) made of Spiritualism the most broadcast popular philosophy in France at that time.

Chapter 4 describes the decline of Spiritualism following the death of Kardec, and a highly publicized trial that took place in 1875, in which

several Spiritists were convicted of producing and marketing false spirit photographs. The following trust crisis in this kind of transcendental evidence led to a repudiation (for example, those claims of the astronomer Camille Flammarion) of the Spiritist doctrine as a solution to the crisis of factuality.

In Chapter 5 and the Epilogue, Monroe explores other heterodox movements: Psychical Research and Occultism. In their own way, these movements have proposed innovations in terms of beliefs, practices, and empirical evidence. The Epilogue is a brief overview of the years following the First World War and the emergence of a new heterodoxy: the founding of the Institut Métapsychique International in 1919 by a group of researchers between Spiritism and psychical research; the reprise by the surrealism of André Breton; the anti-heterodoxy of René Guénon; the fantastic realism around the book *The Morning of the Magicians* (Pauwels & Bergier, 1963); and the use by “cult milieu” of heterodox topics, such as with the Raelian cult and the belief in extraterrestrials.

Monroe approaches his subject with an exemplary academic neutrality when not mocking “evidence of things not seen.” Believers in the paranormal are not shown as mere irrational people, and instead Monroe emphasizes the permanent rationality of their approach, as with Kardec. In this sense, this book illustrates a comprehensive sociology of the apparently most extreme beliefs, placing them in their political, cultural, and intellectual context. It does not reduce the complexity of these “scientifically unacceptable beliefs” (Irwin, 2009) to a deviation of thought developed by marginals, madmen, or idiots.

However, this neutrality will be frustrating for a scientific reader. Spirit seances in small groups, fraudulent photographs of the dead, and ingenious experiments by psychical researchers are put on the same footing: They are all “laboratories of faith.” The “history of religion” perspective takes precedence over the “history of science” one. Thus, in this view, assertions such as “What made Palladino’s phenomena remarkable was their audience” (p. 209) can divide. Gauld (1968) had already established that the Society for Psychical Research was founded by scholars during their “crisis of factuality”. But this had not prevented him from showing the importance of empirical and theoretical progress engendered by the movement of psychical research. In Monroe’s book, the treatment of this movement is rather thin: For example, Monroe says nothing about the Société de Psychologie Physiologique, one of the first institutes for French academic psychology, which included the study of



hypnotic and psychic phenomena. Nothing either on the Académie des Sciences Psychiques, founded in 1898 by theologians and scholars, and its *Revue du Monde Invisible*, which may have been relevant as a “great battle in which the Church can counteract the influence of scientism” (Guillemain, 2006:130). Monroe will even find “far-fetched” (p. 217) F. W. H. Myers’ theories on the Subliminal Self from the point of view of a contemporary researcher. This retrospective judgment differs from the neutrality of the historian by extending controversies he is supposed to describe (for a contrary and complete view on Myers’ theories, cf. Kelly et al., 2007).

Despite these minor reservations, this book gains a worthy place among a series of recent academic works dealing with various heterodox movements in France during this period (Edelman, 1995, Méheust, 1999, Le Maléfan, 1999, Plas, 2000, Lachapelle, 2002, Brower, 2005, Harvey, 2005, Sharp, 2006).

RENAUD EVRARD

Psychologist

Center for Information, Research, & Counseling on Exceptional Experiences

[www.circee.org](http://www.circee.org)

### References

- Brower, M. B. (2005). *The Fantasms of Science: Psychological Research in the French Third Republic, 1880–1935*. [Ph.D dissertation, Rutgers University]
- Edelman, N. (1995). *Voyantes, Guérisseuses et Visionnaires en France, 1785–1914*. Paris: Albin Michel.
- Gauld, A. (1968). *The Founders of Psychological Research*. New York: Schocken Books.
- Guillemain, H. (2006). *Diriger les Consciences, Guérir les Âmes. Une Histoire Comparée des Pratiques Thérapeutiques et Religieuses (1830–1939)*. Paris: La Découverte.
- Harvey, D. A. (2005). *Beyond Enlightenment: Occultism and Politics in Modern France*. DeKalb: Northern Illinois University Press.
- Irwin, H. J. (2009). *The Psychology of Paranormal Belief: A Researcher’s Handbook*. Hertfordshire: University of Hertfordshire Press.
- Kelly, E. F., Kelly, E. W., Crabtree, A., Gauld, A., Grosso, M., & Greyson, B. (2007). *Irreducible Mind: Toward a Psychology for the 21<sup>st</sup> Century*. Lanham, MD: Rowman & Littlefield.
- Lachapelle, S. (2002). *A World Outside Science: French Attitudes toward Mediumistic Phenomena, 1853–1931*. [Ph.D. dissertation]. University of Notre Dame.
- Le Maléfan, P. (1999). *Folie et Spiritisme Histoire du Discours Psychopathologique sur la Pratique du Spiritisme, ses abords et ses Avatars. 1850–1950*. Paris: L’Harmattan.
- Méheust, B. (1999). *Somnambulisme et Médiurnité* (2 volumes). Paris: Les Empêcheurs de Penser en Rond.
- Pauwels, L., & Bergier, J. (1963). *The Morning of the Magicians*. New York: Stein and Day.
- Plas, R. (2000). *Naissance d’une Science Humaine, la Psychologie: Les Psychologues et le “Merveilleux Psychique”*. Rennes: PUR.
- Sbalchiero, P. (Ed.). (2002). *Dictionnaire des Miracles et de l’Extraordinaire Chrétien*. Paris: Fayard.
- Sharp, L. L. (2006). *Secular Spirituality: Reincarnation and Spiritism in Nineteenth-Century France*. Lanham, MD: Lexington Books.

**The Spiritual Anatomy of Emotion: How Feelings Link the Brain, the Body, and the Sixth Sense** by Michael A. Jawer with Marc S. Micozzi. Park Street Press (Rochester, VT), 2009. 576 pp. \$24.95 (paperback). ISBN 9781594772887.

The interaction between body and brain as it relates to emotion has long been an issue of debate within psychology, with the most recognized historical example in the field perhaps being the James–Cannon debate. Based on the premise that emotions are often accompanied by one or more somatic responses, the prominent psychologist William James (1884) had proposed that an emotion-arousing stimulus triggers a somatic response via the autonomic nervous system (ANS) that is then perceived and interpreted by the brain as a certain emotional sensation. From this perspective, emotion seems to have its prime source in the body. A similar theory was independently proposed by Danish researcher Carl Lange, forming the basis for the James–Lange theory. Physiologist Walter Cannon (1927), along with his colleague Philip Bard, later questioned the James–Lange theory and offered an alternative in which the stimulus triggers neural impulses that are sent to the thalamus, which are then routed both to the cortex and to the hypothalamus to initiate a somatic response via the ANS. In parallel with the activity of the ANS, signals from the hypothalamus travel to the cortex to initiate the emotional experience, which would then be accompanied by the associated somatic response. Thus, according to the Cannon–Bard theory, emotion seems to have its prime source in the brain, with the somatic response being a side effect. It would seem that, over the years, the emerging roles of the limbic structures in the medial temporal lobe have placed additional emphasis on the brain as being the likely source of emotion, with the contributions of the body receiving lesser attention. (On a brief personal note, this reviewer might add that this was the general perspective that he was taught when he first became a student of neuropsychology.)

In *The Spiritual Anatomy of Emotion*, emotion researcher Michael Jawer and physiologist Marc Micozzi attempt to reassess the interaction between body and brain in relation to emotion and shed light once again on the body's contribution. Through a review of the latest empirical and anecdotal evidence from fields such as medicine, biochemistry, neurology, neuroimaging, and psychoneuroimmunology in the opening chapters of the book, Jawer and Micozzi aim in part to make a case for consideration that, while the brain plays a major role in emotion, the body also has an important, but possibly overlooked, role. Jawer and Micozzi seem to offer a perspective similar to the one offered by molecular biologist Candace Pert (1997) in her book *Molecules of Emotion*. In Pert's view, the experience of emotion is guided by the biochemical actions of neuropeptides binding to various receptor cells found throughout the body

that are thought to comprise a vast psychosomatic network, with a large amount of receptors being found in the limbic regions. Through this body-spanning network, mind and body are posited to work as one in experiencing sensation and emotion. Through their review, Jawer and Micozzi similarly argue that brain and body operate in tandem through various neurophysiological processes to give rise to emotion. (Like Pert, they use the term *bodymind* to refer to the proposed reciprocal interaction between brain and body.)

Relevant to the scope of this *Journal* is the way in which Jawer and Micozzi attempt to use this perspective to account for various forms of ostensible psychic (psi) phenomena. On the basis of a review of findings relating to the biological effects of electromagnetism, temporal lobe epilepsy, and the neurobiology of fear, the authors suggest that certain individuals “. . . may effectively displace the energy of repressed feeling into the surroundings” (p. 197), and that this may offer a possible explanation for reported apparitional experiences, haunts, and recurrent spontaneous psychokinesis (RSPK, or “poltergeist”).

With respect to apparitions, the authors suggest that the energy of repressed feeling retained in a person’s body, along with unresolved issues or preoccupations held within his or her brain, give rise to an apparition of the person who persists after death, seemingly consumed with these unresolved issues or preoccupations as their apparent purpose for remaining (p. 155). A potential weakness to this idea is that the parapsychological and psychical research literature on apparitions actually reveals very few cases that clearly suggest signs of conscious, purposeful intention on the part of apparitions (Roll, 1982, Sect. 2.4). Eleanor Sidgwick (1885) raised this point most succinctly in her review of apparition cases for the Society for Psychical Research. Regarding cases involving apparent intention consistently carried out by apparitions, she noted that, “. . . it is a rather remarkable fact that we have exceedingly little evidence in our collection clearly tending in this direction” (p. 99). This would seem to lessen the popular assumption that purposeful intention on the part of an apparition is a clear indication that the apparition represents the survival of a person’s conscious awareness, an assumption upon which the authors’ idea is apparently based (p. 155).

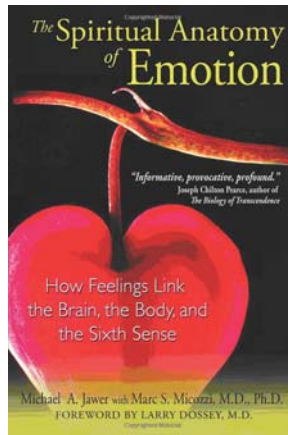
To account for RSPK, Jawer and Micozzi refer to the findings suggesting that RSPK has both a psychological aspect and an energetic aspect (Roll & Persinger, 1998). On this basis, they offer the suggestion that the RSPK agent “. . . becomes a generator of electromagnetic radiation, or at least a transducer for energy in the immediate environment” (p. 197). Moreover, they offer the radical suggestion that electromagnetism may be a medium of conveyance for repressed feeling and emotional information, as indicated by their conjecture that “Electromagnetic radiation . . . is *conducive to feeling*” (p. 197, their emphasis; see also pp. 405 and 441 for similar conjectures). However, aside



from the RSPK case findings (which suggest that emotion and electromagnetism may be *correlated*, but not necessarily causally *connected* with each other) and neurological research that suggests that complex magnetic pulses applied to the medial temporal regions may artificially induce an emotion-related response (e.g., Richards et al., 1992) but not the other way around, there seems to be little (if any) clear evidence that emotion can be conveyed through electromagnetism.

On the other hand, there is an alternative suggestion that would require consideration of a third component to act as a sort of a mediator between the two, and that third component is PK. Here, as suggested by Roll and Persinger (1998, p. 193), PK would be utilized by the RSPK agent to modulate and focus magnetic energy in the environment rather than be a generator of it. In line with this view, a limited amount of PK research indicates deviations from nominal randomness in the output of random event generators (REGs) correlating with certain forms of emotional expression (Blasband, 2000, Lumsden-Cook, 2005a, 2005b). In addition, exploratory PK tests conducted by Puthoff and Targ (1975) with two psychics found evidence to suggest that the psychics were able to affect the wave patterns of magnetic fields, seemingly offering a weak hint that PK may affect external fields (although it must be recognized that it is not clear which target the psychics may have affected—the magnetic fields themselves, or the mechanical components of the magnetometers measuring the fields).

Elsewhere in the book, to further support their bodymind perspective, Jawer and Micozzi review the immunological and psychological evidence for apparent psychosomatic effects. In their attempt to relate these effects to psi, the authors cite organ transplant cases in which transplant recipients seem to spontaneously “recall” events in the lives of their donors (Dossey, 2008, Pearsall et al., 2002). The authors suggest that such cases may be accounted for through consideration of a type of “memory,” which some have labeled “cellular memory” (op. cit.), that is somehow retained by the bodymind. However, they do not recognize the apparent similarity between these cases and those of psychometry, also known as token object reading (for a brief review of cases, see Roll, 2004). In psychometry, a psychic appears to receive psi-related impressions about a specific person or event through the handling of an inanimate physical object associated with that person or event. Similar to the organ transplant cases, psychometric impressions can be “memory”-like and correspond to verifiable events in the lives of living or deceased persons. This seems to suggest that





the transplant cases may represent a form of psychometry. If that is the case, then it may be necessary to take into account psychometry cases involving *inanimate* (i.e. non-biological) objects as well as cases involving animate ones. It is unclear how Jawer and Micozzi's bodymind perspective would be able to do this in its current form.

In further attempts at extension to psi, Jawer and Micozzi cite the cases suggestive of reincarnation that have been extensively documented by the late Ian Stevenson and his associates at the University of Virginia, particularly those involving birthmarks that seem to correspond to injuries sustained by the previous personality (Stevenson, 1997; Tucker, 2005). To account for these cases, the authors suggest that repressed emotional energy resulting from traumatic experience is somehow transferred from one bodymind to another (p. 352). However, aside from anecdotal allusions to reports of "energy" produced by practitioners of mind-body disciplines (pp. 60–61), the authors provide little detail about emotional energy, how it may possibly be verified empirically, and the process by which it may be transferred in these cases.

In attempting to account for experiences of clairvoyance and precognition, Jawer and Micozzi suggest that these may be instances of the bodymind moving through space-time, offering the argument that: "When our emotions are being expressed (i.e. expanding into space), our experience of time should also be in some sense greater" (p. 374). The authors correctly point out that spontaneous ESP experiences tend to involve emotional events, although they do not seem to recognize that emotion may only be one part of ESP rather than the whole, as indicated by their assertion that one never hears of non-emotional ESP experiences (p. 374). While case studies do indicate that spontaneous ESP tends to involve (mostly negative) emotional events (e.g., Feather & Schmicker, 2005; Rhine, 1981; Stevenson, 1970), there are indeed also a small number of ESP experiences involving trivial (i.e. being of less acute emotional value) events. For instance, Louisa Rhine (1981) found that approximately 15% of her 2,878 ESP cases involved a trivial matter, and Ian Stevenson (1970) found that 9% of his 35 cases were trivial (see also his Table 4 for other case collections). One might also consider the early ESP tests by J. B. Rhine and colleagues using Zener cards, which are a relatively unemotional stimulus. Another example might be remote viewing of geographical locations (Targ & Puthoff, 1977), which can also be considered a relatively unemotional stimulus. While ESP experiences of trivial events do comprise only a small proportion of the overall database, their mere existence offers reason that there should be a way to account for them within Jawer and Micozzi's perspective. Again, it is unclear how this may be done in its current form.

In their attempt to account for out-of-body experiences (OBEs), Jawer and Micozzi seem to rely on nearly the same ideas they proposed for apparitions

and RSPK, namely that emotional energy associated with the bodymind can be displaced into the environment through electromagnetism (p. 432). As noted previously, empirical support for these ideas appears to be severely limited at the present time. Largely on the basis of anecdotal accounts, the authors contend that reported OBEs may represent “an external aspect to the bodymind continuum” (p. 426), and that during such experiences, individuals may be outside of their bodyminds (p. 432), suggesting that they are in favor of an extrasomatic aspect to the OBE. While this may still be a possibility, they do not seem to fully recognize that OBE perceptions can appear to be indistinguishable either from vivid hallucinations or from ESP. For instance, the famed OBE experient Robert Monroe would often report having OBEs that were quite vivid and detailed, but not always accurate with regard to what he perceived while presumably out of body (e.g., see the tests by Tart, 1998, pp. 82–89). A similar observation was made by William Roll (1997, p. 55) regarding the last and clearest OBE he had personally experienced. During a study by Tart (1998, pp. 78–82), a female experient was able to accurately recall a random five-digit number following a brief OBE, which could possibly have been perceived through ESP. The authors do note (pp. 416–417) the studies conducted by the Psychical Research Foundation (Morris et al., 1978) in which a pet kitten belonging to Keith Harary seemed to calm at times when Harary attempted to visit it via OBE during randomly determined periods (which could possibly be accounted for by ESP). However, inconsistent or null results were observed in tests using other animal detectors, human detectors, and physical detectors, casting some doubt on the extrasomatic aspect. In the case of the latter, no definitive changes (including magnetic changes) were found whenever Harary attempted to visit a room where physical instrumentation was located. This would tend to refute Jawer and Micozzi’s suggestion that electromagnetism may be involved in OBEs.

Despite the potential shortcomings with regard to their psi-related arguments, Jawer and Micozzi’s book provides a well-written review of psychosomatic research that is accessible to the general reader. In addition, the authors present material of potential promise in Chapter 9. Guided by his ergonomic-related work in assessing the effect of air quality on the work performance of people inside office buildings, Jawer (2005) developed a questionnaire examining the degree to which people reporting apparitional experiences might be susceptible to certain forms of environmental illness (e.g., allergies, migraine headache, chemical sensitivity, depression, sensitivity to light or sound). To date, this questionnaire has been completed by 112 people, 62 of which have described themselves as being environmentally sensitive. Compared to a control group of 50 non-sensitives, the sensitive group reported a higher percentage of apparitional experiences (16% vs. 74%, respectively). Chapter 9 provides a

detailed assessment of Jawer's survey results, which suggest that apparitional experiencers may be particularly sensitive to their surroundings. Currently the findings are mostly limited to those individuals who have had an apparitional experience, and the degree to which it can be further replicated and generalizable to individuals who have experienced other kinds of psi-related phenomena remains to be seen.

BRYAN J. WILLIAMS  
*University of New Mexico*  
*Albuquerque, New Mexico*  
*bwilliams74@hotmail.com*

### References

- Blasband, R. A. (2000). The ordering of random events by emotional expression. *Journal of Scientific Exploration*, 14, 195–216.
- Cannon, W. B. (1927). The James–Lange theory of emotions: A critical examination and an alternative. *American Journal of Physiology*, 39, 106–124.
- Dossey, L. (2008). Transplants, cellular memory, and reincarnation. *Explore: The Journal of Science & Healing*, 4, 285–293.
- Feather, S. R., & Schmicker, M. (2005). *The Gift: ESP, the Extraordinary Experiences of Ordinary People*. New York: St. Martin's Press.
- James, W. (1884). What is emotion? *Mind*, 9, 188–205.
- Jawer, M. (2005). Environmental sensitivity: A link with apparitional experience? *Proceedings of Presented Papers: The Parapsychological Association 48th Annual Convention* (pp. 71–85). Petaluma, CA: Parapsychological Association, Inc.
- Lumsden-Cook, J. (2005a). Mind–matter and emotion. *Journal of the Society for Psychical Research*, 69, 1–17.
- Lumsden-Cook, J. (2005b). Affect and random events: Examining the effects of induced emotion upon mind–matter interactions. *Journal of the Society for Psychical Research*, 69, 128–142.
- Morris, R. L., Harary, S. B., Janis, J., Hartwell, J., & Roll, W. G. (1978). Studies of communication during out-of-body experiences. *Journal of the American Society for Psychical Research*, 72, 1–21.
- Pearsall, P., Schwartz, G. E. R., & Russek, L. G. S. (2002). Changes in heart transplant recipients that parallel the personalities of their donors. *Journal of Near-Death Studies*, 20, 191–206.
- Pert, C. B. (1997). *Molecules of Emotion: Why You Feel the Way You Feel*. New York: Scribner.
- Puthoff, H., & Targ, R. (1975). Physics, entropy, and psychokinesis. In Oteri, L., (Ed.), *Proceedings of an International Conference: Quantum Physics and Parapsychology* (pp. 129–141). New York: Parapsychology Foundation, Inc.
- Rhine, L. E. (1981). *The Invisible Picture: A Study of Psychic Experiences*. Metuchen, NJ: Scarecrow Press.
- Richards, P. M., Koren, S. A., & Persinger, M. A. (1992). Experimental stimulation by burst-firing weak magnetic fields over the right temporal lobe may facilitate apprehension in women. *Perceptual and Motor Skills*, 75, 667–670.
- Roll, W. G. (1982). The changing perspective on life after death. In: Krippner, S. (Ed.), *Advances in Parapsychological Research* 3 (pp. 147 – 291). New York: Plenum Press.
- Roll, W. G. (1997). My search for the soul. In: Tart, C. T., (Ed.), *Body Mind Spirit: Exploring the Parapsychology of Spirituality* (pp. 50–67). Charlottesville, VA: Hampton Roads Publishing.

- Roll, W. G. (2004). Early studies on psychometry. *Journal of Scientific Exploration*, 18, 711–720.
- Roll, W. G., & Persinger, M. A. (1998). Poltergeist and nonlocality: Energetic aspects of RSPK. *Proceedings of Presented Papers: The Parapsychological Association 41st Annual Convention* (pp. 184–198). Durham, NC: Parapsychological Association, Inc.
- Sidgwick, E. M. [Mrs. H.] (1885). Notes on the evidence, collected by the Society, for phantasms of the dead. *Proceedings of the Society for Psychical Research*, 3, 69–150.
- Stevenson, I. (1970). *Telepathic Impressions: A Review and Report of Thirty-Five New Cases*. Charlottesville, VA: University Press of Virginia.
- Stevenson, I. (1997). *Where Reincarnation and Biology Intersect*. Westport, CT: Praeger.
- Targ, R., & Puthoff, H. E. (1977). *Mind Reach: Scientists Look at Psychic Ability*. New York: Delacorte Press/Eleanor Friede.
- Tart, C. T. (1998). Six studies of out-of-body experiences. *Journal of Near-Death Studies*, 17, 73–99.
- Tucker, J. (2005). *Life before Life: A Scientific Investigation of Children's Memories of Previous Lives*. New York: St. Martin's Press.

**La Connaissance Supranormale, Étude Expérimentale** by Eugène Osty. Felix Alcan (Paris), 1922. 358 pp. Exergue, 2000. 358 pp. \$47 (paperback). ISBN 9782911525377. [**Supernormal Faculties in Man: An Experimental Study** by Eugène Osty. Methuen & Co. (Paris), 1923. \$250 (hardcover). ASIN B001OMVDEA.]

Eugène Osty was born in Paris on May 16th, 1874. Graduated as a Medical Doctor, he became interested in metapsychics after a dinner with a psychic who described his personality and those of several friends. From 1909 onward, he met with psychics in Paris to study their “lucidity”. He published his first experimental results and analyses in 1913 in *Lucidité et Intuition* (Osty, 1913). Charles Richet, 1913 Nobel laureate for the Prize in Physiology or Medicine, invited Osty, in June 1914, to be part of the “dinner of the thirteen”. Each 13th of the month for 20 years, Richet gathered French personalities interested in psychical research such as Henri Bergson and Camille Flammarion.

After the war, Osty published *Le Sens de la Vie Humaine* (Osty, 1919). He also joined the Institut Métapsychique International (IMI) and published in 1922 *La Connaissance Supranormale* (Osty, 1922/2000). He became director of IMI after Geley's accidental death in a plane crash and held this position until his death in 1938. While he had practiced as a doctor in Jouet-sur-l'Aubois since 1901, he gave up his activities as a physician from 1924 to 1931 to devote himself entirely to the study of psychic phenomena. As a metapsychist, he conducted many experiments with famous psychics such as Pascal Fortuny (Osty, 1926), but he also set up original and ingenious experiments, with his son, Marcel Osty, to test physical mediums such as Jean Guzik and Rudi Schneider. His last book about the topic was *Les Pouvoirs Inconnus de l'Esprit*

*sur la Matière* (Osty & Osty, 1932). In addition to these books, he published more than 100 articles in psychical research journals.

In *La Connaissance Supranormale*, Osty described twelve years of research and analysis about “metagnomy”, a term coined by Émile Boirac (Boirac, 1917) which means “beyond knowledge” and that can be seen as an equivalent term for psi. This book described different phenomenological aspects of metagnomy.

Osty started *La Connaissance Supranormale* with general remarks about mankind and science and discussed his ambition to elicit the interest of famous scientists with his book. He presented several examples, coming mainly from other researchers, about metagnomy in the medical domain. He reported in detail, for example, the case of an hysteric who described correctly to her doctor, under hypnosis, a part of a bone that she had in the intestine (p. 37). Osty concluded there was a transformation of kinesthetic perceptions into visual representations depending on the beliefs and naive representations of the internal body that the psychic had. He also described several of his own cases in which patients knew precisely the day, and even the hour, on which they would die even if they were not sick at the moment of the prediction (p. 44). Even more disturbing was the case of a young girl who said to her mother “you are putting death’s socks on” a few hours before she was killed by the falling down of her house (p. 45).

Osty then proposed several striking cases of metagnomy about, for example, the death of Jean Jaurès (p. 58), and the way a knife used in a murder was found thanks to a psychic (p. 62). Using these different examples coming from literature, and his own observations, Osty argued that “the study of this faculty leads to the fact that subjects who possess it are so different in their own capacity, that there are not two of them who are similar” (p. 79). For this reason Osty insisted on the importance of taking into account the specificity of these abilities:

Trying to control the reality of hyper-knowledge by an attempt to obtain one specific category of phenomena, without checking the type of subject that will be employed for it, is nonsense. Each subject who has the ability of supernormal knowledge is, for the researcher, as an instrument whose functioning and the conditions of utilization must be known before using it. (p. 82)

When the psychic was well-known, Osty considered that the “metagnome”, as he called them, could be as useful for the doctor as a dog was for the hunter (p. 104). Osty also compared metagnomes to different microscope lenses, who had to be used with precision, because some of them were better able to describe general patterns while others were more prone to give accurate details (p. 142). He was also convinced that there is a link between psi and memory processes because metagnomes generally have a very good memory. Nevertheless, he also specified that “who can do more, cannot necessarily do less” (p. 79). For

example, there is no sense asking a psychic to describe what is in an adjacent room under the pretext that he was able to precisely describe a personality.

Osty was convinced that psi subjects could be used in different settings if one considered precisely the ability of each metagnome and how to use it with efficiency. Besides medical diagnosis, in which, from his own experience, best results were obtained when doctors and metagnomes worked together, Osty thought they could be useful for the treatment of psychoneurosis (p. 105). He also proposed several successful examples of applications in other domains: a description of a child's personality in order to detect hidden abilities (p. 112), employment of a new domestic (p. 115), and even information to determine if a woman would be a good wife (p. 117)!

Osty was also convinced that metagnomy could be useful to know future events of his own life (he had seen many psychics for personal readings). He described in detail several cases of metagnomy and compared each sentence said by the psychic with what had been verified. One case was especially interesting: It began with general information, looking like simple cold reading processing (Hyman, 1989), and finished with accurate information such as the name and surname of several persons and precise personal events.

More generally, Osty wanted to see these abilities used in a more clever and efficient way:

I dream of an epoch in which the period of ridiculous mysticism and skepticism will be closed, and in which metagnome subjects of good quality will be removed from their destiny of fortune-tellers, and will be selected, wisely educated, rationally prepared, and will become for men of science, finally skilled in this domain, psychic tools helping the experimental exploration of [the] latent transcend[ent] plan[s?] of [the] human being, and maybe of everything he lives. (p. 155)

But this dream was quite different from Osty's zeitgeist, and he criticized the attitude of several famous French psychologists concerning metapsychics, such as Binet and Vaschide (who, ironically, had his own year of death predicted rightly by a psychic working with Osty, Mme Fraya). Osty also criticized the supposed amalgam between neurosis and metagnomy, which he believed was the consequence of abusive generalization (p. 180).

From his detailed analysis of numerous sessions conducted with different psychics, Osty reached the conclusion that the "mind of the subject seemed able to communicate with all the individual elements of humankind if we give him sufficient support" (p. 195). This support was an "intermediate object" that enabled a link between the metagnome and the target, making the latter able to use a "creative power and knowledge beyond space and time" (p. 214). Nevertheless, this knowledge was characterized metaphorically most of

the time. For example, some psychics gave true details about organs, but in a metaphoric manner and with a naive representation of the human body (p. 220). Osty thought that this phenomenon came from the fact that psi perceptions were a reconstructive hallucination produced by the mind of the metagnome.

Osty also discussed the great variability of results, as they can be “excellent to nothing” (p. 261), even with the same psychic. But the French researcher argued that good results did not depend only on the psychic: There could be distortions coming from the target, such as the person who was concerned by the reading (p. 262).

Nevertheless, the rate of errors was more frequent with nonselected subjects (p. 277), and several sessions with the same psychic may allow collection of more reliable information (p. 197). In Osty’s view, this information can hardly concern global events, like, for example, the first world war from a general point of view, but Osty gave several examples in which the psychic had predicted the impact of the war when doing predictions for individuals. Consequently, these general events could be deduced from the comparison of individual readings.

Osty came to the conclusion that the study of errors and distortions of the psychic’s descriptions was essential, and he examined them precisely in the last part of *La Connaissance Supranormale*. Indeed, if he had obtained “sessions ideally good”, he never encountered “a perfect subject” (p. 319). He noted moreover that the metagnome not only caught the reality but also conveyed “fears, projects, desires and hopes” (p. 313).

Interestingly, even if Osty seemed quite critical about psychoanalysis, he had discovered the same processes of distortion as those described by Freud during the same period (Freud, 1932). Furthermore, other obstacles could lead to false conclusions concerning the descriptions of a psychic. Osty observed more particularly that “agreement between revelations of metagnome subjects can occur as much in error as in truth” (p. 328). He then presented a particularly long example in which up to ten different metagnomes gave a consistent description of a soldier who had disappeared. In the different descriptions, the soldier was supposed to be alive, and he was actually already dead. But the subjects gave the same details about what they thought had happened to the soldier in a long and coherent story as if all their descriptions were interconnected. Osty supposed that this effect came from a false interpretation of mental imagery by the psychics, and could also be the consequence of the desire of the person who asked for the reading (in this case, the father of the soldier, who of course hoped his son was still alive). More generally, in order to prevent errors and distortions, Osty advised experimenters to be careful with the type of questions they ask the metagnome even to the point of not letting him in on their “absolutely unknown” information (p. 341).

Osty concluded his book with the importance of proposing a hypothesis that

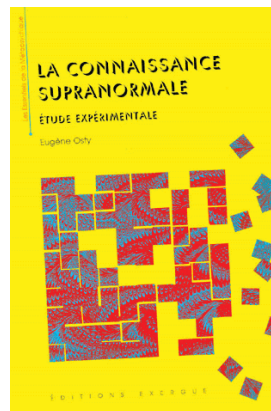


could be experimentally tested. He showed great caution concerning the different interpretations of the observed phenomena and thought that future experiments would have to determine more generally the links between brain and mind. He finally apologized for giving only partial satisfaction to his scientific readers as he was only able to propose several paths that still had to be explored.

We can respect the modesty of a researcher who has proposed a very experimental and detailed approach using a qualitative methodology and which can be seen as a precursor of many later researches. First of all, Osty's observations about psi functioning influenced Warcollier's work about telepathy, which focused on images (Warcollier, 1921). This research was then a source of inspiration for the American government's remote viewing program known as "Stargate" (Hyman, 1996, Utts, 1996). From this point of view, Osty can be seen as one of the first to propose the way to carry out psi applications in an organized and detailed manner.

Thus, when we compare Osty's observations ninety years ago and what is currently proposed by remote viewers and researchers who have been working on psi applications (McMoneagle, 2000), we are surprised by the similarity of observations and recommendations. For example, Osty noted the importance of taking into account not only the mental state of the psychic but also the target, which can be associated with more recent findings concerning the importance of the nature of the target (May, Spottiswoode, & Faith, 2000). This similarity of descriptions and observations over time could be seen as a strong argument in favor of an uniform phenomenology of psi, especially when it is used for applications. Nevertheless, it is still necessary from our point of view to determine if this coherence is actually an astonishing cognitive illusion that has deluded several generations of scientists or if it is the consequence of a real form of perception. In any case, this kind of work has great interest from a phenomenological point of view.

More generally, we can also observe that only a few ideas about applications proposed by Osty have been exploited so far. For example, the use of metagnomes in psychotherapy and medical diagnosis has not been studied and evaluated seriously in large studies so far. This lack of psi applications is probably one of the consequences of the decrease and almost disappearance of an experimental and elitist approach such as the one that used to exist in the French metapsychic tradition. Current researchers should take more into account Osty's conceptions that it was absolutely necessary to select participants and to acknowledge



their specificity in order to study and use their abilities. Interestingly, this question was a crucial point among scientists who have analyzed data from the Stargate program. This principle, absolutely essential in the elitist approach, could maybe explain current problems of reliability observed in universalist and quantitative research. Researchers should maybe use these criteria more, especially for applications, in order to produce original research.

Moreover, from a more classical psychological point of view, Osty has distinguished clearly pathological and nonpathological mental states associated with paranormal experiences as still described today by some researchers (Simmonds-Moore & Holt, 2007). On a more psychodynamic ground, Osty has also observed mechanisms of distortion in the unconscious as Freud (1932) did. Experimental work with psychics could still appear as an original way to understand unconscious processing, and we can regret that this path of research has not been explored so far.

Nevertheless, we can also deplore the lack of rigor, from our current scientific standards, of many experiments carried out by Osty. For example, in most of the readings, there are no double-blind conditions, and consequently it's difficult to determine in which way sensory cues could explain some of the results. Moreover, Osty gives us successful examples, but we also need to know what the rate of failure was.

Consequently, and as a whole, even if Osty's research can hardly be considered as proof of psi functioning, it represents a phenomenological approach that deserves careful and detailed attention. This kind of work is rare today, and we can still find inspiring remarks in this old book. For example, a detail mentioned by Osty has attracted my attention, being similar to my ideas and recent work with psychics (Rabeyron, 2008). Osty thus explained that:

The increase in normal knowledge given to a metagnome subject increases in quantity and quality the supra-normal knowledge that the subject has access to. (p. 262)

This observation could have important consequences. We can see it more precisely in examples given by Osty. During several readings, the metagnome first gives very general information, that looks like, at first, a cold reading, but then gives accurate data such as a name and a description of personal events. Could we suppose that Osty obtained such surprising and precise results because the circumstances of the experiment were similar? And not because this setting would give access to normal clues, but because the access to classical information is a way to enhance the access to psi information? Roughly, it perhaps means there could be better psi interactions if there would be more classical interactions. This kind of analysis could also fit quite well with the

Model of Pragmatic Information (Lucadou, 1995) and Weak Quantum Theory (Lucadou, Römer, & Walach, 2007) and show how topical Osty's analyses still are.

THOMAS RABEYRON

*Ph.D. Student, Clinical Psychology  
Lyon II University and Edinburgh University  
thomas.rabeyron@univ-lyon2.fr*

### References

- Boirac, E. (1917). *L'avenir Des Sciences Psychiques*. Paris: Alcan.
- Freud, S. (1932/1984). Rêve et occultisme. In *Nouvelles Conférences d'Introduction à la Psychanalyse*. Paris: Gallimard.
- Hyman, R. (1989). *The Elusive Quarry: A Scientific Appraisal of Psychological Research*. New York: Prometheus Books.
- Hyman, R. (1996). Evaluation of a program on anomalous mental phenomena. *Journal of Scientific Exploration*, 10(1), 31–58.
- Lucadou, W. (1995). The model of pragmatic information (MPI). *European Journal of Parapsychology*, 11, 58–75.
- Lucadou, W., Römer, H., & Walach, H. (2007). Synchronistic phenomena as entanglement correlations in generalized quantum theory. *Journal of Consciousness Studies*, 14(4), 50–74.
- May, E., Spottiswoode, S., & Faith, L. (2000). The correlation of the gradient of Shannon entropy and anomalous cognition: Toward an AC sensory system. *Journal of Scientific Exploration*, 14(1), 53–72.
- McMoneagle, J. (2000). *Remote Viewing Secrets: A Handbook*. Charlottesville: Hampton Roads Pub.
- Osty, E. (1913). *Lucidité et Intuition: Étude Expérimentale*. Paris: Alcan.
- Osty, E. (1919). *Le Sens de la Vie Humaine*. Paris: La Renaissance du Livre.
- Osty, E. (1922/2000). *La Connaissance Supranormale: Étude Expérimentale*. Paris: Editions Exergue.
- Osty, E. (1923). *Supernormal Faculties in Man: An Experimental Study*. London: Methuen & Co.
- Osty, E. (1926). *Pascal Forthuny: Une Faculté de Connaissance Supra-Normale*. Paris: Alcan.
- Osty, E., Osty, M. (1932). *Les Pouvoirs Inconnus de l'Esprit sur la Matière*. Paris: Alcan.
- Rabeyron, T. (2008). *Analyse Cognitive des Expériences Exceptionnelles*. Ecole Normale Supérieure de Cachan: Unpublished memory.
- Simmonds-Moore, C., Holt, N. (2007). Trait, state and psi: A comparison of psi between clusters of scores on schizotypy in a ganzfeld and waking control condition. *Journal of the Society for Psychological Research*, 71(4), 197–215.
- Utts, J. (1996). An assessment of the evidence for psychic functioning. *Journal of Scientific Exploration*, 10(1), 3–30.
- Warcollier, R. (1921.) *La Télépathie—Recherches Expérimentales*. Paris: Alcan.

**Phénomènes Psychiques au Moment de la Mort** by Ernest Bozzano. Éditions de la B.P.S. (Paris), 1923. 261 pp. J. M. G. Editions (Agnières), 2001. 326 pp. €18.30. ISBN 2912507529.

**Deathbed Visions: The Psychical Experiences of the Dying** by Sir William F. Barrett. Methuen (London), 1926. 116 pp. Free at <http://www.survivalafterdeath.org.uk/books/barrett/dbv/contents.htm>. Aquarian Press (Wellingborough, Northamptonshire), 1986. 173 pp. £5.99 (paperback). ISBN 0850305209.

There is a long tradition of the association of “between death” and a variety of psychic phenomena, among them apparitions, physical phenomena, and what we refer to today as ESP. The writings of such authors as Gurney, Myers, and Podmore (1886), and Flammarion (1920–1922/1922–1923) are examples of this. The books reviewed here are important and influential representatives of this idea.

The first one was authored by Italian student of psychic phenomena Ernest Bozzano (1862–1943), who was well-known for his studies presenting numerous cases of psychic phenomena and for his strong defense of the idea of the survival of bodily death. In *Phénomènes Psychiques au Moment de la Mort*, Bozzano brought together three of his previously published studies about death-related phenomena, namely deathbed visions, music, and physical phenomena.

In the study of deathbed visions, Bozzano presented a classification consisting of visions of persons: (1) known to be dead and seen only by the dying individual; (2) not known to be dead and seen only by the dying individual; (3) seen both by the dying persons and by deathbed bystanders; (4) showing correspondences with information obtained through mediumistic communicators; (5) perceived only by relatives of the dying person located around or close to the deathbed; and (6) seen somewhat after death and in the same house where the dead body was located.

Bozzano presented examples and discussed those veridical visions in which the dying person perceived someone he or she did not know had died. He examined critically the idea that persons knowing about the death affected the dying individual via a subconscious telepathic message that produced a hallucination in the dying person. Bozzano objected to this explanation because he considered it unlikely that such communication would take place between individuals lacking affective rapport between them, a necessary precondition for telepathy, in his view. Furthermore, he believed telepathic transmission was unlikely because “in nearly all spontaneous telepathic phenomena the *agent* transmits to the *percipient* the hallucinatory vision of their own person, and not that of another person . . .” (p. 51) (this, and other translations, are mine).

Referring to subjective hallucinations, Bozzano wrote that “if the phenomena in question have as a cause the thoughts of the moribund . . . the dying person . . . should perceive more frequently hallucinatory forms representing living persons” (p. 109), something he said did not take place. However, Bozzano could have been dealing with a biased sample of cases. We must remember that many of his sources were spiritualistic and psychical research books and journals. It is unlikely that the authors and editors of such publications would have been interested in accounts of visions of the living, unless they were veridical visions.



Bozzano also mentioned a case in which a man saw apparitions at his wife’s deathbed around her dying body and her “astral body” floating above her physical body. He considered the latter an objective “fluidic doubling.” Interestingly, and because one of the apparitions seen was of a woman in a Greek costume and with a crown on her head, Bozzano speculated on the possibility of a “telepathic–symbolic projection” (p. 103) from a spiritual entity.

The section about physical phenomena involved various events corresponding to deaths. As I have mentioned elsewhere (Alvarado, 2006:135), out of 13 accounts presented by Bozzano, the effects consisted of: falling objects (54%), clocks stopping or starting (23%), objects rocking or shaking (8%), objects breaking or exploding (8%), and lights turning on or off (8%). Bozzano argued that cases in which the dying person and the physical event were distant from each other showed that the effect was not physical, but had to be psychical. This suggested to him the presence of the spirit of a dead person at the location in which the event took place. Furthermore, he noticed that some cases involved intention.

In the third part of the book, Bozzano discussed what he called “transcendental music.” He presented cases that took place at deathbeds and after deaths. But Bozzano also discussed mediums who performed with musical instruments, telepathically perceived music, and music heard in hauntings.

The following is an example of a case of music cited by Bozzano (pp. 230–231) related to an apparition, which I take from the original:

In October, 1879, I was staying at Bishopthorpe, near York, with the Archbishop of York. I was sleeping with Miss Z. T., when I suddenly saw a white figure fly through the room from the door to the window. It was only a shadowy form and passed in a moment. I felt utterly terrified, and called out at once, “Did you see that?” and at the same time Miss Z. T. exclaimed, “Did you *hear* that?” Then, I said, instantly, “I saw an angel fly through the room,” and she said, “I heard an angel singing” (Sidgwick et al., 1894:317–318).

Bozzano argued that the case represented “two simultaneous supernormal manifestations that, due to the special idiosyncracies of the percipients, were perceived separately” (p. 231).

Collective percipience of music, Bozzano argued, eliminated suggestion and hallucination as an explanation. In many of the cases the dying person “did not participate in the collective hearing of transcendental music, which excludes all possibility of explaining the facts by assuming a hallucination having its origin in the mentality of the dying person” (pp. 258–259). This referred to the idea that the dying person affected bystanders via a process of telepathic transmission.

The analyses of these cases, and of other psychic phenomena, led Bozzano to argue that he had found proof for survival of death. This proof, he argued, came from different lines of evidence and types of cases that, when considered together, supported each other.

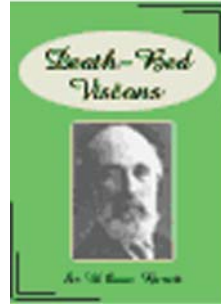
Some years after Bozzano’s book appeared, William Fletcher Barrett’s (1844–1925) *Deathbed Visions* was published, a book that has long been recognized as a classic on the subject. Unfortunately, this is an incomplete study because its author died before he could finish it. The chapters presented here were put together by the author’s wife, physician Florence E. Barrett, who decided not to add anything to the book so as to keep the author’s thought intact.

Barrett was a physicist with a lifelong interest in psychic phenomena. He was a founding member and one of the first vice-presidents of the Society for Psychical Research in 1882, and served in later years as a council member and as President of the Society. Barrett published on such varied topics as telepathy, mediumship, mesmerism, and dowsing. A believer in the nonphysical nature of the mind, Barrett wrote in an autobiographical essay, “psychical research will demonstrate to the educated world, not only the existence of a *soul in man*, but also the existence of a *soul in Nature . . .*” (Barrett, 1924:296).

Barrett summarized his outlook in the first chapter as follows:

It is well known that there are many remarkable instances where a dying person, shortly before his or her transition from the earth, appears to see and recognize some deceased relatives or friends. We must, however, remember the fact that hallucinations of the dying are not very infrequent. Nevertheless, there are instances where the dying person was *unaware* of the previous death of the spirit form he sees, and is therefore astonished to find in the vision of his or her deceased relative one whom the percipient believes to be still on earth. These cases form, perhaps, one of the most cogent arguments for survival after death, as the evidential value and veridical (truth telling) character of these Visions of the Dying is greatly enhanced when the fact is undeniably established that the dying person was wholly ignorant of the decease of the person he or she so vividly sees. (p. 1)

Barrett included in the second chapter several cases about visions corresponding to people not known to be dead at the time of the vision. He took the following case from James H. Hyslop, who in turn took the account from Minot Savage. The case reads as follows:



In a neighbouring city were two little girls, Jennie and Edith, one about eight years of age and the other but a little older. They were schoolmates and intimate friends. In June, 1889, both were taken ill of diphtheria. At noon on Wednesday Jennie died. Then the parents of Edith, and her physician as well, took particular pains to keep from her the fact that her little playmate was gone. They feared the effect of the knowledge on her own condition. To prove that they succeeded and that she did not know, it may be mentioned that on Saturday, June 8th, at noon, just before she became unconscious of all that was passing about her, she selected two of her photographs to be sent to Jennie, and also told her attendants to bid her good-bye.

She died at half-past six o'clock on the evening of Saturday, June 8th. She had roused and bidden her friends good-bye, and was talking of dying, and seemed to have no fear. She appeared to see one and another of the friends she knew were dead. So far it was like other similar cases. But now suddenly, and with every appearance of surprise, she turned to her father and exclaimed, "Why, papa, I am going to take Jennie with me!" Then she added, "Why, papa! you did not tell me that Jennie was here!" And immediately she reached out her arms as if in welcome, and said, "Oh, Jennie, I'm so glad you are here!" (Barrett, pp. 18–19)

Later chapters included such fascinating phenomena as apparitions seen by persons around the deathbed, visions of distant events, music heard by the dying person or by bystanders, and visions of what some described as the separation of the spirit from the physical body at death. Clearly the content of the book was not limited to cases of visions of the dying.

While the book consists mainly of case reports, on occasion Barrett discussed explanations for them. For example, in a case in which two sisters saw the faces of their two dead brothers looking at their dying sister, he mentioned Frank Podmore's speculation that the image was created by telepathy from the dying sister. Barrett wrote that "this explanation is less tenable and quite as unlikely as is the percipience of spirit forms by the dying person and sometimes by those present" (p. 75).

It is obvious that both Bozzano and Barrett were influenced by the work of previous persons, as seen in their citations of works, many of which come from the spiritualistic and psychical research literatures. Regarding deathbed visions, some of their predecessors were Frances Power Cobbe (1877) and James H. Hyslop (1907). Barrett's death prevented him from using in more detail the



work of Bozzano. According to Barrett's wife, her husband had marked parts of Bozzano's book reviewed here. She wrote:

He was specially interested in Bozzano's observation that if the phenomena were caused by the thoughts of the dying person being directed to those he loved, the appearances might be expected to represent living persons at least as frequently as deceased persons who had long passed from this world, whereas no records had come to hand of dying persons seeing at their bedside visions of friends still living. (Barrett, pp. vii–viii)

While Barrett understandably did not provide much analysis, Bozzano did. However, his conclusions sometimes were too definitive. Certainly they depended on theoretical assumptions that could be questioned, such as the way telepathy manifests. In later years Bozzano continued to make similar arguments in favor of survivalistic interpretations. His last statements were made posthumously in his books *Musica Transcendentale* (1943/1982), *Le Visioni dei Morenti* (1947), and *La Psiche Domina la Materia* (1948), which included new cases.

There is no question that research on these topics has been neglected (Alvarado, 2006; for an exception see Brayne, Lovelace, & Fenwick, 2008). Leaving aside the general topic of apparitions of the dead, we should mention the deathbed visions work of Karlis Osis (1961) and of Osis and Haraldsson (1997), the most sophisticated work on the subject conducted to date. Some work has been conducted with death-related physical phenomena (Piccinini & Rinaldi, 1990, Rhine, 1963) and music (Rogo, 1970, 1972). Other topics, such as collectively perceived deathbed cases and the cases of emanations from the dying body, have received much less attention (e.g., Crookall, 1967). Unfortunately, and with the exception of the above-mentioned research, the study of the phenomena outlined by Bozzano and Barrett has not received systematic attention.

Both Bozzano and Barrett performed a service for later researchers by presenting an organized catalog of observations. To this day individuals interested in the phenomena they discuss find useful illustrative cases in their books. But their contribution was not limited to this. They also documented the variety of death-related phenomena, something that has also been done by other authors, such as Flammarion (1920–1922/1922–1923). Furthermore, reading through the books reviewed here modern readers can get a good idea of the features of these experiences. Another contribution is that these studies also remind us of the important conceptual issues underlying these phenomena, particularly the issue of survival of bodily death.

It is to be hoped that new interest in these phenomena goes beyond popular discussions (e.g., Wills–Brandon, 2000), and beyond purely descriptive

studies that are limited to case presentations, as seen in some of the literature available today about “after-death” manifestations (e.g., Guggenheim & Guggenheim, 1995/1997). As I have argued elsewhere in terms of selected near-death phenomena, much remains to be done in this area, considering such aspects as prevalence, the features of the experiences, the characteristics of the experiencers, the relationship of the phenomena to other variables, and hypothesis testing (Alvarado, 2006). But future attempts to develop new research in this area will benefit from attention to Bozzano, Barrett, and other pioneers.

CARLOS S. ALVARADO

*Atlantic University*

215 67th Street, Virginia Beach, VA, 23451

carlos.alvarado@atlanticuniv.edu

### References

- Alvarado, C. S. (2006). Neglected near-death phenomena. *Journal of Near-Death Studies*, 24, 131–151.
- Barrett, W. F. (1924). Some reminiscences of fifty years' psychical research. *Proceedings of the Society for Psychical Research*, 34, 275–297.
- Bozzano, E. (1947). *Le Visioni dei Morenti*. Verona: Europa.
- Bozzano, E. (1948). *La Psiche Domina la Materia: Dei Fenomeni di Telekinesia in Rapporto con Eventi di Morte*. Verona: Europa.
- Bozzano, E. (1982). *Musica Transcendentale*. Rome: Mediterranee. (Original work published 1943)
- Brayne, S., Lovelace, H., Fenwick, P. (2008). End-of-life experiences and the dying process in a Gloucestershire nursing home as reported by nurses and care assistants. *American Journal of Hospice and Palliative Medicine*, 25, 195–206.
- Cobbe, F. P. (1877). The peak in Darien: The riddle of death. *Littell's Living Age*, 19(s.5), 374–379.
- Crookall, R. (1967). *Events on the Threshold of the After Life*. Moradabad, India: Darshana International.
- Flammarion, C. (1922–1923). *Death and Its Mystery* (3 Vols.). New York: Century. (First published in French, 1920–1922)
- Guggenheim, B., & Guggenheim, J. (1997). *Hello from Heaven*. New York: Bantam Books. (Original work published 1995)
- Gurney, E., Myers, F. W. H., & Podmore, F. (1886). *Phantasms of the Living* (2 vols.). London: Trübner.
- Hyslop, J. H. (1907). Visions of the dying. *Journal of the American Society for Psychical Research*, 1, 45–55.
- Osis, K. (1961). *Deathbed Observations by Physicians and Nurses* (Parapsychological Monographs No. 3). New York: Parapsychology Foundation.
- Osis, K., Haraldsson, E. (1997). *What They Saw . . . at the Hour of Death* (3rd ed.). Norwalk, CT: Hastings House.
- Piccinini, G., Rinaldi, G. M. (1990). *I Fantasmii dei Morenti: Inchiesta su una Credenza*. Viareggio, Italy: Il Cardo.
- Rhine, L. E. (1963). Spontaneous physical effects and the psi process. *Journal of Parapsychology*, 27, 84–122.
- Rogo, D. S. (1970). *NAD: A Study of Some Unusual "Other World" Experiences*. New York: University Books.

- Rogo, D. S. (1972). *A Psychic Study of the "Music of the Spheres" (NAD Volume II)*. Secaucus, NJ: University Books.
- Sidgwick, H., Johnson, A., Myers, F. W. H., Podmore, F., & Sidgwick, E. M. (1894). Report on the Census of Hallucinations. *Proceedings of the Society for Psychical Research*, 10, 25–422.
- Wills-Brandon, C. (2000). *One Last Hug before I Go: The Mystery and Meaning of Deathbed Visions*. Deerfield Beach, FL: Health Communications.

**Allan Kardec und der Spiritismus in Lyon um 1900. Geisterkommunikation als Soziales Phänomen** by Katrin Heuser. VDM Verlag Dr. Müller, 2008. 120 pp. €59 (paperback). ISBN 9783639072587.

Judging from the content, structure, and layout of Heuser's micro-study of French spiritism in Lyon c. 1900, which is distributed by VDM (a German publisher specialising in academic theses), the book appears to be the published but self-edited version of the author's *Magisterarbeit*, or M.A. thesis, in cultural studies, though background information regarding the genesis of the book is entirely lacking. While the back cover blurb announces that the book is intended for readers interested in the science, sociology, and historical roots of spiritism, it is only the second (though dependent on the third) aspect that Heuser's study addresses adequately.

The study is based on the activities of the spiritist societies *Les Indépendants Lyonnais* (founded in 1890) and the *Société spirite pour l'Oeuvre de la Crèche* (founded in 1904) in Lyon, the historical capital of French spiritism or Kardecism. Using primary sources such as membership lists, police records, and the groups' periodicals and pamphlets, the author investigates the personal backgrounds of the founders, propagandists, and general members of the two groups, their social structures and aims, and the strictness of adherence to Kardec's original doctrines in relation to the groups' specific social interests. In a brief excursion, Heuser compares the spiritist scene of Lyon to that of the German capital of spiritism (or spiritualism), *fin-de-siècle* Leipzig. The theoretical framework for Heuser's historical study is Berger and Luckmann's social constructivist model of knowledge and reality. Contrary to previous authors' writing on the social and cultural history of French spiritism, such as Laplantine and Aubrée, Bergé, and Sharp, Heuser finds that social class did not determine involvement in spiritist societies, and that gender and biographical factors were more reliable determinants—at least for her small Lyon sample.

Owing to the nature of the study as a work in cultural or social history rather than as history of science—but contradicting the misleading announcement in



ALLAN KARDEC

the book blurb—the science of Lyonnaise spiritism is not discussed at all. Although the author finds that the groups she investigated greatly differed in terms of scientific approaches to spiritism (i.e. *Les Indépendants* was supposed to have a strong emphasis on experimental seances and purported having scientific evidence for postmortem survival in general, while the *Société spirite* was almost entirely concerned with social welfare), we learn nothing about the methodology and scientific rigor (or possible lack thereof) employed in the experimental seances alluded to.



Also regrettably, the author's expertise in the general history of spiritualism seems somewhat wanting. For example, while Heuser rightly claims that the Hydesville incidents around the Fox sisters in 1848 gave birth to modern spiritualism as a large-scale movement, she makes the false conjecture that in Hydesville “for the first time, raps were interpreted as the manifestation of spirits” (p. 3, my translation). After all, the very coinage and use of the German word *poltergeist* (“rumbling spirit”) precedes modern spiritualism by at least three centuries (see also, e.g., Kiesewetter, 1886, Gauld & Cornell, 1979). While the author draws upon works of important French spiritists such as Gabriel Delanne, Léon Denis, and Kardec himself, the only non-French “insider” history of spiritualism referred to (through its French edition) is Arthur Conan Doyle's (Conan misspelled as *Canon* throughout) notoriously unreliable *History of Spiritualism*.

Considering the book's unprofessional layout, stylistic flaws, and lack of index, VDM appears to be a provider of “quick and dirty” publishing-on-demand rather than a traditional academic publisher. To ensure additional academic quality control as well as a broader reception of her results, rather than hiding them away in this apparently self-edited and rather overpriced booklet, the author would do well to attempt boiling down her thesis and then submitting its main findings to a professional cultural studies journal.

ANDREAS SOMMER

*Department of Science and Technology Studies  
University College London  
London, United Kingdom  
a.sommer@ucl.ac.uk*

### References

- Gauld, A., & Cornell, A. D. (1979). *Poltergeists*. London: Routledge & Kegan Paul.  
Kiesewetter, C. (1886). Zur Vorgeschichte des modernen “Geisterklopfens”. *Sphinx*, 1, 213–215.

### Further Book of Note

**El Mundo Oculto de Los Sueños. Metáfora y Significado para Comprender Toda Su Riqueza** [The Hidden World of Dreams: Metaphor and Meaning to Understand All Your Wealth] by Alejandro Parra. Libros Aula Magna, 2009. 320 pp. \$25 (paperback). ISBN 9789501742510.

Alejandro Parra begins with an overview of theories that have guided many modern researchers, and many not-so-modern, for he provides historical accounts of their most hard-won and valuable accomplishments. Insightful historical references make Parra's exposition informative for multiple topics, giving the reader the experience of journeying from their interpersonal experiences, memories, and even fantasies, to scientific achievements, ancient cultural traditions, and an unsuspected social awareness.



Parra respects past traditions that held magic and mysticism in strong regard, for throughout the book a clear sense of both awe and informed instruction is clearly felt by the selection not only of interpretative options and dreamwork based on different therapeutic approaches, but also their creative and personal potential, including the more fantastic interactions and qualities some of us may share. But, just as in life where it cannot be all peaches and cream, nightmares and traumatic and unpleasant dreams also are discussed.

The author's work here shows his sense of identification with the subject matter and his many years of work in the field, and expands on his previous book *Sueños: Cómo Interpretar Sus Mensajes* published by Kier Editorial. Just as it takes the reader on a self-journey, the book also plays ambassador to Argentina's exotic night life, giving detailed accounts of statistics taken from an online survey of more than 2,600 dreamers. And the book also makes it possible for readers to share their experiences in an ever-growing body of work, through a dream imagery questionnaire. This work is highly pragmatic for both layperson and professional.

CR. CARLOS ADRIÁN HERNÁNDEZ TAVARES

STANLEY KRIPPNER

*Alan Watts Professor of Psychology  
Saybrook University, San Francisco, CA*