

ESSAY REVIEW

Know Your Numbers—At Your Peril

Prescribing by Numbers: Drugs and the Definition of Disease by Jeremy A. Greene. Johns Hopkins University Press, 2008. 318 pp. \$53 (hardcover), \$25 (paperback), \$15 (Kindle). ISBN 9780801891007.

*Selling Sickness*¹ describes how drug companies have expanded their markets by defining as diseases some perfectly normal physiological conditions, chiefly those that accompany healthy aging. *Prescribing by Numbers* elucidates the context in which this could happen. The book is enormously informative, illustrating the ability that good historians display to command a huge array of sources. Greene, an M.D. as well as a medical historian, strives rather successfully to do the historian's job, namely to remain descriptive and not judgmental; but he shrugs off that onus in the concluding chapter.

Medical practice since about the middle of the 20th century has become increasingly “science”-based, relying on laboratory tests, statistics, and epidemiology to guide medical practices, to the increasing exclusion of diagnosis and treatment guided by an individual's manifest symptoms. This has allowed drug companies to obtain approval for medications on the basis of clinical trials in which laboratory tests serve as surrogate markers for diseases. But the measured variables—blood pressure, cholesterol level, PSA, etc.—are not yes-or-no markers of pathological conditions, so decisions have to be made about what numbers represent the difference between normal or healthy on the one hand and on the other hand diseased, pathological. Those decisions are made by experts, people involved in pertinent research, which entails ties to drug companies that support the research and the clinical trials. It has followed rather predictably that the thresholds between normal and pathological have seen a steady progression toward including in the “pathological” category larger and larger proportions of the population, who are consuming routinely an ever-increasing range of drugs as preventive measures and not as treatment for any actual manifest illness. Perfectly healthy people are taking in many substances designed to lower perceived statistical risks, with little if any regard for the risks of “side” effects stemming from long-term consumption of physiologically active chemicals foreign to the human body. Natural and chronic conditions of aging have become viewed as preventable diseases. In effect, we are being persuaded that the human body is inherently diseased (p. 217). Some people

may perhaps benefit, while others are certainly and needlessly damaged.

Instead of relying on how we actually feel, we are urged to “know our numbers”—blood sugar, PSA, blood pressure, cholesterol, etc. Not unexpectedly, people recently diagnosed with too-high numbers are quite likely to develop psychosomatic symptoms.² Direct-to-consumer advertising defines drug-centered diseases—erectile dysfunction, low testosterone, premenstrual dysphoric disorder—and pressures medical practice to conform to marketing—“Ask your doctor.” Results of clinical trials are featured on front pages of newspapers and in business sections of web and print media (p. 124). Thereby, the role of physicians differs from the earlier time when it was they who informed the general public about everything to do with illness and treatment (p. 124 ff.).

A grave deficiency in the whole system is the failure of clinical trials to assess the only important point, namely, the effect of any given treatment on all-cause mortality, or the *absolute* reduction in risk rather than the relative reduction typically evaluated: after all, there is little benefit in preventing a possible stroke if one dies of cancer at the same age as the stroke would have been predicted (on average) to occur. The latter point is emphasized with specific examples in Joel Kauffman’s *Malignant Medical Myths*.³

Greene tells this complex tale through the stories of three drugs that were principal players in the evolution of current medical practice and drug marketing.

The first is Diuril, introduced in 1958, a palatable diuretic capable of lowering blood pressure. Earlier, the routine measuring of blood pressure had been made possible by invention of non-invasive methods. Thereupon data accumulated, and insurance companies perceived a correlation between pressure and heart disease. That constituted a financial risk factor in life insurance, and companies began to require blood-pressure measurements and to refuse coverage to individuals with high readings (p. 55). Annual physical examinations became routine, and the financial insurance risk associated with high blood pressure came to be seen also as an individual health risk. This made it worthwhile for drug companies to seek a treatment to lower pressure, and then to instruct doctors that pressure-lowering is desirable for people in general. Diuril was brought to market “amid a dazzle of research symposia, journal advertising, and record prescription rates” (p. 21).

In the first half of the 20th century, pharmacies had actually “compounded” prescriptions from individual generic components supplied by pharmaceutical manufacturers.⁴ Diuril was in at the beginning of the change from that practice, in which the various manufacturers supplied standard chemicals, to the current circumstances of prepackaged medications brand-named and competing with one another.⁵ This brought with it also a different approach to research: from

seeking substantively new treatments to focusing on marketing strategies with a host of “me-too” drugs competing for the same consumers. It seems as if in another world that less than a century ago “drug marketing textbooks stressed the importance of satisfying the ‘ethical demands’ of the AMA” (p. 37). Instead of direct-to-consumer advertising, marketing in those days concentrated on advertisements in medical journals and direct approaches to physicians. Merck’s creative selling of Diuril also pioneered the now-standard practice of flooding physicians with little gifts, in that case small statuettes of the Diuril Man as paperweights whose transparent figurines displayed the organs that Diuril acted on. Greene points out that this “unidirectional gift economy,” too trivial to count as bribery, has the profound effect of creating a relationship between the physician and the company and its sales people.

Diuril marked the transformation of a normal, symptom-free, degenerative condition of aging, increasing blood pressure, into a treatable “risk” category. The medical community did not capitulate immediately to this development. For a decade or more, some cardiologists described it as “a huge uncontrolled clinical–pharmacological experiment . . . masquerading as a clinically acceptable therapy” (p. 53) and resisted the notion of defining a disease purely in terms of a numerical threshold (p. 67 ff.); moreover, the unpredictable course of asymptomatic “hypertension” and the variability of treatment outcomes made it impossible to conduct meaningful trials against untreated controls (p. 72). Even earlier, the highly plausible point had been made that the universally observed increase in pressure with age could be compensating for other physical accompaniments of aging. As we know now, all those reservations eventually went by the board. Further, over the years the threshold pressure for defining and treating “hypertension” was progressively lowered (pp. 77–78).

Greene’s second case study, of Orinase and diabetes, offers salient points that parallel those of the Diuril story. There was a dazzle of activities at the public launch of the drug. Symptomatic adult-onset diabetes was expanded to include symptom-free Diabetes II defined in terms of blood-sugar level. That level can be assessed in a number of ways—average over some period of time, or maximum at any time, or measured after fasting or after stress—and this allowed progressive changes in recommended treatment, always in the direction of calling for increased prescribing of medications—but only once Orinase, an oral pill, had become available; the earlier treatment, by frequent insulin injection, could hardly be marketed effectively to people who felt no symptoms of illness.

The initial application for approval had been enormously more massive than with Diuril: >10,000 pages in 23 volumes, needed because Orinase produces so small an effect, which could only be discerned by lab tests since there were no symptoms before or after “treatment.” Marketing properly emphasized that

Orinase worked differently than insulin, was not an oral insulin, and did not help all diabetics. On the other hand, by defining symptom-free diabetes in terms of blood sugar, it became possible to postulate the existence of “hidden diabetics,” and surveys indicated that there were millions of undetected diabetics who were ideal candidates for Orinase since they had only the asymptomatic, mild, adult-onset form of diabetes for which this drug was effective. Whereas significant sugar in urine is a definite indication of dysfunction, that is not correlated with any definite level of blood sugar. Once blood-sugar measurement became standard, the threshold for beginning “treatment” could be progressively changed as new categories were suggested of people at risk for diabetes: borderline hyperglycemic, protodiabetic, chemical diabetic, latent diabetic, stress diabetic, prediabetic—all potential consumers of Orinase (p. 106). The market expanded from an estimated 1.6 million “hidden” diabetics to perhaps 5 million prediabetics.

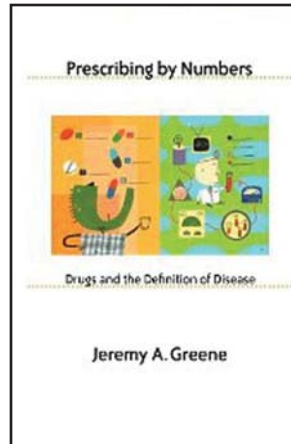
Controversy followed a large clinical trial of Orinase in asymptomatic prediabetics when, after half-a-dozen years, mortality in the treated group rose sharply above that in the control group (p. 119 ff.). An NIH doctor estimated that oral hypoglycemic medications were responsible for 10,000–15,000 unnecessary deaths annually (p. 133). This was grist for malpractice suits, which had become increasingly common in the 1970s; the question became critical, to what extent physicians should be deterred by cautions about side effects in drug-package inserts (p. 135)? In particular, when the treatment is solely to accomplish a presumed reduction of risk, not to deal with actually present illness? Greene points out that the purportedly preventive treatment of prediabetes, prehypertension, and the like has become so routine that if even one of those regimens were to be thoroughly discredited, it would threaten “the entire edifice of medical knowledge and . . . trust in the doctor–patient relationship”; wherefore there is enormous inertia in current practice against acknowledging that any of these preventive treatments could do more harm than good (p. 146).

Cholesterol and Mevacor is the third of Greene’s case studies. The mindset that could assign cholesterol a causative role in heart disease owed something conceptually to the 19th-century discovery that germs cause infectious diseases, that specific substances cause particular vitamin deficiencies, and that toxic agents can cause specific illnesses. These relationships were extrapolated, no doubt subliminally, to the concept that specific things might be identifiable as causing chronic (but natural) conditions associated with aging; so an apparent correlation of cholesterol levels with heart disease stimulated a search for substances that could lower cholesterol. The first such drug to be marketed, MER/29, was launched with the now-typical dazzle and ballyhoo, but it turned out to have unacceptable side effects, was withdrawn from the market, and

the company (Merrell) suffered heavy losses from settling lawsuits—a whistleblower revealed that Merrell had falsified safety and efficacy data in its application for approval of the drug (p. 162). Subsequent clinical trials of dietary changes, and of a consumable resin that reduced blood-cholesterol levels, did not establish a statistically significant decrease in mortality as a result of lowering cholesterol. Nevertheless, the National Heart, Blood, and Lung Institute held a “Consensus Conference” that excluded skeptics (p. 171), and a full-fledged propaganda campaign for reducing cholesterol levels was launched by establishing the National Cholesterol Education Program which pulled out all PR stops and covered all PR bases (pp. 168–177). It is as well to remember that “education” is a misleading euphemism for “propaganda” in a large range of ventures by governments and not-for-profit organizations that are often funded by for-profit entities.

It does little good to urge lowering cholesterol if lifestyle and diet are the only means to do so, and it was the introduction of Merck’s statin (lovastatin, Mevacor), soon followed by simvastatin (Zocor) and pravastatin (Pravachol, from Bristol Myers Squibb) that made possible the current obsession with lowering cholesterol and the corollary ubiquitous consumption of statins. The publicity to “Know Your Numbers” had the predictable side effect that people who discovered that their cholesterol was “high” often experienced nocebo and began to feel ill (p. 192; footnote 6 cites several sources)⁶. To persuade people who did not feel ill that they should take a drug, comparison was made with HIV and AIDS, where symptoms followed infection only after a number of years (p. 200). Over the years, the “desirable” level for cholesterol has been continually reduced, just as with HIV/AIDS the CD4 level at which antiretroviral drugs should begin has been progressively raised. By 2001, more than 10% of the US population qualified for statin use; it was even suggested that Mevacor be made available as an over-the-counter (OTC) drug (pp. 211, 218).

In 2003, the *British Medical Journal* topped that suggestion handsomely (p. 221 ff.) with articles⁷ proposing that every adult over 55 should, without prescription or prior medical examination, take lifelong a “Polypill” (for which a patent application had already been lodged) that would contain a statin, aspirin, folic acid, and three blood-pressure-lowering drugs, to supposedly reduce strokes by 80% and coronary events by 88%. This was called the most important medical news in half a century,⁸ endorsed enthusiastically by a director of a Clinical Trials Research Unit⁹. I recommend the Rapid Responses to those



articles as illuminating and depressing reading for anyone who can access them: Most correspondents offered constructive suggestions for improving the Polypill, only about 1 in 6 of the Responses recognized the idea as ludicrous.

Informative as the book is, I venture some slight caveats. The text is overly sociological in jargon. Too, no one can be familiar with the literature on every topic, and Greene shows himself ignorant about HIV/AIDS when he describes antiretroviral drugs as “safe and effective . . . means of management” (p. 226). A serious substantive deficiency is that although Greene identifies “risk reduction” as the paradigm that has come to dominate medicine, he fails to emphasize that it is actually the reduction of risk *factors*, which represent correlations and not causation; it is symptoms that are being treated, not the sources of those symptoms. Greene also neglects to remark that recommended reductions in blood pressure and cholesterol level are made as though the same levels were somehow pathological or undesirable irrespective of age, when in fact both rise naturally with age, and plausibly for good reason. Greene does point out, however, that treating symptoms and not causes, on the basis of quantitative measures, was already practiced in the 19th century after temperature measurements became common, and drugs were prescribed to bring down fever when doing so was not necessarily a good thing since it might hinder the body’s fight against the actual illness.

For the future, it ought to be kept in mind that the risk of mortality increases with age, and that innumerable physiological reactions and quantitative measures also change with age. Therefore the greatest degree of skepticism and demand for overwhelming proof ought to be directed at any claim of a causative role for anything to do with age-related changes that we don’t happen to like and that are declared to be pathological just on that account.

Greene seeks to underscore “the fundamental political, economic, ethical, and moral contradictions within American understandings of health that pharmaceuticals bring into sharp relief” (p. 14). He points out in several places that no single actor or group of actors can be held responsible for unsatisfactory, illogical, unproven present-day medical practices. Rather, present circumstances are “overdetermined by some combination” (p. 17) of researchers, regulators, consumer advocacy groups, community activists, charitable foundations, drug companies, physicians and their professional associations, and notably insurance companies, which have all contributed in some fashion to the fact that prescription drugs are the fastest-growing part of health costs; in 2003, Americans aged ≥ 65 consumed an average of 25 prescription medications each. Many of these highly medicated individuals are subjectively healthy, taking drugs only as preventives.

No conspiracy, no dastardly effect of conflicts of interest is to blame; it is the conventional wisdom, the widely accepted notion of what constitutes good

medical science, the concept that it is beneficial to lower apparent risk levels further and further (p. 190). Conflicts of interest are only a part of that whole, and accepted as normal—it is virtually universally the case that academic researchers are at the same time consultants with drug companies and advisers to regulating agencies. The crucial role of clinical trials in establishing a new drug's credentials led, since about the 1970s, to the development of a new industry, Contract Research Organizations (CROs); paid by drug companies to conduct trials, CROs have a vested interest in getting results desired by their clients (p. 203 ff.). The “influence of the pharmaceutical industry now permeates the global economy of medical knowledge” (p. 232), and Greene states that the public good will be served only if the public invests in it and sets the priorities under non-commercial criteria (pp. 238–239). Marcia Angell, former editor of the *New England Journal of Medicine*, has also called for a publicly funded, disinterested way of assessing drugs.¹⁰

That no single influence or agent brought about the present circumstances does not entail, however, that a single action could not change current practices quite significantly. My suggestion would be that the Food and Drug Administration require all clinical trials to be evaluated only in terms of absolute risk reduction or effect on all-cause mortality, and that the statistical evaluation be carried out by Bayesian rather than frequentist approaches.¹¹ In one fell swoop, this would prevent approval of drugs that have to be withdrawn within months or a few years of their introduction into general use, which has become all too common in the last decade or two; and it would cut heavily into the consumption of blood thinners, blood-pressure reducers, and cholesterol-lowerers.

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Notes

- ¹ Ray Moynihan & Alan Cassels, *Selling Sickness*, New York: Nation Books, 2000; see review in *Journal of Scientific Exploration*, 24 (2010), 515–520.
- ² For this noteworthy assertion, Greene cites E. O. Wheeler & C. R. Williamson, “Heart scare, heart surveys, and iatrogenic heart disease”, *JAMA*, 167 (1958), 1096–1102; Arthur Barsky, *Worried Sick*, Little, Brown, 1988; Dorothy Nelkin & Laurence Tancredi, *Dangerous Diagnostics*, New York: Basic Books, 1989; Robert Croyle (Ed.), *Psychosocial Effects of Screening for Disease Prevention and Detection*, Oxford University Press, 1995.

- ³ Joel M. Kauffman, *Malignant Medical Myths*, West Conshohocken, PA: Infinity Publishing, 2006; see review in *Journal of Scientific Exploration*, 20 (2006), 622–629.
- ⁴ The training and licensing of pharmacists is now anachronistic, suited to people competent to compound prescriptions even though pharmacists nowadays do little but count out pills.
- ⁵ Fifty years later, the rate of prescription of Diuril and similar thiazide diuretics has fallen dramatically, even though their efficacy exceeds that of more recent and more heavily advertised and much more expensive drugs (p. 49).
- ⁶ Told their cholesterol is high, some people develop shortness of breath, dizziness, or chest pain in absence of discernible physiological cause: A. S. Brett, *American Journal of Medicine*, 91 (1991), 642–647; R. C. LeFebvre, K. G. Hursey, & R. A. Carleton, *Archives of Internal Medicine*, 148 (1988), 1993–1997; T. Tijmstra, *International Journal of Risk and Safety in Medicine*, 1 (1990), 29–44.
- ⁷ N. J. Wald & M. R. Law, *BMJ*, 326 (2003), 1419–1425; M. R. Law, N. J. Wald, & A. R. Rudnicka, *ibid.*, 1423–1430; M. R. Law, N. J. Wald, J. K. Morris, & R. E. Jordan, *ibid.*, 1427–1435.
- ⁸ “Editor’s choice: The most important *BMJ* for 50 years?,” *BMJ*, 326, 28 June 2003.
- ⁹ Anthony Rodgers, *BMJ*, 326 (2003), 1407–1428.
- ¹⁰ Marcia Angell, *The Truth about the Drug Companies: How They Deceive Us and What To Do about It*, New York: Random House, 2004.
- ¹¹ For the importance of that change, see R. A. J. Matthews, “Facts versus Factions: The use and abuse of subjectivity in scientific research,” *European Science and Environment Forum Working Paper*, 1998, reprinted in J. Morris (Ed.), *Rethinking Risk and the Precautionary Principle*, Butterworth-Heinemann, 2000, pp. 247–282.

ESSAY REVIEW

On Doubles and Excursions from the Physical Body, 1876–1956

“On the Trans-Corporeal Action of Spirit” by William Stainton Moses (under the pseudonym M. A. Oxon). *Human Nature*, 10, 1876, 97–125, 145–157.

Posthumous Humanity: A Study of Phantoms by Adolphe D’Assier. London: George Redway, 1887. 360 pp. [Reprinted by Wizards Bookshelf (San Diego) in 1981]. Free online at <http://www.archive.org/details/posthumoushuman00olcogoo>

Le Fantôme des Vivants: Anatomie et Physiologie de l’Ame: Recherches Expérimentales sur le Dédoublément des Corps de l’Homme [The Phantom of the Living: Anatomy and Physiology of the Soul: Experimental Researches on the Doubling of Man’s Body] by Hector Durville. Paris: Librairie du Magnétisme, 1909. 356 pp.

The Case for Astral Projection by Sylvan J. Muldoon. Chicago: Ariel Press, 1936. 173 pp. [Reprinted by Kessinger in 2004]

Les Phénomènes de Bilocation [The Phenomena of Bilocation] by Ernesto Bozzano. Paris: Jean Meyer, 1937. 187 pp. [Reprinted by JMG Editions in 2006]

The Phenomena of Astral Projection by Sylvan J. Muldoon and Hereward Carrington. London: Rider, 1951. 222 pp. [Reprinted by Samuel Weiser in 1981]

“ESP Projection: Spontaneous Cases and the Experimental Method” by Hornell Hart. *Journal of the American Society for Psychical Research*, 48, 1954, 121–146.

“Six Theories about Apparitions” by Hornell Hart et al. *Proceedings of the Society for Psychical Research*, 50, 1956, 153–239.

This Essay Review is about the ideas of a group of authors who contributed to constructing and maintaining the concept that some principle inherent in human beings was capable of leaving the physical body, and thus accounted for phenomena such as apparitions of the living and what later came to be called out-of-body and near-death experiences (OBEs and NDEs). The authors in

question believed the phenomena were explained by the projection of a spirit, or some sort of subtle body sometimes referred to as a “double,” from the physical body. In fact, such ideas of subtle bodies come from ancient times (Mead, 1919, Poortman, 1954/1978) and were widely discussed in the past by many writers (e.g., Jung-Stilling, 1808/1851), including those representing theosophy (e.g., Besant, 1896). But there have been others, such as prominent members of the Society for Psychical Research (Gurney, Myers & Podmore, 1886, Myers, 1903), who have not conceptualized OBEs and apparitions of the living as produced by the projection of a subtle body.

Referring to the implications of excursions of consciousness for the issue of survival of bodily death, German philosopher Carl du Prel (1839–1899) argued that the astral body could “exist independently of the material body and be separated from it, in other words it is immortal. . . .” (du Prel, 1899/1907(1):186). The authors reviewed in this essay believed that OBEs supported belief in survival of death, something accepted as well by many others (e.g., Mattiesen, 1931, Myers, 1903). These ideas have been included in popular books published in relatively modern times, such as *The Mystery of the Human Double* (Shirley, n.d.), and *The Enigma of Out-of-Body Travel* (Smith, 1965), among others (e.g., Battersby, n.d., Pilloni, 1978). All of this is part of the conceptual history of OBEs, a topic that has received some attention as seen in my writings (Alvarado, 1989, 2005, 2009b, 2009c) and those of others (Crookall, 1961, Appendix 1, Deveney, 1997).

In this Essay Review I will comment on three articles and five books published between 1876 and 1956 whose authors have postulated that something leaves the body in an OBE, as opposed to the ideas of those who have theorized that the experience is hallucinatory, even if accompanied by veridical perceptions (Alvarado, 2009a). I am not including in the Review writings based on the repeated OBEs of single individuals (e.g., Muldoon & Carrington, 1929), nor on single accounts of NDEs (Wiltse, 1889), literatures that deserve to be separately reviewed.

William Stainton Moses

William Stainton Moses (1839–1892) was a clergyman, as well as an influential English spiritualist and medium. He wrote about many aspects of spiritualism and psychic phenomena, among them the identity of mediumistic communicators and direct writing (Moses, 1879, 1882). In one of his private notebooks he recorded an interesting OBE he had in January of 1874 while he was writing (Myers, 1895:36–37).

His article “On the Trans-Corporeal Action of Spirit,” published in the English journal *Human Nature* in 1876, is one of those nineteenth-century forgotten discussions on the topics of apparitions of the living and OBEs. Like

other writers discussed here, Moses considered cases that did not involve recollection of being out of the body while the person in question was seen as an apparition. Moses wrote:

The testimony of all sensitives, psychics, or mediums, i.e. persons in whom the spirit is not so closely bound to the body as in the majority of individuals, agrees in the consciousness they all have of standing in places, and observing people, and scenes from a spot removed from that which they know their bodies to be. Whilst employed in some occupation compatible with quietness and passivity, e.g., reading, meditating, or quiet conversation, they feel frequently a strange second consciousness, as though the *ego* had moved away through space and were busied with other scenes. (p. 102)



WILLIAM STAINTON MOSES

Moses classified the cases he discussed in two groups. The first were those cases happening spontaneously: (1) seeing oneself (later called autoscopy) and unconscious apparitions of the living; (2) apparitions apparently providing warnings of an oncoming death; (3) apparitions taking place when the physical body was not in movement or was in some other state (including mediumistic materializations), and (4) apparitions showing consciousness and those apparently without consciousness while the person seen was experiencing anxiety.

The second group discussed by Moses was what he considered to be phenomena connected to some form of volition. This group consisted of cases having a strong emotional content (such as apparitions of the dying), and those seemingly dependent on the will of the person represented by the apparition.

Adolphe D'Assier

The topic of a double with physical properties was the main concept discussed by Adolphe D'Assier (1827–1889), once member of the Académie des Sciences de Bordeaux, and known for his writings about matters such as grammar and language (e.g., D'Assier, 1861). His book *Posthumous Humanity: A Study of Phantoms* (1887) was translated from the original

French edition *Essai sur l'Humanité Posthume et le Spiritisme* (1883).

In the book, D'Assier speculated on the posthumous personality as manifesting with phenomena such as apparitions, and argued that during life there was a principle that could leave the body and that could continue after physical death. Some cases of doubling during life, the author argued, were remembered by the experiencer, but others were forgotten.

D'Assier speculated about this principle, which he believed had physical properties. He wrote:

The child who comes out of the body of its mother is attached to her by a vascular system which brought it strength and life. It is the same in this doubling; the human phantom is constantly in immediate relation with the body whence it has wandered for some moments. Invisible bonds, and of a vascular nature, so intimately connect the two extremities of the chain, that any accident happening to one of the two poles reacts (*se répercute*) instantaneously upon the other (p. 51) The phantom possesses a circulatory apparatus as well as the body of which it is the double. Invisible capillaries unite the one to the other, and the whole forms a system so homogeneous, so closely connected, that the slightest prick received by the phantom at once reacts . . . on all the vascular apparatus up to the extremity of the chain, and blood flows immediately. . . . (p. 57)

Like Moses, D'Assier presented many cases of apparitions in his book. In his view, the phenomenon of duplication “is observed only in some organizations exceptionally gifted in the matter of sensitiveness; and this explains its extreme rarity” (p. 250). The posthumous apparition, he believed, was the same entity manifested in doublings and apparitions of the living:

The living spectre and the spectre from beyond the tomb, having the same origin, can present in their manifestation the same common characteristics. Such are the noises that occur in certain habitations, where the chairs, furniture, crockery, &c., are seen to change place or to shake under the impulse of an invisible hand. (p. 256)

Hector Durville

Hector Durville (1849–1923) was a well-known French student of magnetism and psychic phenomena. He founded the Société de Magnétisme de France and defended the existence of a magnetic force that could cause healing and other phenomena, a topic he discussed in his two-volume work *Traité Expérimentale de Magnétisme* (1895–1896). In the book reviewed here, *Le Fantôme des Vivants* (1909), Durville focused on the projection of phantoms of the living, or what he termed doubling.

The first part of the book was about the history and conceptual aspects

of the topic. This included the idea of subtle bodies and their manifestations. The latter part consisted of OBEs as well as apparitions of the living with and without the consciousness of the person represented by the apparition. Durville concluded the section stating:

The physical body is seen at the place that it really occupies; and at the same moment its phantom is seen at a distance. . . . The sensations felt by the phantom are reflected on the physical [body]. . . . The physical [body] is never in its normal state during doubling. The mystics are always in ecstasy; the sorcerers and nearly all the common people are more or less profoundly asleep, the mediums are in trance, the somnambules in a state of magnetic somnambulism and the dying delirious or in syncope Some of the doubled recollect perfectly everything that was seen, said, or that took place . . . ; others remember vaguely . . . , most others do not keep any recollection. . . .

(pp. 136–138; this and other translations are mine)

Durville believed that doubling showed that the thinking principle could leave the physical body while the person was alive and that this double could perceive and sometimes act on the environment, an idea consistent with the beliefs of other individuals mentioned in this Essay Review.

In the second part of the book, Durville reported tests he conducted to study intentionally projected phantoms of the living. In this work Durville followed on the previous investigations of Albert de Rochas (1837–1914), a pioneer in the laboratory study of phantoms of the living (de Rochas, 1895) and of the exteriorization of sensibility, a topic I have discussed before in the *JSE* (Alvarado, 2011a). Durville worked with several ladies whom he magnetized repeatedly, asking them to project their phantom in order to explore its perceptual and motor capabilities. He said very little about his participants but they were obviously sensitive to magnetization (or suggestion). One of the ladies in question, Mme. Lambert, was also studied by de Rochas. She was later described as a medium who had physical phenomena at home as well as in the séance room (Lefranc, 1911a).

Durville wrote that he considered the exteriorization of sensibility and doubling to be similar. The first was a state in which the sensibility was believed to radiate around the person, while the second was a state in which the sensibility was contained in the phantom. Durville wrote:

We have seen that the subjects submitted to the action of magnetism . . . exteriorize . . . , all of them keep their usual state of consciousness, their sensibility which had disappeared at the beginning of somnambulism . . . radiates now around them, up to a distance that may reach a distance 2 m. 50 and even 3 meters. At some moment . . . such *sensibility*, which all the subjects see in the form of vapour, a whitish fluid, gray or grayish, sometimes with light iri-

descent shades, is condensed and localized on each side of them, at a distance that may vary from 20 centimeters . . . to 80 centimeters. . . . (p. 178)

Several chapters contain descriptions of such aspects as the appearance of the phantom, its perceptual capabilities, influences on other persons, and physical effects presumably produced by it. The point of the studies was to obtain evidence that perceptions and physical effects could take place from a location distant from the physical body of the projected persons, at the place where the phantom was supposed to be. Because some aspects of Durville's reports have been published in English in the *Annals of Psychical Science* (Durville, 1908a, 1908b), I will cite some descriptions from one of them to take advantage of the translations.

Some tests were performed to test for vision. In Durville's words:

The projected double can see, but rather confusedly, from one room into another. While I was at the end of my study with Edmée, whose double was projected, I asked three of the witnesses of the experiment . . . to go into the lecture room of the society and perform some simple and easily described movements, so that we could ascertain whether the double, which I would send there, could see anything. Dr. Pau de Saint-Martin stood near the window, between my study and the hall where the witnesses were, in order to see almost at the same time both the subject and what these experimenters were doing.

First Experiment. — Mme. Fournier seated herself on the table. 'I see,' said the subject, 'Mme. Fournier seated on the table.'

Second Experiment. — The three persons walked into the room and gesticulated. 'They walk and make gestures with their hands; I do not know what it means.'

Third Experiment. — Mme. Stahl took a pamphlet from the table and handed it to Mme. Fournier. 'The two ladies are reading,' said the subject.

Fourth Experiment. — The three persons joined hands, formed a chain and walked round the table. 'How funny!' said the subject; 'they are dancing round the table like three lunatics.' (Durville, 1908a:338)

Durville believed that the phantom emanated N-rays, a controversial form of radiation prominent during the first decade of the twentieth century that was eventually dismissed by the scientific community as being due to artifactual observations (Ashmore, 1993, Nye, 1980). To detect the projected phantom, he used screens covered with calcium sulphide, a substance believed to produce brightness in contact with the rays. Durville wrote as follows:

The double of the subject having been projected, I took the three screens and showed them to the witnesses, who observed that they were completely dark. Laying the small screen aside for a moment, I placed one of the large

ones on the abdomen of the subject and held the other in the phantom, which was seated on an armchair to the left of the subject.

The screen placed in the phantom became rapidly illuminated, and the one on the subject remained completely dark. After several minutes I took both screens and showed them to the witnesses, who were much astonished by the phenomenon. I then took the screen which had been on the subject, and remained dark, and placed it in the phantom. It immediately became illuminated like the first. I again showed them to the witnesses, who saw that they were sufficiently illuminated to allow them easily to count the spots of sulphide of calcium at a distance of a yard.

I then took the small screen which had not been used, and placed it on the abdomen of the subject for two or three minutes without obtaining the slightest trace of luminosity. I then placed it in the phantom, and it became very strongly illuminated. The witnesses found that it gave enough light to enable one of them to tell the time by a watch.

These experiments, repeated about ten times with seven or eight different subjects, always gave similar results, which were very intense when the screens had been well exposed to the sun, less so when the exposure had been insufficient. (Durville, 1908a:341)



PHANTOM

The double was said to be able to produce raps and movement of objects, which was taken by Durville to indicate its objective nature. This body, Durville wrote in his book, carried the “very principle of life, as well as will, intelligence, memory, consciousness, the physical senses, while the physical body does not have any faculty” (p. 354). This suggests that the subject’s awareness was out of the body, something that is not always clear throughout the experiments reported in the book.

The tests reported by Durville represent a historically important attempt to empirically study the topic through the induction of experiences. This is a break with the rest of the work discussed in this Essay Review, which depended on the collection and interpretation of cases. The book was repeatedly cited by later writers on the topic such as the following ones mentioned below. Some aspects of his work were replicated and extended, but the reports have fewer methodological details than Durville’s (e.g., Lefranc, 1911b).

Ernesto Bozzano

Italian psychical researcher Ernesto Bozzano (1862–1943) was well-known for his publications presenting many cases of psychic phenomena from the international literature on the subject, for his classifications of phenomena,

and for his ardent defenses of survival of bodily death. Such work was evident in his discussions of phenomena related to death, such as deathbed visions, the hearing of music, and the perception of physical phenomena related to a distant death (Bozzano, 1923). Bozzano discussed the topic under the name of “bilocation,” a term he used to group a variety of phenomena he explained using the concept of a subtle body (Alvarado, 2005). He first wrote in detail about the topic in a paper (Bozzano, 1911), and expanded this article into a short book published in Italian (Bozzano, 1934). I am commenting here on the French translation of this book, *Les Phénomènes de Bilocation*, published in 1937.



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This study consisted of the compilation and interpretation of published cases. Bozzano discussed: (1) the phantom limb sensation of amputees and the “doubling” sensations of the body of hemiplegics; (2) apparitions of the self, or autoscopy; (3) cases of apparitions perceived by another person (such as those manifestations seen apparently coming out of the body of dying persons); and (4) a variety of cases difficult to classify as those of doubling or of telepathy, including many apparitions of the living.

In some cases, Bozzano noticed, “the personal consciousness is transferred to the phantom” (p. 41). He believed consciousness was in the etheric body, which he referred to as “the supreme, immaterial envelope of the discarnate spirit” (p. 8). But many cases discussed by him did not involve the *experience* of being out of the body.

In the book Bozzano mentioned twenty published cases of individuals who found themselves out of their physical body in a variety of circumstances. These were taken from published discussions of psychic phenomena. Bozzano noticed that these cases rarely happened when the person was in their waking state. Many of the cases he presented happened “during absolute rest of the body” (p. 41). Five of them took place when the person was under the effects of anesthesia, while the rest were experiences that took place during illness (2 cases), hypnosis (2 cases), and one each in the following circumstances: exhaustion and stress, being shot, giving birth, under depression, during asphyxia, smoke inhalation, coma, a fall, sleep, during automatic writing, and falling asleep.

Bozzano considered veridical perceptions during the experience to be very important. These cases suggested to him that the phenomenon was not

hallucinatory. Similarly, Bozzano placed great importance on those perceptions of deathbed observers in which mists or lights were seen emanating from the dying person, phenomena that are not frequently discussed today (for an exception see Alvarado, 2006b). In his view, these cases indicated an initial stage of doubling representing the beginnings of death. This was conceptualized as the separation of a fluidic matter from the body that showed fluctuations due to changes in the vitality of the dying person, ending with the formation of an etheric body.

For Bozzano, when all the phenomena he mentioned in his book were considered together they showed the existence of an etheric body capable of leaving the body. Furthermore, he believed that such etheric body implicated the existence of an etheric brain through which a spirit manifested. In his view bilocation demonstrated survival of bodily death.

Sylvan J. Muldoon and Hereward Carrington

Sylvan Muldoon (1903–1969) became known for his classic book written with psychical researcher Hereward Carrington (1880–1958), *The Projection of the Astral Body* (Muldoon & Carrington, 1929). In this book Muldoon analyzed his multiple OBEs, some of which he could induce. His interest on the topic led him to publish books about psychic phenomena (e.g., Muldoon, 1942), as well as the two books reviewed here. By the time Carrington published his 1929 book with Muldoon, he had been involved in psychical research for more than 20 years and was well-known through publications such as *The Physical Phenomena of Spiritualism*, where he discussed mediumistic fraud (Carrington, 1920).

In his first case collection, *The Case for Astral Projection* (1936), Muldoon presented previously published cases, as well as new cases from people who wrote to him. The first part of the book was devoted to the concept of astral projection, while the second included many actual cases.

Some accounts included projections presented with headings such as “Floats Horizontally in Air,” “A Mother Projects, Finds Her Baby Well,” “Finds Her Dog in Astral World,” “Finds Her



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Astral Body Beautiful,” and “Spends Several Days in Spirit World.” There were also accounts such as Wiltse’s (1889) NDE, and other experiences taking place under anesthesia, during sleep, relaxing, and in other circumstances. Muldoon was convinced that people could leave their bodies, but he was also open to other explanations in some particular cases.

Muldoon’s work was continued in a study published fifteen years later with Carrington as coauthor. This was *The Phenomena of Astral Projection* (1951), one of the most influential of the modern case collections of OBEs and NDEs. The authors presented more than 100 cases, most of which were organized in chapters including deliberately induced projections (such as those under hypnosis), and those taking place under the influence of drugs, suppressed desire and other emotional factors, during accidents or illness, and during the waking state. The latter included cases where the person was lying down (eight cases), sitting down playing an organ (six cases consisting of the same individual’s repeated experiences), sitting down (three cases), and one each for the following: walking, standing and assisting a surgical operation, standing inactive, kneeling in prayer, and no information.

Like Bozzano, Muldoon and Carrington included in their book several cases in which observers at deathbeds saw emanations such as mists and lights from the body of dying persons. Those accounts present no evidence that the persons were conscious of leaving the body while they were dying.

The authors commented in their conclusion about the commonality of features in the narratives presented in the book:

In a large percentage of the cases we find mention of floating and soaring, of being above the body and looking down upon it, of floating above the physical body, of being suspended in the air, of the astral cord uniting the two bodies, of cracking and snapping sensations and sounds in the head, of catalepsy, physical numbness and the inability to move, of the momentary blanking of consciousness when entering and leaving the body, of the feeling of depression just before projection, of the feeling of “repercussion” when again entering the body, of the belief that one is dead, etc. These characteristics are repeatedly found throughout the cases reported, and it is interesting to note that they are seemingly so universal and so identical. (p. 216)

Muldoon and Carrington also presented descriptions of rare features of astral projection. Among them were returning to the body through the head of the physical body (p. 77), seeing both the physical body and a replica of it from a different position (p. 133), being perceived by others while out of the body (p. 187), and shifts of visual perception location in terms of alternately seeing from the physical body and from another location (p. 190).

Like so many before them, Muldoon and Carrington argued that astral

projection involved a spiritual body and that it supported the concept of survival of bodily death. They wrote about the latter idea: “Death is nothing more than the *permanent* separation of the two bodies. . . .” (p. 31)

Hornell Hart

As the inheritor of the previous literature, sociologist Hornell Hart (1888–1967) focused on the study of spontaneous cases and the idea of survival of bodily death. One of his initial studies, “Visions and Apparitions Collectively and Reciprocally Perceived,” appeared in the *Proceedings of the Society for Psychical Research* (Hart & Hart, 1933). In later years he expressed his ideas about survival in his book *The Enigma of Survival* (1959). He is to be credited for bringing the topic of OBEs to parapsychology journals at a time in which there was little discussion of the topic.

In his paper “ESP Projection: Spontaneous Cases and the Experimental Method,” published in the *Journal of the American Society for Psychical Research* in 1954, Hart compiled published OBE cases to study what he referred to as “ESP projection.” These were experiences that included the sensation one was located out of the body, veridical perceptions during that state, and that had a “consistent orientation to the out-of-body location” (p. 121). His efforts led him to find 288 published cases, out of which he used 99 reports in which the experience had been reported before it was verified.

Hart analyzed cases in terms of various concerns. One was the way in which the experience took place. Some were induced via the use of hypnosis (20 cases), concentration (15), and methods other than concentration (12), while others took place spontaneously (22). He found that “neither the concentration method nor the hypnotic method usually produce full-fledged ESP projection” (p. 128).

The “full-fledged projections” had several features. In addition to veridical features, the cases also included reports of seeing the physical body, sensations of floating, being aware of having a different body, and being able to pass through matter.

Some of the features seemed related to the circumstances in which the OBE took place. For example, features such as going to other dimensions and seeing spirits took place more often in spontaneous OBEs than in induced ones. Those induced by hypnosis had veridical perceptions, but few other features. Perhaps the hypnotically induced experiences tended to be veridical because the induction procedure included suggestions to visit and observe distant places. With some exceptions, such focusing of attention is not necessarily present in spontaneous OBEs.

Hart said he used a scale to rate cases for evidentiality, details of which appear in his 1956 paper “Six Theories about Apparitions.” The article presented

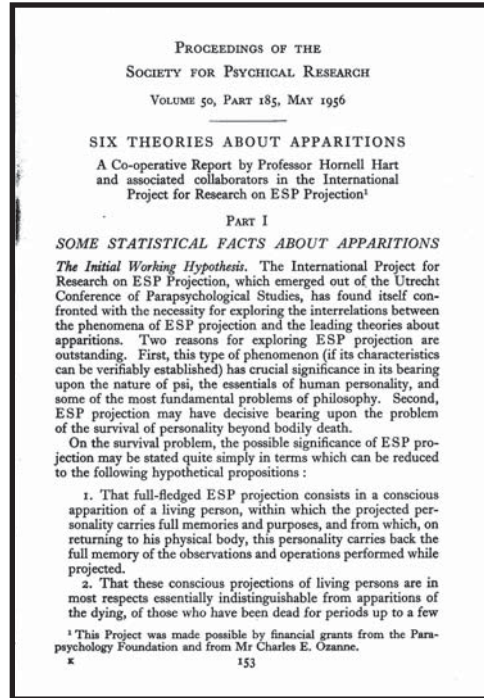
an early example of the use of quantification to analyze OBE features.

The overall purpose of the paper was to discuss explanations of apparitions and to assess empirically if the features of apparitions of the living and apparitions of the dead were similar. Hart collected 165 published apparition cases out of which 25 were OBE apparitions. Some of the features of the latter cases were full figures (100%), adjustment to physical surroundings (80%) and to persons (72%), normal body movements (28%), descriptions of features as vivid (24%), and of the apparitions as solid and life-like (12%).

Hart believed that OBEs were “internal views of the phenomena observed externally in connection with apparition of the living” (p. 177). For this reason he argued that similarities between different types of apparitions—apparitions of the dead, of the dying (but not conscious), and OBE apparitions—suggested “something of the nature of the experiences undergone at and (to a limited extent) after death” (p. 177). Statistical analyses were reported by Hart showing that all apparitions had similar features.

He summarized the hypotheses and findings of the study as follows:

1. That full-fledged ESP projection consists in a conscious apparition of a living person, within which the projected personality carries full memories and purposes, and from which, on returning to his physical body, this personality carries back the full memory of the observations and operations performed while projected.
2. That these conscious projections of living persons are in most respects essentially indistinguishable from apparitions of the dying, of those who have been dead for periods up to a few hours, and those who have been dead for days, months, or years.



3. That since this is the case, some of the most frequent types of apparitions of the dead presumably carry with them the memories and purposes of the personalities which they represent, and thus constitute evidence of survival of personality beyond bodily death. (pp. 234–235)

As mentioned in my discussion of D'Assier, and as I have pointed out before in this *Journal* (Alvarado, 2011b), the idea that apparitions of the living are similar to apparitions of the dead, and that this similarity supports a survivalist explanation, was discussed by others before Hart.

Critical Remarks

An interesting issue regarding work with cases is how much the authors in question imposed a theoretical framework onto the accounts they compiled. This seems to be the case when D'Assier assured us that the phantoms he studied had “invisible capillaries” and when Bozzano wrote about an “etheric brain.” These were speculations derived from the author's interpretation of cases.

Related to this is the continuity the above-mentioned authors and others (e.g., Myers, 1903) assumed existed between apparitions of the living and OBEs. But this continuity, as assumed by authors such as Moses, D'Assier, and Bozzano, is not clear in many cases. The same may be said about the various phenomena Bozzano connected to each other: OBEs, autoscopy, emanations from the dying, and apparitions of the living. While the connections assumed to exist may be real and may reveal we are dealing with the same class of phenomena, they are not clearly observable and instead of being “uncovered” from the data they may be the result of conceptual impositions guided by projection assumptions. After all, many of the same phenomena these authors have interpreted on a projection OBE model have been interpreted in different ways by others (Braude, 2003, Bret, 1939, Gurney, Myers, & Podmore, 1886).

Most of the authors relied on their impression of the cases to argue for similarities and continuities, and this may have produced erroneous conclusions. To check for Muldoon and Carrington's statements about the commonality of OBE features, I analyzed their cases for a few of the features Muldoon and Carrington said were frequently reported: reports of cords, catalepsy, sounds (such as snapping, clicking, and roaring sounds), and “repercussion” (shocks or jolts felt on the physical body on return). Except for the chapter of cases in brief (Chapter 9), and those cases of emanations from the body at death which did not include cases in which individuals felt they were located outside of their physical bodies, I used the 87 cases reported in chapters 1–2 and 4–8 of their book. This showed the following: cords (6 cases, or 7%), catalepsy (5 cases, or 6%), sounds (7 cases, or 8%), and shocks (3 cases, or 3%). Such results do not support the claim that such features were found in a “large percentage of the

cases” (p. 216), casting doubt on Muldoon and Carrington’s generalizations, as well as on impressionistic analyses which fail to include the most elementary counts of features. This reminds us of the importance of reaching conclusions on the basis of estimates of the actual proportion of OBE features as opposed to general impressions based on what we remember from reading cases.

Hart brought more precision to OBE studies when he conducted quantitative analyses of the features of OBE apparitions, and apparitions of the dying and of the dead. With his work we have specific proportions of features while before him the issue was only addressed with general descriptions. But was such precision unambiguous? His conclusion regarding the survival implications of the above-mentioned apparitions did not depend solely on his statistical comparisons. The interpretations of his results depend on the validity of his assumption that OBEs represent consciousness located out of the physical body.

Furthermore, it may be argued that some of the cases used by Hart are problematic. Six of the 25 OBE apparition cases analyzed by Hart were taken from secondary sources that did not present the actual testimony of the experiencer. This, and the fact that most of the other cases with first-hand testimony included few details about the OBEs suggest that the profile of features coded by Hart may not be reliable. In any case, his effort was a valuable one deserving followup with a higher number of cases.

There are also questions about Durville’s work. It is not always clear how isolated the magnetized subjects were from the information they were asked to perceive. The physical results reported by Durville are puzzling, but one wonders if they can be explained by ideas other than the exteriorization of a phantom. Similar effects have been interpreted in the past in the physical mediumship and psychokinesis literatures using concepts that do not necessarily involve the idea of a double. In addition, because perceptions of the phantom depended on the testimony of the subjects, one wonders about the role of suggestion, particularly with repeatedly used individuals who knew what Durville and his collaborators wanted to obtain. One wonders if different effects would have been obtained with special subjects who had different beliefs than the ones used by Durville or with subjects with less “training.”

I do not mean to say that the work of the authors discussed here is not valid or that it has no value for us today. But the above-mentioned critiques are methodological issues that need to be considered both in the evaluation as well as in the replication of such research.

Concluding Remarks

Works such as the ones commented on here have kept alive the idea of subtle bodies and projection over time. However, some of them, such as Moses and D’Assier, have been almost forgotten in the modern scholarly and scientific

OBE literature. Durville and Bozzano are cited mainly by European authors, partly because their work has not been translated into English. There was a period when most authors writing about OBEs cited Muldoon and Carrington's 1951 book as well as Hart's 1954 paper. This work has not been completely forgotten, but, as happens in most fields, citations from these years decline because more recent publications tend to be cited instead.

In addition to the usual forgetfulness that writers in modern fields show about the old literature over time, there have been other influences in the neglect of this past. Perhaps the main one is that the academic contemporary OBE literature has been heavily influenced by psychological ideas (Murray, 2009), and more recently by neurophysiological approaches (Blanke, 2004). In such climate—affecting both parapsychology and psychology—ideas of projection such as the ones discussed here are not seriously considered in academic circles. This has led to the neglect of empirical studies about veridical aspects of OBEs in recent times, a topic that has received more attention in NDE studies (Holden, 2009).

Another reason for the neglect of this old literature is that some of the concepts of subtle bodies discussed here (mainly those of D'Assier and Durville) may seem to be too physical for some current students of psychic phenomena. As I have argued elsewhere, many modern parapsychologists have argued that experimental evidence for psi is inconsistent with a belief in physical forces (Alvarado, 2006a). Furthermore, some have presented higher-space theoretical speculations that do not assume a projection into physical space (Poynton, 2001).

We also need to remember that during the 1980s and later, most OBE researchers focused on studies of the features, the psychology, and other correlates of OBEs, and ideas of projection and subtle bodies became less popular in parapsychology (for overviews see Alvarado, 1989, 2000). Examples of this were the works of Gabbard and Twemlow (1984) and Irwin (1985).

Regardless of changes in approach, the tradition represented by the publications reviewed here has been important in modern times. These ideas have been influential in discussions of the topic of survival of death (e.g., Fontana, 2005), and have inspired the few modern laboratory studies of veridical perception and detection (Alvarado, 1982a, 1982b) that deserve followup. In fact, successful laboratory work along these lines and the compilation and study of new well-documented cases would be valuable to balance the view held by many today that the OBE is purely hallucinatory.

Some of this past work, such as Muldoon and Carrington's, has reminded us about the variety and complexity of OBE features. Much remains to be done with cases to examine the basic features of the OBE, including the less frequent ones, as well as studying if specific features, or features profiles, are related to

other features, to circumstances of occurrence, or to other variables (Alvarado, 1997). Hart provides us with ideas for research, such as the difference between spontaneous and induced OBEs.

Although the writings of Moses, D'Assier, Durville, Bozzano, Muldoon and Carrington, and Hart represent different time periods, they can still inspire new research on the subject. Furthermore, these old writings help us to understand the development of OBE studies. But we need to realize that such development did not depend solely on projection ideas. In addition to these, the field was influenced by other concepts, such as those coming from psychology. Like the OBE, the history of the topic is more complex than what it seems on the surface.

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BOOK REVIEWS

Esprit: Men and Women of Parapsychology, Personal Reflections, Volume 1, edited by Rosemarie Pilkington. San Antonio: Anomalist Press, 2010. 184 pp. \$12.95 (paperback). ISBN 9781933665504.

Esprit is a very readable collection of short autobiographical essays from a dozen leading psi researchers who were over 65 at the time of the original publication in 1987. Long out of print, this book is now republished with a modified title and the notice that it is the first of a three-volume series to come, all edited by Rosemarie Pilkington. The twelve essays are from Jule Eisenbud, Montague Ullman, Jan Ehrenwald, Eileen Coly, Joseph H. Rush, Gertrude R. Schmeidler, Emilio Servadio, Renée Haynes, Hans Bender, Karlis Osis, George Zorab, and Bernard Grad. At the time of this review, only Eileen Coly is still living.

As the first collection of its kind for the parapsychological world, *Esprit* is a rich biographical resource for historians of the field, but it really is much more. It is the human story behind the scientific reports. It provides an insightful glimpse into what motivated a diverse group of gifted men and women to devote a large part of their lives to the exploration of an elusive and controversial dimension of human consciousness, and with little concern for monetary or societal reward. I would expect that *JSE* readers might find many similarities in their own absorption with interests that may lie outside the boundaries of conventional science.

With a great degree of openness, the *Esprit* authors have tackled five basic questions presented by the Editor: namely, what led them to become involved in the field, what were their most important contributions, what might they have done differently, what experiences exceeded their “boggle threshold,” and what advice would they give to young people entering the field today. In his helpful Foreword to this new edition, Stanley Krippner notes that despite their differences, nearly all their lives contain three factors that can be seen to be essential. There are the predisposing factors that led them to an initial interest in psi, the precipitating factors that led to a conscious decision to become involved, and the maintaining factors that enabled the continuation of a deep motivation and involvement in this field.

Predisposing factors tended to be personality factors or early exposure, such as Haynes and Osis hearing folktales around the kitchen table or Coly growing up as the daughter of the celebrated medium Eileen Garrett. Precipitating factors were often personal experiences, such as the “living light” that

startled Osis at the time of his aunt's death in rural Latvia, the group sessions with a purported entity that engaged the adolescent Ullman, or the unusual energetic phenomena experienced so intensely by the youthful Grad. An early fear of death assuaged by attending a séance was a precipitating event for the young Zorab, while Ehrenwald was first mystified as a young psychiatrist by the case of a dyslexic nine-year-old girl who could "read" only when her mother was reading the same lines from a book in an adjacent room.

Intellectual challenges from reading psi-related material or encountering exceptional cases were precipitating factors for many of this group and often led to research efforts of their own. An available research opportunity for dream telepathy work at Maimonides Hospital helped continue Ullman's interest, while an invitation from my father, J. B. Rhine, to join the Duke Lab provided Osis a position to continue his work on animal psi (where I was his assistant for a time).

Employment opportunities were a major maintaining factor for continuing in the field, although they were scarce then as they are now. For Ehrenwald, Eisenbud, Servadio, and Ullman, their parapsychological interest and identity was maintained by their psychotherapeutic practice, while the success of research projects helped encourage Grad, Rush, Schmeidler, and others to continue as they did. And for many of this group it was the camaraderie and collegial reinforcement aided by international meetings and conferences that has continued to be a major maintaining factor in a field where considerable hostility from the outside professional world is still the norm.

There were a few minor disappointments in the book, such as George Zorab's short essay that revealed little of the measure of the man or Hans Bender's account that was sadly cut short due to health issues. There is a notable omission of other prominent individuals who were still alive in 1987, such as John Beloff and Ian Stevenson, although this is explained by Pilkington in a paragraph cleverly entitled the "few that got away." We can be glad that she began when she did, and that she is continuing this effort with two subsequent volumes.

In summary, *Esprit* offers valuable guidance to the novice, some new "discoveries" of unfinished work and speculations for the more experienced parapsychologist, and possible fodder for the skeptic who just wonders about the makeup of a parapsychologist. But regardless of one's belief about psi, this collection of essays provides priceless vignettes of a band of dedicated and selfless pioneers. As I ended the book, this long-forgotten verse of Longfellow's



spontaneously came to mind, "Lives of great men (and women) all remind us, we must make our lives sublime, and departing, leave behind us, footsteps on the sands of time."

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Notre Sixième Sens by Charles Richet. Paris: Editions Montaigne, 1928. 253 pp. 19 illustrations.

In 1928, the year of publication of *Notre Sixième Sens*, Charles Richet was a world-famous professor of physiology, qualified as a professor by the Medical Faculty of Paris, and a Nobel Prize winner in medicine. He was also Honorary President (1919) of the Institut Métapsychique International (IMI), of which he was to become president from 1930 until his death in 1935.

Charles Richet lived many parallel lives: physiologist, psychologist, métapsychiste, poet, novelist, historian, aviation pioneer. He was a pacifist but a eugenicist, too. He was an extraordinary personality who "strangely mixed scientific rigor with a poet's understanding." His works in physiology were of decisive importance: nervous system, thermoregulation, breathing, anesthesia, and immunology. His discovery of serotherapy and his work on anaphylactic shock qualified him for the Nobel Prize in medicine in 1913.

He became one of the great names in métapsychique for which, moreover, he had coined the term (in 1905), on the model of Aristotle's metaphysics.

His interest in psychic sciences went back to his adolescence, but he denied in his first writings the existence of paranormal phenomena, which he had witnessed however. Thus, in 1872, during his internship in surgery, he hypnotized many female patients and published his observations, describing in minute detail the characteristics of hypnotic sleep and the peculiar capacity of sleepwalkers to incarnate different personalities (prosopopoesia) under the effect of suggestion (Richet, 1875). For Richet, and in that period, the supposed manifestations of clairvoyance could only be due to "a special state of the imagination, a neurosis" (Richet, 1875:358).

At the beginning of the 1880s, he began nevertheless to commit himself openly to métapsychique research, following publication of his first articles. In 1885, he created, on the model of the English SPR, the Société de Psychologie Physiologique [Society for Physiological Psychology] with Ribot and Marillier, of which Charcot was president. This society "soon disappeared, because

we had the bothersome idea of presuming to interest the psychologists, the physiologists, and the physicians in métapsychique research” (Richet, 1922/1994:63).

In 1891, he wrote the Preface for the French translation of *Phantasms of the Living* (Gurney, Myers, & Podmore, 1886) and founded the *Annales des Sciences Psychiques, Recueil d’Observations, et d’Expériences*, where famous researchers, such as Flammarion, Bozzano, de Vesme, C. Lombroso, Lodge, Maxwell, Marillier, Lodge, Schrenk-Notzing, Geley, and Osty published their work. These *Annales* (which became the *Revue Métapsychique* in 1919 when the IMI was founded):

establish a proper balance between the credulity of the spiritualist/spiritist journals and the blind ignorance of the compilations of official psychology. (Richet, 1922/1994:63)

In 1919 he participated, with Gustave Geley, R. Santo Liquido, and Jean Meyer in the creation of the IMI and *Les Annales* became the *Revue Métapsychique*.

Richet’s interest in métapsychique was considered by many of his contemporaries, “a simple *tocade*” of a scholar. This opinion seems to still be shared by some of his descendants. So attracted by “marginal” subjects, but heir to the Age of Enlightenment, Richet was to have science as his religion and was to always hold that physiology could establish a bridge between spirit and matter, the visible world and the invisible world, thanks to the study of sleepwalking, of cryptesthesia, and of métapsychique.

Thus it was that in 1928, more than 20 years after the episode of the Villa Carmen in Algiers, where Richet witnessed a so-called “ghost manifestation” that has proven to be a hoax that had discredited him (Le Maléfan, 2002), nine years after foundation of the Institut Métapsychique International, and six years after publication of his *Treatise on Métapsychique*, Charles Richet, having withstood winds and tides, having upheld his interest in psychic sciences, published *Notre Sixième Sens*.

This book is dedicated to Henri Bergson in honor of his work, particularly on the mind/body relationship (1896). It is Richet’s attempt to explain métapsychique through physiology, based on the idea that the métapsychique, at least in its subjective dimension, could be a coextensive area of the physiology of perception. Richet suggests then to apply the same methodology, the same procedures, which are so efficient in the field of physiology. Thus he coined the term *Sixth Sense*, in line with the other five senses that are more common: hearing, sight, taste, smell, and touch. Hence, this supplementary sense must be—like the other senses—integrated into human physiology.

In his *Traité de Métapsychique* (1922), Richet established a kind of

catalogue of all the phenomena covering the field of *métapsychique*, while contenting himself by merely evoking the existence of this sixth sense.

In *Notre Sixième Sens*, he labored to establish the existence of this sense “demonstrating it will be exclusively based on observation and experience, that is to say on the classic methods of physiology” (p. 11). On the basis of testimony and experiments, he reviews here everything that can extend perception by the usual senses in a more subtle way, concluding with the affirmation that this extra and unknown sense is real.

Between the lines of this work, a kind of leitmotiv appears. It is an endeavor to convince the world of skeptics that this sixth sense is real, what Eugène Osty called *metagnomia* (Osty, 1922) and that others call *clairvoyance*, *telepathy*. Richet also calls it *cryptesthesia* (or hidden sensitivity). This implies a major presupposition that we have just mentioned. It consists in looking as a physiologist at that potentiality of perception and sensitivity. For this reason, he preferred the term *sensitive person* to that of *metagnomist* or to (terms even more abhorred) *clairvoyants*, *mediums*, or *extralucids*. This sixth sense, a potentiality present in all of us, at a latent level, includes: telepathic perceptions or flashes, clairvoyance, psychometry, thought transference, premonition, pragmatic cryptesthesia (psychometry) or a capacity to obtain “information starting with simple objects as material indicators of everything that can be connected with their history” (p. 88), or even veridical hallucinations: a perception in visionary form of an object or a situation, or of a scene out of range of the spatial–temporal field of the normal senses.

It’s not always very easy to follow Richet’s thoughts when he tries to give a clear definition of this “special sensitivity” called the sixth sense, which can explain telepathy and also the capacity of certain mediums in spiritualistic sittings.

The book is divided into five large parts (that Richet calls Books), which are in turn subdivided into chapters. In the first part, made up of the Introduction and five small chapters, he first defines this sixth sense. Relying on the adage “*nihil est in intellectu quod non prius fuerit in sensu*,” he describes our ordinary senses from a psychological and physiological point of view and puts forth the idea of a perception of the exterior world “showing itself by other ways than those of the normal sensory ways.”

Alongside the forces and vibrations of all kinds that surround us and of which only part are accessible to our ordinary senses or to our technology, for Richet there exist around us:

vibratory forces, sometimes huge, sometimes tiny, that would be capable of manifesting themselves if there were detectors to perceive them. That does not at all prove that there is a sixth sense, that only proves—and with irresistible force—that this sixth sense is possible. (p. 14)

Richet then draws up a short historical reminder of testimonies of that capacity: Cicero, Mesmer, and Myers and his contemporaries of the SPR, and the immense material that they have gathered. This first part ends with a question that is still of current interest: How to bring into the orbit of science facts that are so fleeting, so accidental, so difficult to reproduce as those of *métapsychique*.

The second part, "Observations That Establish That a Sixth Sense Is Real," is composed of two chapters. In the first, Richet draws up a bibliography of the principal works on telepathy (Gurney, Myers, & Podmore, 1886), on telekinesis (Schrenk-Notzing, 1920), on the survival of the soul (Lodge, 1909), and on the unconscious dimensions at play in these *métapsychique* facts (Geley, 1921).

Subsequently, on the grounds of trustworthy testimonies drawn from *Phantasms of the Living*, or from the *Treatise on Métapsychique* (1922), and without seeking to penetrate their mechanism, Richet endeavors to posit the existence of this sixth sense. From possible it becomes "morally certain," after he has eliminated the hypotheses of fraud, of error, of illusion, and of coincidence. For example, Wingfield's case of a hallucinatory vision of his brother at the very moment of the latter's death; Mr. Wingfield had never had hallucinations in the past, so we are therefore confronted with a veridical hallucination (monition of death) (pp. 31–33). According to the statistically estimated probabilities, that hallucination, that perception, would have only one chance in " 8×10^{-11} " to be produced. In this manner, seven testimonies of veridical hallucinations were reviewed with the same conclusions (p. 29). Likewise for three cases of veridical collective hallucinations and nine other cases of psi perception or monitions of less dramatic events (that is other than death). Thus, again, he concluded:

It is always a special esthesia which is in play. It is always the sixth sense that reveals a (unknown) fragment of reality to us. (p. 64)

By fragment of reality, Richet means another dimension, a hidden part of the reality dimension inaccessible to usual perception.

In the third part, he takes up the "Experiments That Establish That the Sixth Sense Is Real." This part comprises nine chapters in which we can follow Richet in his attempt to classify personal experiments, experiments with sleepwalkers (provoked or experimental), veridical hallucinations, pragmatic cryptesthesia, *spiritic* cryptesthesia, reproduction of drawings, and experiments with several highly sensitive persons.

Richet, confident in his scientific approach, proposes first of all a classification of the phenomenon under study, according to:

- the state of consciousness (hypnosis or trance), whether the subject is highly sensitive or not,

- the object with which the sixth sense has to deal,
- the degree of probability of the results (easy to estimate if one word is involved, much more problematic in all other cases),
- the capacities of the subject to mobilize this sixth sense, an elitist point of view that seems to take away its favor and that demands to be adopted.

The chapter devoted to his personal experiments begins with a story that one might see as the origin of Richet's *métapsychique* trajectory: a spectacular experiment carried out in 1872 on one of his women patients, Mariette, of the Hôtel Dieu. Richet asks her to read while she is under hypnosis from a blank piece of paper the name of one of his friends who was accompanying him and was unknown to the patient. After a moment, she succeeds in giving him in order four letters out of the five making up the name of this friend (pp. 69–70). Weirdly, three years later and when he published his dissertation on sleepwalking, Richet rejects the existence of any phenomenon of clairvoyance or “extralucidity” related to the hypnotic state. He will not get into the substance of the subject until 10 years later.

Then Richet recounts his experiments with transmitting drawings, in 1886–1887, with Alice, a sensitive. In order to distinguish cryptesthesia and telepathy, he had worked in such a way that the drawing sent and put in a sealed, opaque envelope would be handed to the percipient by a third party who had not attended the *séance* (pp. 71–77). His results and his observations had many points in common with what René Warcollier would perform several years later in his studies of telepathic transmission of drawings (Warcollier, 1921, Si Ahmed, 2010). Richet then takes up the experiments in hypnosis at a distance performed with Léonie (Janet's patient), who had a cryptesthetic perception in Le Havre of the fire in Richet's laboratory in Paris (pp. 81–82). We note in the examples given in this chapter, the difficulties encountered by Richet in cleansing cryptesthesia of telepathic contamination. This observation also applies to the account of cryptesthesia on the wristwatch of Georges (Richet's son) handed to Mme Thompson (a clairvoyant studied by Myers). This wristwatch had belonged to Georges' grandfather (killed in 1870 at the battle of Vendôme), handed to his son, handed down to his grandson, Georges. After having taken the watch, Mme Thompson said: “There is blood on this watch,” and she added “three generations mixed” (pp. 86–88).

At this point, Richet reported various experiments with sensitive and non-sensitive persons and took an elitist position by writing: “In order to succeed in demonstrating the reality of the sixth sense, one must work with the highly sensitive persons” (p. 98). He then supported his thesis with an array of observations performed with important sleepwalkers such as Alexis Didier, by always making an effort to differentiate between telepathic perception and

cryptesthetic perception. He next compares the various manifestations related to the sixth sense: true experimental hallucinations, premonitions of approach (a perception in daily life of an encounter with or the imminent appearance of a close relative, friend, or associate), pragmatic cryptesthesia, and “spiritual” cryptesthesia, and the transmission of drawings, related to the first experiments of René Warcollier (1921).

This part concludes with studies of highly sensitive subjects and of several edifying experiments. It is quite obvious that Richet is fascinated by these psi subjects, which allow him to support his original hypothesis: the existence of a sixth sense that he defines as the possibility of certain psyches being able to perceive a subtle vibration of reality with, in the background, a more or less explicit reference to the hypothesis of mental radio. In most cases, he applies himself to posing a statistical estimate of the probable reality of these perceptions. Whenever he can, he tries (and we don’t know why) to refute the telepathic hypothesis while favoring that of cryptesthesia, as if it were easier for him to admit the hypothesis of an interaction between matter and psyche rather than that of an interaction between two psyches.

In the fourth part, made up of eight chapters, Richet enumerates “Various Considerations about the Sixth Sense.” In the first chapter, a short review of phenomena that can be connected to the sixth sense: premonitions, divining rod, auditory hyperesthesia, xenoglossia, and human prodigy calculators. He anticipates what will be rediscovered later by Rhine: the extinction effect (the effect of decline), but also the necessity to include in the statistics the unsuccessful experiments, etc. He also watches out for the experiment to take place properly: a friendly, kind climate, respect for the *habitus* of the sensitive person, etc. He dwells on the difficulty (still current, still just as fruitless) of convincing the skeptics, as obvious as the phenomena may be. We may note that among the skeptics named is Pierre Janet of whom we know—if we step back—the history of him distancing himself from *métapsychique*, although he had been the initiator of such studies with his experiments in Le Havre on Léonie. Richet stresses the “Frequency and Rarity of the Sixth Sense” (p. 162), and especially its difficult reproducibility, which makes its study so problematic. He means that some facts of cryptesthesia are frequently observed with many different persons, but only once or twice in one life, or, in other words very rarely. It is of course different with exceptionally gifted persons who may show this ability more frequently (pp. 215–219).

Then Richet poses the differential diagnosis between the cases having to do with telepathy (p. 167) and those that cannot be interpreted by telepathy, between telepathy and the hypothesis of an unknown vibration of reality, that is to say a hidden aspect of reality that our usual senses cannot perceive. He criticizes and rejects the spiritualist interpretation, in the majority of cases, even if, he says:

there are cases (few in number) in which the spiritualist hypothesis is more convenient, but which can also be explained by the sixth sense. (p. 230)

This part concludes with an attempt at classification of this sixth sense according to the nature of the vibrations of reality, which it may involve: sender's thoughts, present or past material reality, etc. This last part ends with a sort of evocative vision: that of a future world where the sixth sense would be fully recognized and cultivated, a guarantee for the improvement and progress of humanity.

Throughout this work, Richet considers the sixth sense, on the model of other physiological senses, like a new sense and a concept which allows us to take together psi phenomena. For instance, in his conclusion, Richet goes back over all the proofs, observations, and experiments that uphold the reality of this sixth sense. But he observes, not without bitterness and with a certain astonishment, that the great minds of his time continue to deny the evidence. However, he writes, summarizing and concluding his work:

The real world emits vibrations around us. Some are perceived by our senses; others, not perceptible by our senses, are discerned by our physical devices; but there are yet others, not perceived by our senses or by our physical devices, which act on certain human intelligences and reveal to them a fragment of reality. (p. 247)

And he concludes this book by saying:

It seems to me that the sixth sense is a small (a very small) window opened onto the mysterious forces. (p. 248)

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The Western Esoteric Traditions: A Historical Introduction by Nicholas Goodrick-Clarke. Oxford University Press, 2008. 286 pp. \$29.95 (hardcover). ISBN 9780195320992.

Nicholas Goodrick-Clarke is Professor of Western Esotericism at the University of Exeter and Director of EXESES0, the Exeter Centre for the Study of Esotericism. Those who are skeptical of such a university chair might be inclined to ask whether, like ABRACADABRA, the acronym EXESES0 may be a magic word. Images of Harry Potter thrusting forward his wand with the invocation “EXESES0!” come to mind. However, before Professor Goodrick-Clarke aims his wand at this reviewer, let me clarify. What he tellingly argues in this densely packed 286-page volume is that his subject matter, which has been thought of as constituting “survivals of superstition and irrationalism” and has been “kept in epistemological quarantine” (p. 4), actually represents an important body of work having an ongoing impact on the development of both culture and science. In Goodrick-Clarke’s view, the historical systems under the rubric “esoteric” are uniquely important today as a spiritual counterpoise to the mechanistic view of nature.

If Goodrick-Clarke is right, the Western esoteric tradition should command scientific interest in the light of starkly contrary views such as those of Hawking and Mlodinow that we are nothing more than biological machines having no free will, and that there is no need for a deity to explain the creation of the universe (Hawking & Mlodinow, 2010), or the fad in cognitive science identifying the mind with the brain, the brain with a computer, and the consequent denial of selfhood and with it of course the soul (cf. McDaniel, 2010). Yet traditional (non-esoteric) religions already stand opposed to a scientific world view that eliminates soul, deity, and self. What does the esoteric perspective provide that non-esoteric spirituality cannot? How might science be transformed by

a dose of esotericism? In his final chapter, Goodrick-Clarke proposes that a “scientized” esotericism may bridge the gulf between spirituality and science.

The Historical Account

The main body of this book consists of a detailed history of systems loosely classified as esoteric, excluding related systems of Far Eastern origin such as Vedic philosophy, Buddhism, Jainism, Yoga, and so on, except as, in some cases, proselytizers have preempted such materials especially in the later works of individuals such as Blavatsky, Besant, and Leadbeater. (Leadbeater, 1968). Readers who have an interest in the subject from a purely historical viewpoint should find his account rewarding; but if one is drawn to the book out of a desire to deepen one’s understanding of esoteric materials from the point of view of personal transformation through specific practices, or of relevance to scientific methodology, the first chapters may seem pedantic as the author takes us through outlines of ancient sources of esotericism originating in the area of the eastern Mediterranean during the first centuries A.D. (p. 15), and subsequently through brief summaries of views promulgated by literally dozens of spiritual teachers and their derived systems over the course of the following centuries.

My experience in reading this volume is that during Goodrick-Clarke’s account of this historical sequence, his position regarding the veracity of oftentimes outlandish claims is ambiguous. At times he seems the unbiased reporter, but at other times there appears to be an implication in his phraseology suggesting the role of an advocate. This ambiguity remains until we reach the final chapter, where it seems clear that he takes the perspective of an enthusiast.

In this review I do not intend to address in any detail the accounts he provides of the long trail of these seemingly self-multiplying systems, their historical interrelations, and their frequently colorful proselytizers (such as the flamboyant Count Cagliostro or the mysterious Madam Helena Blavatsky). Instead I wish to focus on the central character of what is called *esotericism*: what makes these systems “esoteric?” And why should they have any special impact upon either spirituality or science in the modern world?

The Question of Origins

Uppermost in any account of Western Esotericism (WE) is the question of origins. This is especially the case because the claim to truth is regularly referred to the assumed veracity of “ancient wisdom” and divine communications. Goodrick-Clarke cites early sources as including Alexandrian Hermetism, the cult of Thoth in Egypt, the *Hermetica* or Hermetic texts from scattered sources (the chief of which is the Greek *Corpus Hermeticum* dating from the second and third centuries A.D.), Neoplatonism, Plotinus, Porphyry, Iamblichus, Proclus,

Chaldean Oracles, and Gnosticism. However, he points out that these systems reflect Eastern influences dating from the time of Alexander and carried to the Mediterranean world through Egypt (p. 16).

WE is therefore a hybrid set of ideas. Because of the author's focus on Western systems, certain factors having to do with this East–West juxtaposition appear to this reader to be insufficiently recognized. Aside from the Orient (Near East), major religions of the Far East such as Buddhism and Hinduism do not depend on a deity in the sense of a Christian God. WE systems, as they developed in the Middle Ages and later, very much adopted Christian or Judaic concepts. One can readily detect an overlay of Judeo–Christian thought on an underpinning of quite different ideas.

One notable omission in Goodrick-Clarke's account is the absence of significant reference to the goddesses of Egypt and the goddess-religions of the ancient Mediterranean such as the Greek or Pelasgian creation-goddess Eurynome and the Minoan Mother-goddess of Crete (Graves, 1966, Cottrell, 1962), whose origins are pre-Hellenic. There is no reference to “goddess” in the exceedingly elaborate index. Yet it is beyond imagination to think that this amalgam of ideas could have escaped the influence of the very ancient deified feminine creative principle.

Without blinking, Goodrick-Clarke notes that Thoth (who in his later identification with Hermes becomes the chief figure and Psychopomp of Alchemy, Hermes Trismegistus) was “associated with the Moon” and was in fact a “Moon-God.” Rather ironically he continues,

This identification of Thoth with the Moon was of immense practical importance to Egyptian culture for the Moon's phases governed the great rhythms of flood and drought across the Nile delta. It was from these rhythms that the Egyptians measured time and seasons and Thoth became associated with the governance of Time itself. (p. 17)

It cannot escape our attention that the monthly cycles, as well as all rhythmic cyclical order, have from time immemorial been associated with the feminine. The Egyptian goddess Maat is not only the overall creatrix of order in the universe, standing above even the sun-god Horus, but Thoth, the wellspring from whom the Hermetic tradition is said to come, is in fact her masculine counterpart who shares all of her attributes including those of Logos, Order, and Truth (Budge, 1904: 400–416, Hooker, 1997). Thoth, by his connection with the Moon, is by inference a hermaphroditic god combining masculine and feminine creative power (Figure 1).¹

There is good reason to believe that it is the presence of the feminine in the esoteric tradition, largely veiled or as in Goodrick-Clarke's case ignored, that is the heart of what makes the tradition esoteric (occult or hidden). It is

so because in the patriarchal fixation on a masculine God, the consequence of allowing the feminine archetype an equal place with the masculine is the foremost of heresies. The psychologist C. G. Jung felt that alchemy expressed an esoteric undercurrent within “official Christianity” due, among other factors, to the stress resulting from the absence of a feminine figure in the trinity (Wehr, 1987:252). A supporter of the Christianized version of the esoteric tradition may find the equal presence of the feminine discomfiting. However, as I will suggest, key defining characteristics of WE actually flow from the presence of the feminine principle in parallel with the masculine.²



Figure 1. Energy flows from the breast of the goddess to the Earth below. (From an alchemical engraving).

Hermes Trismegistus and the Question of Origins

The major source of Western Esotericism, we are told, is a corpus of writings termed the *Hermetica*, covering such topics as magic, alchemy, astrology, and cosmology (p. 17). In pointing out that the *Hermetica* is attributed to Hermes Trismegistus (“Thrice Great”), Goodrick-Clarke identifies this individual simply as an “Egyptian sage.” A confusion is immediately introduced as Goodrick-Clark proceeds in the following paragraphs to discourse on Thoth the Egyptian god, his attributes, and the Greek identification of Thoth with Hermes; but aside from one paragraph where he speaks of Hermes, Thoth, and the “Egyptian sage” together, he never indicates whether the latter is a real individual or the *god* Hermes–Thoth (pp. 17–18).

Indeed there is no place in the entire volume where I have been able to find him taking up the question of the historicity of Hermes Trismegistus.³ Instead, he frequently lumps Hermes Trismegistus with the names of various known historical figures such as Moses, Pythagoras, and Plato (pp. 37, 45, 199). A clearer view is that provided by E. Wallis Budge: “Hermes Trismegistus . . . is the representation of the syncretic combination of the Greek god Hermes and the Egyptian god Thoth” (Budge, 1904:415).

In other words, “Hermes Trismegistus” is not a historical figure chatting with Plato and the “High Priest of Hermetic Secrets” Marsilio Ficino, as shown in a fanciful floor intarsia at the west entrance to the Siena Cathedral (p. 38), but a mythical being, a god. The key writings of the *Hermetica* come to the mundane world from a divine source, Hermes–Thoth. This is the essential argument for

the validity of the doctrine. There is an evident parallel here with the concept of the Bible having been written by God through human intermediaries, or the stone tablets conveyed by God to Moses. The Egyptian Book of the Dead describes the discovery of a mysterious stone slab beneath the feet of a statue of a god, inlaid with letters of lapis lazuli and containing esoteric wisdom. It was “a thing of great mystery, [the like of] which had never [before] been seen or looked upon” (Budge, 1904).

I have belabored this point because of the question of origins and authenticity of doctrinal claims. As the book proceeds, there are numerous places where one or another practitioner’s personal representation of esoteric doctrine claims authority by means of a fanciful narrative tracing his or her knowledge back to mysterious sources in antiquity. To be fair, Goodrick-Clarke does seem to classify *some* of these claims as mythical, but even there he prefers the term “legendary.” He is not often willing to say openly that there may be deliberate fabrications. As one reads along, the distinction among myth, fancy, and historical reality seems to become disturbingly ambiguous.

Idiosyncratic Esoteric Systems

The history of Western esotericism is constituted by the contributions of a series of doctrines, rituals, and secret societies, all of which offer variations on the same general themes and are typically associated with one or another key individual. To establish authenticity, a story is told, usually in the form of a quest by the practitioner to ancient sites, or receipt of wisdom from one or more sages or “Masters,” or by means of a vision or visitation. The individuals telling these authenticating stories frequently change their own names to lend themselves more prestige. Guiseppe Balsamo, a novice monk who was expelled from his seminary, became the flamboyant magician and seer “Count Cagliostro” (1743–1795). Samuel Liddell Mathers (1854–1918), associated with the Order of the Golden Dawn, “added MacGregor to his surname” to give himself a Celtic aura and used the title Comte de Glenstrae (pp. 149, 198).

This charlatanesque and megalomaniacal syndrome is repeated over centuries. Yet Goodrick-Clarke does not, as far as I can tell, raise the issue of whether such individuals were charlatans or megalomaniacs seized by what Carl Jung referred to as psychological inflation brought on by the influence of archetypal imagery. From a Jungian point of view, the Hermetic/Alchemical symbolism is a potent cluster of archetypal materials which because of their numinosity can, in a susceptible individual, produce “An expansion of the personality beyond its proper limits by identification with . . . an archetype.” It produces “an exaggerated sense of one’s self-importance” (Jung, 1963).

Tellingly in this context, Jung says “it not infrequently happens that the archetype appears in the form of a *spirit* in dreams or fantasy products, or even

comports itself like a ghost” (Jung, 1960:205, Jung’s italics). One has only to think of the esotericist Madam Helena Blavatsky’s spirit friend, “John King,” who painted a portrait of himself almost certainly using the hands and eyes of Madam Blavatsky (p. 215). Oddly, in the caption to a photo of the painting, Goodrick-Clarke simply states that John King himself painted the portrait (p. 215).⁴

The Principle of Correspondence and Scientific Esotericism

The Jungian interpretation of alchemical symbolism argues that the imagery and concepts of the esoteric tradition constitute a psychoactive *Symbol* whose potency is capable of activating personal self-transformation toward enlightenment, or in Jung’s terminology individuation.⁵ This perspective is in contrast to the *metaphysical* interpretation of esoteric symbolism which argues for the cosmological reality of the hierarchy of levels, the interpretation of the soul as a kind of non-physical entity, the predominance of the godhead as the creator, “backworlds,” etheric bodies, and so forth. The Jungian view is thoroughly spiritual as it places the divinity within the psyche, while the latter view is “spiritual” in a more obvious way in that it posits a progression of the soul toward divinity within a real, if metaphysical, cosmic milieu.

But the latter also includes an additional factor of promoting psychological inflation by leading the devotee to believe he or she will come to perceive, and to gain control over, higher levels of “reality” and potentially be capable of “magical operations.” The difference between the two is readily exemplified by the manner in which alchemical transformation of metals is understood. In the Jungian view, this is entirely a metaphor for the spiritual transformation of the psyche (Wehr, 1987:246); from the metaphysical point of view operations on the physical world, including transmutation of metals, are potential psychic powers that can be conferred on the devotee as he or she advances through the various ranks of the hierarchies.

Masonic, Rosicrucian, and similar “orders” trade upon this metaphysicalization of the esoteric symbolism by establishing analogous hierarchical levels of achievement for their members. In the milieu of this interpretation, powers of clairvoyance, talking with spirits, contacts with secret Masters, and other such claims by one or another proponent of the various idiosyncratic systems are seen as proofs of the transcendent reality.

It appears evident as one reaches Goodrick-Clarke’s final chapter, that his interpretation of esotericism falls into the metaphysical category. This explains the ongoing ambiguity about authentication that is present throughout the text, as for example his uncritical report of how Christian Rosenkreutz, the originator of the Rosicrucian order, was “an adept in the transmutation of metals” who could have made a name for himself but instead chose to spend

five years in quietude before founding his system (p. 109). He also uncritically reports “Count Cagliostro” as “achieving alchemical transmutations” (p. 147). Predictably, then, Goodrick-Clarke summarily dismisses the significance of the Jungian psychological interpretation except as Jung’s emphasis on archetypes has influenced “New Age Religions” (p. 247). In his final chapter he seeks to show that esoteric concepts and procedures have entered the realm of scientific verification and stand poised to re-enchant science by infusing science with spirituality.

What, then, is the epistemological foundation for such a claim? The central concept behind the entire body of Western esoteric materials is the dictum referred to as the Maxim of Hermes Trismegistus, from *The Emerald Tablet*, said to be “one of the oldest surviving of all alchemical documents” and to be a “founding document” of renaissance esotericism following the fourteenth century (p. 72). The Maxim reads (in my rough translation),

WHAT IS BELOW IS AS WHAT IS ABOVE,
AND WHAT IS ABOVE IS AS WHAT IS BELOW,
TO RENDER THE MIRACLE OF UNITY.

This rule or principle is intended to have cosmological significance.⁶ Esoteric systems argue for a hierarchy of Worlds, or planes, from the lowest material realms to the highest spiritual existence, including the Godhead itself. By this maxim, there is a continuity of relationship running across all levels. But here a distinct question of interpretation arises. Generally speaking esotericists interpret this maxim as asserting a principle of correspondence, according to which things in the world that are similar in just about any way imaginable may influence one another. By implication, the esoteric adept may learn to use this correspondence to control or predict physical events. In other words, the maxim is seized upon (incorrectly as I shall argue) as a basis for various forms of sympathetic magic.

At this point we find Goodrick-Clarke’s concept of “scientized esotericism” (p. 234). This refers to “empirical engagement of traditional esotericism with the natural world,” i.e. to experiments carried out by esotericists which aim at proving empirically that such correspondences exist. He cites with enthusiasm, for example, alleged proofs of “nonlocal acausal” relations between planets and their “corresponding” metals (p. 238). According to Goodrick-Clarke, the German chemist Karl von Reichenbach (1788–1869) *showed that* “a new Odic force” was connected with water divination and other psychic phenomena. “Clairvoyant auras” discussed by esotericist C. W. Leadbeater were *empirically confirmed* as “magnetic radiations” (p. 241); and Homeopathic Medicine has offered *empirical proof* of its effectiveness (p. 242). With regard to the latter, Goodrick-Clarke makes the startling claim that “it posited a principle for which

there is no tangible evidence, yet its effects could be demonstrated.” (Apparently demonstration of a theory does not provide tangible evidence, or else there is no clear relation between the theory and the experimental results.)

It is not my place here to offer critiques of these sorts of claims. I leave it to the reader, if he or she so wishes, to follow out the various reports of proofs cited by Goodrick-Clarke. I would point out, however, that since concepts of “correspondence” as a means of understanding and controlling nature have been around for millennia, such as studying the entrails of animals for clues as to the weather or the result of a battle, or noting the flight of birds to tell the future, or wearing a certain crystal amulet to ward off disease, if these means were truly effective we would have known about it by now.

However, in my opinion such “scientized” empirical “proofs” are based on a muddled, naïve understanding of the notion of “correspondence” (bolstered by the desire for acquiring magical powers) and really have little or no relation to the substantive underlying significance of esoteric concepts. They are, rather, superficial metaphysicalizations of ideas that represent, in symbolic and often veiled form, one fundamental notion that can be exemplified by recalling our earlier discussion of the presence of the feminine in esoteric thought.

The principle of analogy, or the Hermetic maxim, is not in my view a license for concocting correspondence theories of all sorts and attempting to prove them empirically. This is because there is one single analogical relationship to which the maxim refers. Its esoteric expression lies in the “Law of the Tetragrammaton.” This law, in a more contemporary expression, is the idea that the entirety of creation is based on a particular dynamic process: the *synthesis of opposites* by means of energy, resulting in a change of level. Insofar as the world may be constituted by an evolutionary hierarchy, levels of that hierarchy develop out of one another both ascending and descending, producing a thoroughgoing nondualistic universe by means of the analogy of synthesis.

In a quite detailed account of this principle, esotericist Mouni Sadhu (actually Mieczysław Demetriusz Sudowski) makes clear that symbolically the opposites to be brought into relation by synthesis are represented by male and female elements (Sadhu, 1962:15–18). It follows that it is the *exclusion of the feminine creative principle*, the goddess if you will, by the patriarchal worldview, that stands in the way of a truly enlightened cosmology. I wish to devote the remainder of this review to a necessarily brief discussion of this concept.

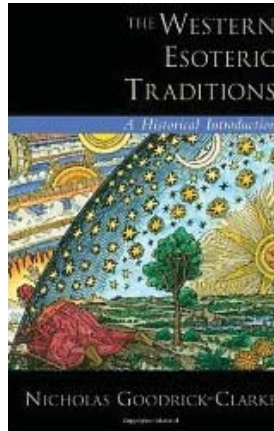




Figure 2. Creation through synthesis. (From an alchemical engraving.)

The “Law of the Tetragrammaton” or the Law of Four is exemplified by the geometrical symbol of a triangle with a dot or an eye in its center (Sadhu, 1962:19). Two apices of the triangle represent the opposites, and the third represents the reconciling factor, seen as a form of universal energy. The center dot, or the eye, indicates a change of level, something truly new, arising out of the process of synthesis. It is an image of creation. Figure 2 from an alchemical engraving illustrates this in human terms, where the union of opposites is the sexual embrace. As such, it bears, of course, a deep relationship to the fundamental imagery of Tantric Buddhism, as I have pointed out elsewhere (McDaniel, 2010a).

In Figure 2 we have the copulating male–female principles (points 1 and 2 of the triangle of synthesis), in the “alchemical vessel” which itself has cosmological significance as representing a requirement for containment.⁷ The third factor, energy of synthesis, is the fire of the alchemist’s oven (not shown in this particular image but inferred) which brings about the transformation. Above the couple, moving upward, is the child, the fruit of their union, i.e. the fourth factor representing a change of level. This entire process is one of creation and movement “upward.” The final and most important message behind this symbol is that because of the possibility of creativity, freedom results. Freedom in the image is represented by the open mouth of the vessel showing seed-pods, living things, emerging upward. In other alchemical images these are replaced by birds whose winged flight can take them upward. Such birds, usually doves, represent the spirit or the soul. Significantly it is through the synthesis of opposites that soul emerges.

How does this concept, based on the Maxim of Hermes Trismegistus as the analogy giving continuity to all levels of existence (i.e. matter, life, and mind), affect the science of cosmology? The fundamental dualistic schism is undoubtedly that of the brutal severance of consciousness from matter. What this principle indicates is that the universe cannot come into being, and cannot evolve, without the presence of both consciousness and matter at the turning-point of its origin. In other words, cognitive science can go nowhere as long as consciousness is thought either not to exist, or to exist only as a “supervening property” of matter when it reaches a certain stage of complexity. Instead, complex forms cannot evolve from less complex forms without the operation

of both consciousness and matter. Our “scientific” understanding of the world is incomplete. If, as philosopher Colin McGinn argues, physical limitations of our human brains will never allow us to integrate consciousness with matter, then indeed we are in a sad state with nowhere to go. But the message of esoteric philosophy is that the mouth of the vessel is open.

Notes

- ¹ A detailed discussion of the relation between the ancient tradition of the Mother–Goddess and the alchemical vessel with respect to the limitations of patriarchal consciousness stemming from denial of the creative feminine principle is to be found in Neumann (Neumann, 1963:57–63, 326).
- ² Figure 1 is from an engraving attributed to M. Merian and is found in Johannes Fabricius’ *Alchemy, The Medieval Alchemists and Their Royal Art*, p. 161 (Texas Bookman paperback, 1996). Note that the ray of lifegiving energy emerges from the solar breast. The creatrix here combines male and female elements indicated by the sun–moon emblems at her breasts, even as does the pairing Thoth–Maat.
- ³ There has been considerable speculation as to the meaning of the name *Trismegistus*. What is seldom, if ever, mentioned is that the goddess of the ancient Mediterranean, like the goddesses such as Maya–Shakti in India, are forever depicted as *triple*. For example, the triple godhead Brahma, Vishnu, and Shiva is complemented by the three consorts, Saraswati, Parvati, and Lakshmi, called together the Trimurti. The “Triple Hermes” thus exhibits the threefold character of the goddess.
- ⁴ It is my speculation that the early impressions of the 10-year-old later to become Madam Helena Blavatsky, who at that young age encountered a significant library of esoteric volumes in her home, overwhelmed her with a severe case of inflation which lasted her entire lifetime.
- ⁵ For Jung, “Symbol” with a capital “S” is differentiated from arbitrary symbol due to the former’s psychoactive property, which in turn is based on its capacity for activating the archetypal process of personal development.
- ⁶ I cannot resist the impulse here to cite one of the riddles in J. R. R. Tolkien’s *The Hobbit*. The riddle is “An eye in a blue face/saw an eye in a green face. That eye is like to this eye/But in a low place/Not in a high place,” the answer to which is “Sun on the daisies.” The image has a clear alchemical reference.
- ⁷ In McDaniel 2010a, I suggest that gravitational force is the initial facilitator of the requirement for containment. Without the gravitational “container,” forms are incapable of development.

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Electronic Voices: Contact with Another Dimension? by Anabela Cardoso. O Books, 2010. 236 pp. \$24.95 (paperback). ISBN 9781846943638.

This book is essentially a narrative of Anabela Cardoso's discovery of electronic voice phenomenon (EVP) and instrumental transcommunication (ITC), which are phenomena in which electronic devices are used for the purpose of communicating with the deceased. The author starts out with a few definitions and brief historical survey; then describes how she tried to help a bereaved mother by setting up ITC and EVP experiments in a room in her house; the developments that occurred as she continued her experimentation; her founding of the *ITC Journal*; and ends the book with several chapters in which she discusses the methods used, the substance of the information received, and the various issues that come up with this type of research. Cardoso should be lauded for the integrity, patience, and tenacity that she appears to have exhibited toward this subject matter over the course of many years. Although, as I explain below, I would like to have seen a more critical approach taken toward the subject matter, I do recommend this book for anyone interested in anomalous phenomena generally and the survival hypothesis specifically.

My main criticism is the lack of a sufficiently critical stance by Cardoso to these types of phenomena and the results of her experimentation. This begins with her uncritical acceptance of the canonical history of ITC research. For example, she fails to adequately review the criticisms against the EVP research

of the Latvian writer Konstantīns Raudīve. From the available evidence, it is reasonable to suppose that much of the meaning of the sounds that he captured on tape were projections of his own imagination (Barušs, 2001). Well, consideration of such pareidolia raises the obvious problem facing EVP, namely the constructive nature of acoustic perceptions. For instance, in psychology experiments in which a single syllable is played repeatedly to participants, they report a sequence of various phrases and words. This is known as the “verbal transformation effect” (Warren, 1968). Given that EVP researchers usually need to listen repeatedly to the same acoustic signals in order to understand their meaning, they would naturally be subject to the verbal transformation effect. For example, Cardoso says “Carlos and I listened to the recording but we could not understand with certainty the content of all the utterances besides ‘difícil’ and ‘outro mundo’. Nevertheless, we realized, without doubt, that something amazing had happened.” (p. 63). It took her several days and help from several other listeners to come up with a meaningful interpretation in Portuguese and Spanish including “a very odd syntactic construction in Portuguese” (p. 64). Elsewhere, Cardoso addresses this problem by saying that “it is the role of the serious, committed ITC researcher to differentiate between what carries real, objective meaning and what does not” (p. 192), but I feel that she could have applied that advice more scrupulously both to her own research and that of others. Nor do I find her appeal for the use of sound editing software an assurance, given that the software used to “clean the noise” (p. 186) presupposes that there is a signal amidst the noise in the first place, with the result that the sound editing software could intrinsically erroneously help to create the appearance of meaningful voices.

If, after taking the previous objections into consideration, EVP voices are sufficiently articulate and contain enough specific information, then they could be considered to be anomalous. What is “sufficient” and “enough” are matters of judgment, and, in the case of Cardoso’s EVP voices, David Fontana, in his Foreword to the book, says “The voices were clear, at normal volume, and beyond the possibility of any doubt. There was no sign of the faint, almost unintelligible voices obtained by some ITC experimenters” (p. 3). But even if these were anomalous voices, they cannot necessarily be attributed to deceased relatives, dogs, and so on, as Cardoso does. They could be the result of remote influencing on the part of those connected to the experiment. The author addresses the psychokinetic hypothesis, but considers it “to be the peak of absurdity” (p. 112).

We have to accept that the communicator takes the active role and the experimenter the passive role in producing communications, and this holds true even if we take the view that the experimenter in some way makes an active contri-

bution through the action of his/her mind on the radio or the recorder through the operation of some form of unconscious psychokinesis. (p. 154)

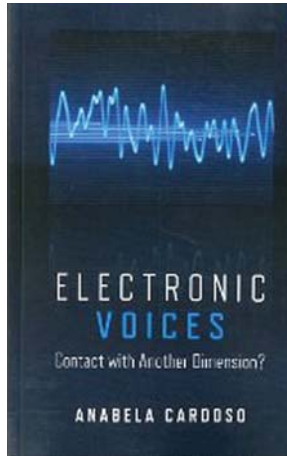
Cardoso insists on attributing the source of the voices to the deceased. If the voices were anomalous, then they are clearly the result of psychokinesis. But the question of agency remains—the living, the deceased, some other entity or natural process, or combination thereof.

To see why there could be a problem with the attribution of agency, let us consider an example given by Cardoso. Upon visiting Cardoso and in the presence of her equipment, Fontana said “Rio do Tempo, can you say ‘How are you?’” (p. 87), with the apparent result that “a loud, clear, perfectly formed masculine voice replied back, ‘How are you?’” (p. 88). If I had the same equipment running in my lab but this were labeled as an experiment in remote influencing, I would attribute the response to remote influencing and not to the activity of the deceased. Similarly, if a FieldREG goes high for me, then I interpret that as the presence of resonance, not as a message from the dead. Within a broader conceptual framework, ITC is just poltergeist activity with particularly nuanced manipulation of physical manifestation. And there are examples of poltergeist activity in which the living clearly appear to be initiating it. For instance, Cardoso appears to be unaware of the Philip experiment demonstrating the extent to which we, the living, can be the authors of poltergeist activity. In the early 1970s members of the Toronto Society for Psychological Research created a fictional character they named “Philip.” Subsequent rapping and table movements occurred during séances in which Philip correctly answered questions about himself. Essentially what happened was that the poltergeist phenomena mirrored the expectations of the participants in the experiment (Owen, 1976). Similarly, Cardoso’s electronic voices could be a reflection of information from those who are involved in her experiments. Cardoso’s counterargument would likely rest on the specificity of correct information about the deceased provided during the ITC sessions. But that just brings us back to the standard mediumship conundrum, namely, that correct information produced by a medium, or, in this case, by ITC, could be accounted for by the super-ESP hypothesis, and is not, of itself, proof of survival. In other words, the information contained in EVP need not be confined to the state of knowledge of those who are involved in Cardoso’s experiments. And the super-ESP hypothesis is not nearly as easy to discharge as it might at first appear to be (Braude, 2003). There is lots of evidence that we shape the substance of the experiences that we have, including anomalous experiences, and that evidence has to be adequately taken into account in any serious discussion of the meaning of EVP and ITC phenomena.

Placing agency back on the experimenter does not delimit the extent to

which our expectations can manifest in apparently objective form. The Toronto group considered the possibility that Philip was a *tulpa*, a thought form that they had created that had acquired objective existence. But then, if there is any truth to that contention, we must also consider the possibility that the apparent deceased relatives, dogs, and so on, that we encounter through ITC are thought forms that exist as somebody's or something's creation and not the living entities themselves that we think we are encountering (cf. Barušs, 1996).

Not only is it prudent to not jump to conclusions about who or what we have apparently contacted through ITC but it is also wise to critically evaluate whatever pronouncements we think we have received. Cardoso assumes that whatever she thinks she has heard must be true.



They convey to me the vision of a superior world much fairer than our own.
 . . . A world that, therefore, is 'closer to the truth', as communicators from Rio do Tempo have told me. (p. 84)

For instance, "My communicators tell us that the time of death is predetermined" (p. 100). Last fall, a medium whom I had invited to give a guest lecture in one of my classes, had a message for one of the students from the student's great-grandmother who had lived into her 90s before dying of old age: "You choose the time of your death." So who is right? Cardoso's "communicators" or my student's "great-grandmother"? During an ITC experiment that I conducted in my laboratory, the same medium had the impression that the level from which electronic apparatuses could be affected was analogous to a rough neighborhood in which one could get mugged (Barušs, 2007). Decent people do not go there. That leaves the pretenders, liars, stray thought forms, *astral goons*, et al., and the occasional brave relative who has no idea how to affect the radios, tape recorder, or whatever. There is no reason to suppose, even if we have made contact with someone or something at some other level of reality, that they know what they are talking about, even if they pretend that they do. It is reasonable to suppose that the deceased retain knowledge that they possessed during their lifetimes, but why should we expect them to suddenly be experts on matters, such as the timing of one's death, about which they likely knew little while they were alive (Barušs, 1996)? At this point Cardoso might argue that she has contact with Rio do Tempo, known as "Timestream in English"

(p. 78), which is supposed to be a transmitting station in the “next world” (p. 77), with nice, knowledgeable, dead people and entities sending the messages. But by now I think that I have made my point. There are numerous steps that need to be taken at each stage of the interpretation process, none of which is automatic. How much of the canonical history of EVP and ITC is fictional and how much of it can be trusted? Are we just listening to noise or are there really anomalous voices present? If there are anomalous voices present, are we creating them ourselves through super-psi and remote influencing, or is there some other source for them? If there is some other source for them, is that source just astral goons or is it deceased relatives, friends, dogs, and non-human intelligent beings? And if we are talking to whom we think we are, then how do we know that they know what they are talking about? I would like to have seen Cardoso put more serious effort into negotiating each of these steps.

I agree fully with Cardoso, whose own background is in the humanities (p. 173), that ITC requires robust scientific exploration. Something is happening, and we need to direct resources toward understanding it. The book itself is reasonably well-written and fairly clean in terms of editing. An index is necessary, though, for a book that is a serious presentation of its subject matter. Apparently there is a compact disc that is supposed to accompany this book which I did not receive and, hence, could not evaluate. In conclusion, I commend Anabela Cardoso for her investigations and for telling us about them! I just ask that she and other researchers please address adequately the points that I have raised.

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Manufacturing Depression: The Secret History of a Modern Disease by Gary Greenberg. Simon & Schuster, 2010. 448 pp. \$17.82 (hardcover), \$10.93 (paperback), \$9.99 (Kindle). ISBN 9781416569794.

Instructions on how to write a book review say that the reviewer must do three things:

1. Read the book—an obvious but not always followed first step.
2. Figure out what the writer is saying—an important and occasionally difficult step.
3. Formulate reactions to the book.

Reading *Manufacturing Depression* by Gary Greenberg was not, as is all too often the case, a difficult task. I found the book to be, for want of a better word, entertaining. Given that Greenberg is a seasoned journalist, contributing to such popular magazines as *Rolling Stone* and *Mother Jones*, that's hardly surprising.

But figuring out what he is saying was another matter entirely.

Granted, Greenberg does state up front that he is raising complex questions and goes so far as to warn the reader that his book will not end the confusion. As he explains it, "in part, that's because my subject is not the drugs so much as the condition they purport to treat, the disease of depression" (p. 7).

I'm OK with his starting off this way and usually I'm favorably impressed by writers who acknowledge complexity and refuse to fall back on easy answers.

We do, as he points out, live in a society in which "depression" is a hot topic with people arguing about what it means, wondering whether they are or are not depressed, and weighing the various treatment options. Conflicting messages abound.

His warning, however, did not prepare me for the magnitude of the confusion and the massive onslaught of mounting contradictions.

This level of befuddlement can't be attributed to the complexity of the topic, but seems, rather, to reflect the muddled mind of an author who chooses to speak at different times in different voices. Sometimes he's writing as a social critic investigating depression while at other times he's speaking as a patient battling his own depression or as a psychotherapist drawing on his experience in treating depressed patients.

When he's maintaining a reasonably detached critical tone, it's relatively easy to figure out what he's saying. In this voice, he's describing how we've come to redefine "unhappiness" and "discontent" as an illness called depression. He's telling stories about Kraepelin, Meyer, Freud, and "the shock doctors" and pulling together documented descriptions of young professions trying to achieve maturity, respect, and power. He's focusing on the co-reliance of psychiatry

with its ever-changing diagnostic (DSM) manual and the pharmaceutical industry with its ever-expanding pharmacopeia and explaining how this cooperation serves not to benefit patients but rather to expand the playing field for psychiatry and the financial gain for Pharma. And he's discounting the various attempts to make all of this appear scientific, including the various efforts to use brain scan technologies to prove that depression is tangible, measurable, and thus "real."

These arguments are familiar to anyone who has read other books challenging the "depression as a disease" model that permeates our society. Here they serve to raise, and give substance to, the questions Greenberg says are the complex topic of his book.

At the beginning of the book, this critical tone predominates. But soon, Greenberg assumes his role as a "real-life patient," who, while saying that he suffers from "depression," does and doesn't accept the diagnosis of depression. Here confusion seeps, and eventually floods, in. Informative, well-argued material becomes interspersed with, and eventually drowned out by, personal stories, doubts, inner conflicts, and fuzzy thinking.

This starts early on when, midway through the first chapter, he recounts an experience with depression that occurred some decades earlier, telling us later in the book how it was relieved through the use of the psychedelic drug Ecstasy (MDMA).

Starting in Chapter 3 and then repeatedly throughout the book, he talks about a recent (2006) episode of depression during which he volunteered to participate in a double-blind study on the effectiveness of an antidepressant drug. He announces that, having been diagnosed by a highly respected Harvard psychiatrist, he became at that time "an officially depressed person" (p. 38). Demonstrating disgruntled revelry, he recounts how he was upgraded from the "minor" to the "major" depression group and then bemoans the lack of attention paid by the researchers to his feelings and "interior life." This is a common complaint of patients and one that, in this context, demonstrates Greenberg's failure to appreciate how such conversation would serve to contaminate the research. After the study has ended he seems to be feeling better and wants to know whether that's because the drug worked. When the researchers refuse to tell him which group he was in, he becomes annoyed and eventually, when he discovers that he was receiving a placebo, he seems to think that cured him.

As he recounts his experiences as a patient/subject in this research, he portrays himself as something of an undercover sleuth who volunteered so that he could expose drug research for the sham he seems to believe it to be. And he takes on this sleuthing role for a second time when he tries out cognitive behavior therapy (CBT) and concludes that its benefits (whatever they may be) are sort of like the drugs and serve to support the notion that depressed patients are sick.

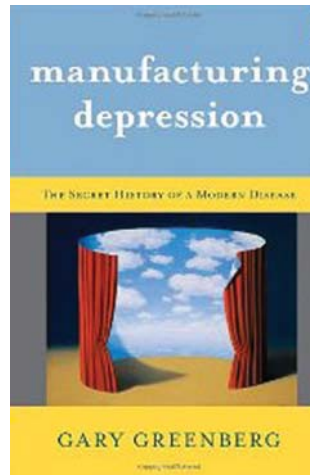
Near the end of the book Greenberg refers to another of his bouts of depression—this time claiming that a house renovation cured it—whether he thinks it was cured by the physical activity or the satisfaction he felt with the project or just by taking his mind off what was making him feel depressed is anybody’s guess.

In his third voice, that of a psychotherapist who speaks from his professional experience with severely disturbed (i.e. depressed) patients, the message is nothing short of mind-boggling. While taking on his therapeutic persona he condemns but apparently acquiesces to the demand for a diagnosis in order to be paid by insurance companies, wrestles with what he understands depression to be while suggesting that in many, or even in most, cases, depression may be an aspect of life to be examined and accepted rather than an illness to be treated.

At times he refers to his “major depression” as a “disease, ready to be coded on the insurance form” (p. 250), and writes that depression can “rightly be considered a disease that can be cured by drugs” (p. 23). Curiously this pronouncement comes only a few lines after he expresses his intention “to show you (the reader) how depression has been manufactured right before your eyes” (p. 23). Greenberg seems to see his depressed patients as ill and in need of treatment while at the same time casting them as individuals who have been led to believe that they are sick in order to benefit psychiatry and the drug company. He doesn’t deny that drugs work, and, in fact, he claims “I know, through my own experiences as both a therapist and . . . as an officially depressed person that drugs . . . do work” (p. 24). But then he qualifies (or confuses) the point by saying “although not necessarily the drugs that Pharma is selling,” a reference later clarified to refer to Ecstasy and LSD.

And he seems to believe that what he does as a psychotherapist (whatever that may be) is good though he has his doubts. At one point, contrasting what he does to what cognitive behavior therapists do, he says:

I’m always catching a case of self doubt. . . . I’m wondering if I’ve failed my patients and myself, if I’ve frittered away twenty-five years of my life and millions of their dollars by focusing on the tractors and the strawberries and all their possible meanings, by the inescapable and sometimes intentional inefficiencies of this method, by my nearly wilful avoidance of anything resembling accomplishing work, by my possibly blind and certainly unscientific



belief that the best we can do is to integrate all that we can of ourselves into a good story. . . (p. 297)

Greenberg talks on and on about depression, admitting that he doesn't know what to make of it (his or anyone else's); then, finally he tell us what to do. And what's his solution? Well, he claims that the closest to advice he's going to give is: "Whatever else you do, don't let the depression doctors make you sick" (p. 339). On the final pages he reiterates this advice; then, he ends the book saying:

Call your sorrow a disease or don't. Take drugs or don't. See a therapist or don't. But whatever you do when life drives you to your knees, which it is bound to do, maybe it is meant to do, don't settle for being sick in the brain. Remember that's just a story. You can tell your own story about your discontents, and my guess is that it will be better than the one that the depression doctors have manufactured. (p. 367)

Feeling confused? This is only a taste of the confusion and contradiction to be found between the covers of this book.

By the time I reached this point in writing the review I was utterly confused and sorely tempted to end on a one-word reaction—CONFUSED.

However the task of writing a book review requires a bit more. So, after clearing my head as best I could, I came back to the task of formulating reactions.

Manufacturing Depression is, I think, just one of a number of books that have appeared in recent years (several of these have been reviewed by me here)—all with a tediously similar storyline. Like this one, with its subtitle *The Secret History of a Modern Disease*, each claims to be uncovering a secret—saying something so entirely new and exciting that it's worthy of being called "news". Most do a reasonably good job, as does this one, of providing a critique of psychiatry, psychiatric diagnoses, and pharmaceutical cures.

But at some point each of these books veers off in the direction of the author's own bias.

In this instance, that bias is evident from near the beginning when Greenberg, having said that his book won't end the reader's confusion and attributes that, in part, to the complexity of the topic, goes on to say that it's also because "ongoing uncertainty is a hazard of reading a book by an old-fashioned psychotherapist like me . . ." (p. 7).

There he's hit his bias on the head. His views about depression (and about life) date back about half a century to the counterculture of 1960s and 1970s. That's when pop psychology was all the rage, psychedelic drugs were raising consciousness, and the idea took hold that life is "all about me." Everyone, it seemed, needed a bit of psychotherapy for, as the Polsters said, "Therapy is too

good to be limited to the sick” (Polster & Polster, 1973:7). Psychotherapists, of a humanistic bent, came to understand their job to be one of encouraging their patients to manufacture their own healing, narcissistic stories.

Greenberg, it seems, is a therapist/patient who believes deeply in the “mantra” of that by-gone era. And *Manufacturing Depression* isn’t so much a critique of depression in 21st-century society as it is a telling of his own personal story.

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Reference

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Karl Shuker’s Alien Zoo by Karl P. N. Shuker. CFZ (Centre for Fortean Zoology) Press, 2010. 392 pp. \$26.99, softcover. ISBN 9781905723621.

This book is an excellent introduction to cryptozoology as well as a feast for people already interested in the subject. There are interleaved chapters dealing on the one hand with specific topics in some depth, on the other hand with snippets of relevant news items from the years 1995 to 2010, arranged chronologically. The items are from columns Shuker wrote for *Fortean Times*, and several have been updated with more recent information.

The wide scope of cryptozoology is illustrated, and the approaches to specific subjects illuminate the inevitably interdisciplinary character of cryptozoological research: an inescapably needed background of zoological knowledge, plus sophisticated understanding of how to weigh different kinds of evidence, which ranges from actual specimens through photographs and paintings of (claimed) specimens through written reports from the most varied sources to, not least, eyewitness accounts.

That complexity calls for expert guidance, and Shuker is fully equipped to provide it, with a Ph.D. in zoology, membership in learned societies, and long fascination with and work in cryptozoology. Those credentials do not necessarily entail good judgment, of course, and in this vital respect Shuker is very trustworthy indeed. He is determinedly skeptical and his assessments are based squarely on empirical evidence. In cryptozoology as in anomalistics more broadly, the rarest and most desirable resources are compendia that can be relied upon to be factually accurate and judicious in making judgments. In those

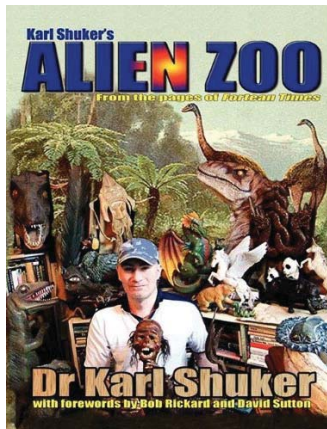
respects, I rate Shuker's works as highly as I (and others, of course) rate the works of Jerome Clark. As to specifically cryptozoology, Shuker's work inevitably reminds one of that of Bernard Heuvelmans, often described as the founder of cryptozoology and also a zoologist by orthodox training. Heuvelmans broke barriers and displayed the bravado needed by those who bring into existence some new institution or subject; Shuker displays the qualities needed by the successors who bring more order and judiciousness to the field.

Alien Zoo offers the pleasure of browsing in the knowledge that one will be able to enjoy it over a long time: Each of the "topic" chapters is an independent essay, and the collections of news snippets in each year or set of years can be taken in one or in several gulps.

The introductory essay, debunking a story published by a quite well-known writer on oddities of Nature, sets the stage appropriately by illustrating Shuker's diligent perseverance in tracking down evidence and then determinedly hewing to that evidence.

Over the years I've read quite widely in cryptozoology, yet I found new specifics here as well as welcome interpretations of more familiar subjects, for instance on the "mystery cats" reported from all sorts of places around the world. New to me were such things as angel feathers, bacteria reproducing in clouds, or the possible relationship between fruit bats and primates—the latter highly instructive about the complex task of tracing evolutionary lineages even in the era of DNA analysis.

I recommend *Alien Zoo* highly and without reservation. Readers should not neglect what looks at first like many pages of advertisements at the back of the book: On pp. 381–382 there is a list of other works by Shuker that those who appreciate *Alien Zoo* will then want to read, too. One of my own favorites is the 1995 *In Search of Prehistoric Survivors*.



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Articles of Interest

The Origin of Purportedly Pre-Columbian Mexican Crystal Skulls by Margaet Sax, Jane M. Walsh, Ian C. Freestone, Andrew H. Rankin, and Nigel D. Meeks. *Journal of Archaeological Science*, 35(10) (2008), 2751–2760.

Crystal Cranium by Owen Edwards. *Smithsonian*, 39(4) (2008), 20.

Legend of the Crystal Skulls: The Truth Behind Indiana Jones's Latest Quest by Jane MacClaren Walsh. *Archaeology*, 61(3) (May/June 2008), 36–41.

A carved-rock crystal, life-sized human skull of mysterious but allegedly ancient Mesoamerican origin and now housed in the British Museum has, over the years, had various mystical powers attributed to it (see, for example, Chris Morton and Ceri Louise Thomas, 2002 [1997], *The Mystery of the Crystal Skulls: Unlocking the Secrets of the Past, Present, and Future*, Rochester, VT: Bear & Company; David Hatcher Childress and Stephen S. Mehler, 2008, *The Crystal Skulls: Astonishing Portals to Man's Past*, Kempton, IL: Adventures Unlimited Press). The genuineness of the supposed pre-Columbian provenance of this sculpture, as well as of a second one held by the Smithsonian Institution—for which no proof has been ever been forthcoming—has been much debated. Now, a team has subjected the skulls to scientific examination. The researchers found that the carving was accomplished with the use of rotary wheels, which did not exist in pre-Columbian America, and that Carborundum, a modern synthetic abrasive, was used on at least the British skull. The material of the latter appears to have come from either Brazil or Madagascar, not Mexico; the quartz of the former could have originated in Mexico or the U.S. The British skull was made sometime before 1885, presumably in Europe, and the Smithsonian one probably in Mexico during the 1950s. The authors do not address the paranormal effects sometimes assigned to the skulls. Walsh has also studied other, less spectacular crystal skulls, numbers of which surfaced during the nineteenth century. She believes that many were made in Germany during the late nineteenth century. One, dubbed “The Skull of Doom,” appeared in 1943, and its owner claimed to have found it during the early 1920s, in a temple in British Honduras (Belize). The crystal of some skulls have inclusions characteristic of quartz occurrences in the Swiss Alps. In fact, for \$10,000 one may buy online a skull manufactured to order in Germany.

Follow the Kelp by Heather Pringle. *New Scientist*, 195(2616) (2007), 40–43.

Kelp Highways by Heather Pringle. *Discover* (June, 2008), 38–43.

In contrast to earlier scenarios of Ice Age hunters following big-game animals on foot across the then-dry Bering Strait into North America when sea levels were lower some 12,000 years ago, many archaeologists have recently come to favor an earlier initial human entry into the Western Hemisphere, via the Pacific littoral and employing boats. Science writer Pringle describes this developing theory and one of its researchers, Jon Erlandson of the University of Oregon, speaks of a trail of rare but distinctive dart points with flaring barbs that dot the Pacific Rim from Japan to Chile. This may reflect an 18,000–15,000-years-ago coastwise movement, although most of the potential evidence now lies deep underwater owing to post-Pleistocene sea-level rise. Much of the route would have paralleled a familiar and biotically productive offshore ecosystem, the “forest” of kelp seaweed. Southern Chile’s near-coast Monte Verde site dates to more than 14,000 years ago, and (as reported after Pringle’s article appeared) has yielded nine species of marine algae.

This vision of a maritime movement to America is but a part of the growing consciousness of very early human use of, and movement by means of, watercraft. Modern humans evolved in Africa some 200,000 years ago. Shellfish-gathering as old as 164,000 years has been identified in South Africa. Genetics indicates that people moved from Northeast Africa to the Arabian Peninsula as many as 70,000 years ago across the then-narrower Bab el Mandeb at the Red Sea’s mouth, spreading coastally eastward and across the Strait of Hormuz, ultimately reaching Australia by traversing Indonesia’s water gaps prior to 50,000 years ago. Humans settled islands well off Japan’s shores by 32,000 years ago (and, as the article fails to note, reached some of the islands of eastern Melanesia equally early). There are even indications that the pre-*sapiens* human *Homo erectus* arrived on the Indonesian island of Flores by water more than 800,000 years ago. In the New World, greater genetic diversity of coastal Native Americans supports the notion of the first entrants having been shoreline-dwellers. Although “Twenty years ago, most archaeologists would simply have laughed at the idea of Ice Age mariners colonizing the globe” (Pringle 2008:43), that is exactly the picture that is emerging.

Radiocarbon and DNA Evidence for a Pre-Columbian Introduction of Polynesian Chickens to Chile by Alice A. Storey, José Miguel Ramírez, Daniel Quiroz, David B. Burley, David J. Addison, Richard Walter, Atholl J. Anderson, Terry L. Hunt, J. Stephen Athens, Leon Huynen, and Elizabeth A. Mattisoo-Smith. *Proceedings of the National Academy of Sciences USA*, 104(25) (2007), 10, 335–339.

Most scholars have assumed that the chicken, a Southeast Asian domesticate, was absent in the pre-Columbian Americas. Now, Alice Storey's team of researchers from several countries has identified and analyzed bones from a minimum of five chickens in the near-coast site of El Arenal-1 on south-central Chile's Arauco Peninsula, in historic Mapuche Indian territory. The site was occupied between A.D. 700 and 1390, and a chicken-bone sample yielded a carbon-14 date of 622 ± 35 B.P., i.e. a calibrated date of A.D. 1321–1407. Mitochondrial DNA obtained from the bones proved to be identical to that of contemporaneous pre-Columbian chicken bones from Western Polynesia's American Samoa and Tonga, some 8,050 kilometers (5,000 mi.) away, and slightly different from mtDNA in bones from Hawaii, from Easter Island, from Yunnan in China, and from Vietnam. Chile's contemporary blue-egg-laying Araucana chicken, taken note of more than a half century ago by geographer Carl O. Sauer, appears to descend from the Polynesian breed. The mtDNA of later chickens from Easter and Hawaii resembled that of chickens from Indonesia's Lombok, from the Philippines, and from Thailand, suggesting two separate introductions of *Gallus gallus* into the Pacific islands—a suggestion first forwarded by George F. Carter in 1971 on linguistic grounds. Earliest archaeological dates for chickens in Oceania so far are from the Reef/Santa Cruz islands circa 3,000 years ago and from Vanuatu shortly afterward. Various cultural phenomena among the Mapuche also suggest Polynesian inputs, and undated chicken bones have been known of for some years.

In Search of the World's Most Ancient Mariners by Michael Balter. *Science*, 318(5849) (2007), 388–389.

Balter reports on a Cambridge conference on Global Origins and Development of Seafaring. There was disagreement among the conferees as to whether early crossings of Southeast Asian straits were accidental or purposeful. Because of the lack of comparable evidence elsewhere, many felt that Michael Morwood's

800,000+ B.P. *Homo erectus* tools on water-surrounded Flores (M. J. Morwood, P. B. O'Sullivan, F. Aziz, & A. Raza, Fission-track ages of stone tools on the East Indonesian Island of Flores, *Nature*, 392(6672) (1998), 173–176) represent a fluke, involving not maritime technology but, rather, accidental drift on floating natural rafts of vegetation; modern humans did not cross the water gaps of Wallacea from Sunda to Sahul until 50,000 or 60,000 Y.A. Accidental drifts on family-operated bamboo rafts might have been adequate to establish minimum viable populations of from five to ten persons. About 30,000 Y.A., people of Sahul developed the watercraft and the navigational ability to colonize the islands of Near Oceania. Island colonization in the Mediterranean has been thought to have occurred much later (ca. 13,000 Y.A.), perhaps because this much-less-productive water body did not encourage the development of sea-going (but recent discoveries put human occupation of Crete at more than 130,000 Y.A.).

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