

GUEST EDITORIAL

On Wolverines and Epistemological Totalitarianism^{1,2}

BY ETZEL CARDEÑA

Whoever undertakes to set himself up as a judge of Truth and Knowledge is shipwrecked by the laughter of the gods.

Albert Einstein

And fashionable madmen raise
Their pedantic boring cry
From *Lullaby* by W. H. Auden

While strolling with my beloved in the local zoo, we came across a shortish, furry brown fellow who engaged our sight and seemed to want to play with us, albeit at a distance. He was friendlier even than the acknowledged local clowns (i.e., the bears) and surprise followed surprise as we read that this guy belonged to the ferocious wolverine species. Could this same jolly creature be one who would promptly dispatch us, much larger animals, if he were not fed for a while? Thinking about these seemingly contradictory views of one and the same being and of how reality is always more complicated than our models of it, I had the insight that what mostly afflicts “skepticism” is the inability to tolerate complexity and even seemingly contradictory but valid views about a phenomenon. I write “skepticism” in quotation marks to differentiate the epistemological absolutism that pervades both the strident anti- and pro-psi proponents from what I consider a healthy abeyance from fully committing to a final position in science or other aspects of life. I contend that although the person in a “new age fair” trading in everything from magical rocks to mysterious odors may seem to be the counterpoint of, say, the arch-skeptic academic who a priori declares psi impossible, they are both afflicted with the same inability to assimilate contradictory information and tolerate ambiguity; it is only their axioms that differ. And even those may not be that different, as evidenced by superficial materialism and superficial spiritualism (Cardena, 2010). Consider Humphrey’s comments (1995, p. 54) that “materialism is to all intents and purposes the fact of life” no matter how contentious that concept of “matter” is in physics and philosophy (e.g., Wigner, 1969), and

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² This editorial is dedicated to the memory of the maestro José Sobrino, a very good piano teacher and composer, and an even better human being, who left us recently.

that of a Brazilian medium who reported that after death there is food, the same as here, just better-tasting (cf. Playfair, 2010). For both, nothing else seems to exist but “material things,” the only difference being that for the second, they continue after death.

The main thesis of this editorial is that although the rhetoric of the aggressive psi critic, the all-believing psi proponent, or the New-Ager would seem to be, pun intended, universes apart, they both reveal an epistemological totalitarianism that assumes an all-knowing apprehension about the nature of reality, intolerance for complexity and ambiguity, and an indictment of anyone not sharing that view.

Now let me discuss the differences between the respectable skeptic and the “skeptic.” The former is a person who is inclined to question accepted opinions, including those offered by “authorities,” scientific or otherwise, and those stemming from one’s own preconceptions. This attitude undergirds the scientific attitude toward epistemology, which divorced itself from pronouncements coming from way back (as in Aristotle’s statements about the number of teeth found in a horse) or way up high (as in texts inspired by the religious or academic higher echelons). Here are two examples of this very healthy stance. The editors for the issue of the *Journal for Personality and Social Psychology* that published the recent series of studies on precognition by Daryl Bem wrote that they found the results “extremely puzzling [but] our obligation as journal editors is not to endorse particular hypotheses, but to advance and stimulate science through a rigorous review process” (Judd & Gawronski, 2011, p. 406). Also, Carl Sagan’s principled refusal to sign a letter against astrology not because he felt “that astrology has any validity whatever, but because I felt and still feel that the tone of the statement is authoritarian ... That we can think of no mechanism for astrology is relevant but unconvincing. No mechanism was known, for example, for continental drift.” He also questioned whether the signatories had any expertise on the matter and concluded that “we can question whether they have the right to state that ‘there is no scientific foundation for (astrological) tenets’ without having done the necessary homework” (in Gauquelin, 1983, p. 5).

In contrast, the “**skeptic**” is **simplistic** and **knowledge-adverse**, ensures that other perspectives cannot be considered, is **pejorative** toward his/her antagonists, aims to **terrify** others, holds **inconsistent** standards, and uses **circular** reasoning. In what follows, although I will refer to specific authors to make my points, my criticism is against a way of thinking found in both pro- and anti-psi stances rather than against particular individuals or conclusions about psi. Thus, I expect that this piece will make a number of readers uncomfortable, but hopefully will encourage reflection on the danger of endorsing any simple solution to our topic.

1) Simplistic

“Skeptics,” notwithstanding their surface differences, are convinced that they have found a single explanation for everything, be it materialist

metaphysics, evolutionary theory, the action of psi in every event, or the world of the spirits and angels, and refuse to consider complexity and uncertainty. Isaac Asimov (1987) was insightful in his analysis of “pseudoscience” as providing “a security blanket, a thumb to suck” instead of the uncertainty and insecurity of science, but failed to extend it to those who use science for these same purposes. In a scolding rebuke to the latter, Marilyn Robison (2010) discusses how the issue is not that broad theories such as evolution are wrong, but that they do not explain everything and are often used to underpin metaphysical commitments rather than scientific explanations, what the eminent evolutionary biologist Richard C. Lewontin calls “evolutionism” (2005). He also (1994) pointed out how biology, dependent on so many complex phenomena plus a sprinkling of randomness, might be considered more an interpretative discipline than an “exact” science, a perspective missing in so many psychologists and philosophers like Dawkins, Dennett, and Pinker, cloaking themselves with the mantle of an all-explaining evolutionary theory.

An equally all-encompassing (and as unfalsifiable as some functionalist evolutionary accounts) stance, although parting from a different metaphysical point, involves such ideas as the New Age *The Secret* (Byrne, 2006), which propose that positive thinking will transform reality. While there is some truth to the idea that attitudes and beliefs can have some effect on the self and others’ experience and physiology (Cardena & Cousins, 2010), to pass it as an all-powerful force makes a mockery of, among others, the victims of massacres and other forms of violence throughout history who, we should assume, were not thinking positively enough about themselves and their children.

“Skeptic” treatises are rife with other forms of oversimplification. For instance, Humphrey (1995) describes a monolithic science and states that “Most people most of the time actually behave as if they were thoroughgoing materialists” (p. 55), apparently not realizing that individuals may hold as valid *simultaneously* the reality of a world of objects and of seemingly nonmaterial forces, as the cross-cultural phenomena of shamanism, mysticism, and others exemplify (Cardena, Lynn, & Krippner, 2000). Grossman (in Carter, 2010, p. x) also describes a monolithic science that “has in fact already established that consciousness can exist independent of the brain and that materialism is therefore empirically false.” Predictably his and Humphrey’s “sciences” arrive at opposite conclusions. A similar certainty about science is found in a theory of survival which states that “The reality of living spirits will no longer fall outside of science, *it will be required by science* (my emphasis)” (Schwartz & Russek, 1990). However, even the “mainstream” psychology I work with is not at all how these authors portray it. For every theory I know (including some in the “harder” sciences like biology and physics) there are knowledgeable people who vehemently disagree about the evidential value of different pieces of research, how to interpret them, and so on. Of course, the latter

is not a foreign idea at all to the philosophy and sociology of science (e.g., Lakatos & Musgrave, 1970).

2) Knowledge-averse

“Skeptics” do not need to read anything that runs counter to their beliefs because they already **know**. Thus, not even minimal rules of academic scholarship count. Humphrey (1985) provides an example of this attitude in a book written, ironically, while he held an endowment created to research psi phenomena. In it he shows that he is well-read in literature and philosophy, yet when it comes to the major theme in his book, psi phenomena, he only included slightly more than 10 references to psi research, most of them having to do with beliefs and attitudes, rather than with testing the validity of psi phenomena. An undergraduate thesis with about 10 references on its central topic would be unlikely to get a passing grade in my university. The same practice is followed by some psi proponents (e.g., Playfair, 2010) that fail to cover the relevant literature and give due credit to reasonable, alternative explanations, not to mention the many popular books that do not include even a single reference. In contrast, in a recent book evaluating the worth (or not) of most skeptical criticism of psi, McLuhan (2010) analyzed hundreds of publications for and against psi, discussing the merits of both sides. Besides the failure to conduct the typical first stage of a research project, namely doing a good literature review, Krippner (2010) provides a number of examples in which critics blatantly misrepresented his research (e.g., Zusne & Jones) and even failed to correct their mistakes after they had been pointed out to them (e.g., Hansel).

3) Ensures That an Alternative Perspective Will Not Be Listened To

Contrary to the free discourse of ideas propounded by John Stuart Mill and others, the “skeptic” wants to eliminate the existence of alternate positions. For instance, in his op-ed, the cognitive scientist Douglas Hofstadter (2011) blasted the editors of the prestigious *Journal of Personality and Social Psychology* for allowing an article on research in precognition, which had undergone appropriate peer-review, to be published, and concluded that it should have been ignored and denied publication. A similar type of censorship was attempted by physicists Antony Valentini and Mike Towler, who initially disinvited Nobel prize-winner Brian Josephson and physicist David Peat to a conference discussing the work of David Bohm because of their interest in, respectively, psi and synchronicity (Reisz, 2010). Ironically, Bohm himself endorsed the reality of psi and got an award from the American Society for Psychical Research.

Although I am not aware of similar egregious forms of censorship carried out by parapsychologists, a recent anthology on the possibility of survival (Storm & Thalbourne, 2006) did not include a single chapter that would provide an informed alternative to the position of the survival of

consciousness. Along similar lines, in a closed list on survival research some of us get periodically chastised for expressing doubts about its reality, never mind that such knowledgeable authors as Gauld (1982) have a very difficult time reaching closure or clarity on what the relevant research means, even while accepting that there is a good case to be made for anomalous cognition in this area. And popular New Age books often fail completely to discuss alternative or supplementary explanations to their tenets.

4) Pejorative

Although the attacks by “skeptics” against parapsychologists have not reached the extreme of comparing them to Hitler, as Frederick Crews did to Freud (in Begley, 1994), questions about personal integrity, intelligence, and even personal insults have been the order of the day. Richard Dawkins (1998), while showing no evidence that he had actually read parapsychology research, called psi “bunk” and those who “[t]ry to sell it to us fakes and charlatans, and some of them have grown rich and fat.” Although in this and in other areas there have been and continue to be people who engage in fraud for personal gain, last time I checked with parapsychology researchers, I could not find anyone who would be considered wealthy, and their waists did not evidence a greater voluminosity than typically found in academic circles.

Hofstadter (2011), with unrestrained nastiness, called anyone endorsing or doing research on psi “crazy” and “crackpot.” Thus, he must consider “crackpots” at least nine previous Nobel prizewinners in physics, medicine, and other disciplines (Marie Curie, Lord Rayleigh, Joseph John Thomson, Santiago Ramón y Cajal, Maurice Maeterlinck, Charles Richet, W. B. Yeats, Henri Bergson, Nicholas Murray Butler, and Brian Josephson), towering figures in psychology including William James and H. J. Eysenck, along with at least two past American Psychological Association presidents (James and Gardner Murphy) and current faculty members at such bastions of “craziness” as Cambridge University, the University of London, Edinburgh University, Princeton University, Cornell University, the University of California, and Lund University. And of course he claims to know more physics than Einstein (and Nobel prizewinner in physics Brian Josephson, who supports the validity of psi phenomena), who wrote that “we have no right to rule out a priori the possibility of telepathy. For that the foundations of our science are too uncertain and incomplete” (1946, in Ehrenwald, 1978, p. 138).

Going one pejorative step farther, Ganoe and Kirwan (1984) described research on psi as pseudoscience and “horse manure” (p. 376), and Eric-Jan Wagenmakers evidenced this scatological inclination by commenting about Bem’s research that “It shouldn’t be difficult to do one proper experiment and not nine crappy experiments” (in Kols, 2011).

On the “other side,” we have the contempt of Grossman (in Carter, 2010) stating that whoever holds a materialist perspective is not “a

responsible investigator” and is dogmatic and “irrational.” He also stated that those who succeed academically do so not on the grounds of “talent, but mostly on competition, self-promotion, and so forth.” He also implies that anyone disagreeing with his conclusion has not accepted the primacy of love. I have encountered in other venues the similar idea that holding a materialist perspective necessarily implies that such an individual cannot be ethical, find meaning in life, or be a “nice person.” As an antidote to that assumption, here are the beautiful words of Bruce Frederick Cummings (nom de plume Barbellion), who had no trouble expressing the sacredness of life without requiring an afterlife in his *Journal of a Disappointed Man* (1920, p. 72).

To me the honour is sufficient of belonging to the universe—such a great universe, and so grand a scheme of things. Not even Death can rob me of that honour. When I am dead, you can boil me, burn me, drown me, scatter me—but you cannot destroy me: my little atoms would merely deride such heavy vengeance. Death can do no more than kill you.

5) Terrifies Others

One of the central principles of contemporary politics is that it pays to fear-monger so your audience will become terrified and flock in panic to you so you can rescue them from such threats. Just such a rhetorical strategy is used by Hofstadter (2011), who writes, without giving a scintilla of evidence supporting his contention, that publishing Bem’s studies on precognition goes “against the laws of physics as we know them [and] ... our entire scientific worldview would be toppled ... and we would have to rethink everything about the nature of the universe.” Really? This must be news to some physicists, including David Bohm, Brian Josephson, and emeritus dean of the Princeton School of Engineering Robert Jahn, who have written about the reality of psi phenomena without fleeing to a cave to wait for the imminent collapse of science as we know it. It is also worthy of remark that pronouncements about psi phenomena breaking the laws of physics a la Hofstadter typically fail to mention just what laws are being broken and in what way. For instead, consider that backward causation is both a recognized theory in physics (Sheehan, 2006) and compatible with the precognition data reported by Bem and others.

I could not think of similar fear-mongering by pro-psi authors, but in the New Age literature we are of course living just one year before 2012, the year that according to the interpretation by some of the Mayan calendar the whole world will end, although perhaps not for those who become spiritual enough to escape that fate. By the way, being Mexican, I have friends with Mayan roots, all of whom seem to be, amazingly enough, unconcerned about this imminent debacle.

6) Inconsistent

The scientific process has a number of features that guard it against blatant authoritarianism and prejudice, among them the assumption that evidence trumps authority and that one's hypotheses should be put to the test not only by ourselves but by others who do not share our perspective. These safeguards are to be applied consistently by all players, but the "skeptic" frequently disregards the rules. As Robinson (2010, pp. 2, 33) writes, parascience (her term for scientism) "claims the authority of science [without practicing] the self-discipline or self-criticism for which science is distinguished ... [and presumes that it] has given us knowledge sufficient to allow us to answer certain essential questions about the nature of reality, if only by dismissing them." Consider a recent review of a book on neurobiological aspects of people claiming psi abilities. In it, Hughes (2010) chastises the authors for "casting aspersions" on "useful science" yet has no problem in stating that psi phenomena "do not exist in a way that can be seen, heard, felt, witnessed, or recorded *by a disinterested observer* [my emphasis]," failing to follow his own advice about aspersions. He also writes that the authors need to "acquire higher standards of epistemology," yet has no compunction in citing a meta-analysis of psi research (Milton & Wiseman, 1999) while failing to mention both the criticisms against various aspects of that study (Bem, Palmer, & Broughton, 2001) and a more comprehensive and recent meta-analysis (Storm, Tressoldi, & Di Risio, 2010).

Zingrone (2004) has documented many instances in which critics of parapsychology have failed to follow the standards they demand, whether rightly or wrongly, from psi research. She presents examples in which a number of "skeptics," including James Alcock, present alternative explanations to psi that either are irrelevant or that they themselves do not test (the published research records of a number of critics of psi methodology, including those of Alcock, Hansel, and Hyman, are noticeably thin, as evidenced by the PscInfo database), and they are uncritical of the sources of their "data," including "anecdotes" whose use they criticize in the pro-psi literature. They also show lack of self-evaluation and criticism of their own arguments, while being thoroughly critical of those offered by parapsychologists. A more recent example documenting unscientific standards by "skeptics" is an analysis of Martin Gardner's attack of the research on the famous medium Mrs. Piper, which describes his blatant misrepresentation of the actual research (Taylor, 2010).

One point on which I agree with Hughes, though, is that some authors writing on parapsychology, spirituality, or similar topics are inconsistent in decrying mainstream science and the scientific method while at the same time using, admiring, and quoting scientific research data that may be interpreted as supporting their ideology. Grossman's (in Carter, 2010) claim that science has proved his conclusion while simultaneously blasting academia is an example of this tendency.

7) Circular and Other Forms of Specious Reasoning

Implicit in many of the examples discussed above is circular reasoning, which helps the “skeptic” retain its certainty. Thus, Grossman (in Carter, 2010) states that whoever holds a materialist perspective is not “a responsible investigator.” How does he know? Well, because whoever is a responsible investigator does not hold a materialist perspective. Similarly, for Hofstadter (2011) anyone supporting psi is a crackpot. How does he know? Because only crackpots would support psi ... And there are other types of vicious circles. When aiming to appear reasonable, a critic may write that “it might be worthwhile to allocate some resources toward seeing whether these findings [on anomalous cognition] can be independently replicated” (Hyman, 1995) and some years later state that it is “craziness ... an embarrassment for the entire field” when a collection of studies replicating each other and previous studies is published (Hyman, in Carey, 2011).

A different kind of circular reasoning is the “abuse” that Wagenmakers and collaborators (2011) make of Bayesian statistics in which the probability of psi is given as 10^{-20} . In context, this means that at the same time that evidence is demanded for the validity of psi, that evidence is invalidated a priori (for a rebuttal to Wagenmakers et al., see Bem, Utts, & Johnson, in press). Even Humphrey (1995, p. 75) does not buy the goods offered by Wagenmakers and coauthors: “It is important, however, that we play this fairly and do not load the dice against the paranormal ... we must be careful not to prejudge the issue of ‘fishiness’ [or experimental or statistical competence, I may add] by presuming that the very fact that a paranormal phenomenon would contravene normal laws is proof that it cannot have occurred.” One final example is by Samuel Moulton (2011), who criticized parapsychology for not publishing negative results, yet when he was asked why he had not published his failures to replicate, a standard practice in parapsychology, he replied that his studies were not that interesting and that anyway he would not publish in a parapsychology journal.

With regard to proponents of psi, although I do believe that there are such things as decline and experimenter effects (Irwin & Watt, 2007), and not only in research on psi (cf. Schooler, 2011), I am sympathetic to the argument of some critics that such research is sometimes interpreted as supportive for it no matter what the actual results, and that all fishing expeditions for anomalies in data should be launched, rather than considering that some studies may just not show evidence of psi phenomena (Alcock, 2003). Failures to replicate in parapsychology, especially considering the very low statistical power of most projects, are not egregiously damning considering that accepted phenomena in mainstream psychology and other disciplines also show a far from perfect replication record (see Bem, 2011, for a discussion and references on this issue).

From “The Secret” type of New Age theories, one encounters a different form of circular reasoning: If people want something hard

enough, they will get it. If they do not, well, it is because they consciously or unconsciously did not want it enough.

I will now leave the “skeptic” to its certainty and give some words to the far humbler and more open perspective of William James. He wrote that (1956/1897, p. ix), “There is no possible point of view from which the world can appear an absolutely single fact.” The courage to assume that one’s perspective is not likely to explain all observations also underlies Henry Sidgwick’s idea of the *tertium quid*, or the residue of unexplained phenomena in different areas of enquiry (Gauld, 1968). Yes, many reputed psi phenomena can be explained by failures in reasoning or fraud, yet there have always been observations and experimental results that could not be clarified by these either/or theories, and for which at this point we have the right to hold psi as a valid explanation. Furthermore, the cognitive and emotional ability to tolerate ambiguity, remain open to other possibilities, and attend to the “unclassified residuum” (James, 1956) can stimulate new forms of expression, ideas, and discoveries in both the arts and science (cf. Koestler, 1964).

To come back to the wolverine at the beginning of this article, he is not only a ferocious, deadly creature or a playful guy, but both and much more. To reduce him to either a “red of fang and claw” or a cute Disney creature fails to approach him in all his complexity. As some spiritual, phenomenological (Braud, 2011), and scientific (cf. Keller, 1983) traditions maintain, the cognitive and emotional openness to encounter phenomena as they are may reveal more of reality than the imposition of a priori models. To understand wolverines, and the world in general, we should reject self-indulgent epistemological totalitarianism and let ourselves be seduced by the melancholy whisper of uncertainty.

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