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EDITORIAL

The Need for Negativity

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Several of my recent Editorials have dealt with terminological/conceptual errors and confusions that have been all too prevalent among psi researchers. In this Editorial, I want to consider a related issue often raised about parapsychological concepts and explanation.

Probably we've all heard the complaint that parapsychology's core concepts have been defined only negatively, with respect to our present level of ignorance—for example, taking "telepathy" to be "the causal influence of one mind on another independently of the *known* senses." Perhaps some of you have even expressed that complaint yourselves. Of course, the assumption underlying those complaints is that this definitional strategy is a problem. However, it seems like a perfectly reasonable procedure to me, and I can easily accept the possibility that we might eventually learn enough about phenomena so defined that we can later construct better, detailed, and more informative analytical definitions.

But at least as far as psi research is concerned, I consider it presumptuous—at our present (and considerable) level of ignorance—to proceed any other way. We hardly have the barest hint, based on all the available data, as to what psi is doing in the world (i.e., both inside and outside the lab). In fact, formal, experimental evidence has been particularly unilluminating. It has barely succeeded, if it's succeeded at all, in convincing parapsychological fence-sitters that there are any genuine paranormal phenomena to study (I've explored some reasons for this in Braude, 1997). And it certainly hasn't shed light on how pervasive, extensive, and refined psi effects might be, or whether effects

of radically different magnitudes would be the result of substantially different processes. At best, typical quantitative research examines only straitjacketed expressions of phenomena that non-laboratory evidence suggests occur more impressively (if not flamboyantly) "in the wild." So it strikes me as appropriately modest and circumspect to define "PK" (for example) as "the effect of an organism on a region *r* of the physical world without any known sort of physical interaction between the organism's body and *r*." (For additional specific parapsychological definitions, see Braude, 2002).

Philosopher Michael Scriven addressed this topic very sensibly back in the 1970s (Scriven, 1976). Among other things, and focusing more specifically on the topic of scientific explanation, he argued (plausibly) that so-called negative definitions are still substantive. Scriven wrote,

> . . . let us briefly consider another of the puzzles about explanation and ESP. Richard Robinson once complained that parapsychologists thought they were explaining something by labelling it "telepathy," whereas, he said, labelling something "telepathy" is simply to say that it cannot be explained. Here's another example of an attempt to dispose of the supernatural or the parapsychological by a piece of logical legerdemain. Again, it will illustrate the extent to which a better understanding of the theory of explanation can enable one to cope with apparent conceptual difficulties in this area. Contrary to Robinson's view, it is—in certain contexts—perfectly appropriate for somebody to offer as an explanation of a puzzling phenomenon the hypothesis that it is due to telepathy; by this he or she means to convey the fact that transfer of information is occurring other than by the typical means, and the existence of this information in the mind of some individual associated with the experimenter is a necessary condition for success. There is plenty of meat in this hypothesis—meat that can be tested. For example, it denies that ordinary sensory transfer is occurring, and it denies that clairvoyance would be an adequate explanation of the events. On the other hand, of course, it does not provide a theory of telepathy itself. To explain a remarkable performance by a stage mentalist, by saying that he memorizes a list of key words, may be perfectly legitimate, even though one cannot give an explanation of the phenomenon of memory. Explanations all come to an end; explanations all leave other things unexplained. Explanations [in terms of] telepathy are perfectly legitimate, even though telepathy is not explained. (Scriven, 1976, p. 193)

It might help here[1] to remember that science started with, and has always been driven by, the desire to explain what we've already and undeniably observed to occur. In fact, it's easy to rattle off long lists of phenomena we've both named and ascertained to be genuine before we had—or before we at least settled on—a theory as to why or how they occurred. Consider, for example, lightning, thunder, heat, rain, earthquakes, sunrise and sunset, lunar cycles, tides, magnetism, organic growth and development, aging, tooth decay, inherited characteristics, memory, pain, the surprising and anomalous skills of savants, and hair loss (some of these we still don't know how to explain).

Of course, our interpretations of these phenomena have occasionally changed in the process of trying to make sense of them. And so sometimes our explanatory efforts lead to a change both in our concepts and in our labels for the phenomena. For example, what previously would have been considered demonic possession might now be classified as a dissociative disorder. But in other cases, we retain our original vocabulary. The phenomena once called earthquakes are still called earthquakes even though we can now explain them in terms, like *plate subduction*, that were previously not part of our conceptual arsenal. And of course, before we had the insights of plate tectonics at our disposal, we had no qualms about claiming that the collapse of buildings was caused by an earthquake.

But the crucial point here is that our explanatory uncertainty was never a barrier to forming and using the concepts in the meantime, even if that meant we had to define the concepts for a while with respect to some level of ignorance. And we're usually content with that because we know that as science proceeds, we usually find new ways of systematizing observed regularities and drawing explanatory links between them and other things we observe or believe about the world. We knew that objects burned in combustion, whether we explained what we observed with respect to phlogiston or oxygen. Various symptoms of disease and ill health have been recognized for millennia, whether those conditions were explained in terms of imbalance of bodily humors, demonic influence, or micro-organisms. Even very unusual phenomena, such as instances of exceptional ("photographic") memory and the appearance of musical or mathematical prodigies and savants, occur indisputably, even though we're still struggling to explain them.

But no matter how we characterized and organized these occurrences and tried to connect them with other items in experience, we had concepts to operate with, for which we sought scientifically satisfying analysis, but which in the meantime we couldn't define analytically.

Furthermore, the complaint that parapsychological terms are only defined negatively seems to rest on a perniciously naïve tacit assumption—namely, that any phenomenon worthy of scientific attention must have an *analysis*, and in particular, an analysis in terms of respectable and presumably lower-level phenomena (e.g., explaining heat in terms of molecular motion, or earthquakes in terms of plate tectonics). But that seems to require that psi phenomena, and mental and behavioral phenomena generally, can't be irreducible or basic.

As I've remarked elsewhere (no doubt ad nauseum), most scientists wittingly or unwittingly subscribe to what I've called the *small-is-beautiful assumption*. According to that assumption, there can't be unanalyzable phenomena or facts at the observable level. But this is not only indefensible, it's downright peculiar. Scientists agree, reasonably, that explanation by analysis (i.e., into constitutive lower-level processes) can't continue indefinitely. In other words, they admit that some processes and regularities in nature are primitive in the sense that we can't go behind or beneath them and profitably ask *how* they occur. *That* they occur is simply a basic fact about the way the universe works, and there are no deeper (lower-level) corresponding regularities that explain why. Put another way, we can't always expect a general and context-independent answer to the question: How is phenomenon *P* possible? Some things simply *are* possible. Moreover, by acknowledging this we can avoid positing an infinite regress of analytical explanations and arrive at one kind of scientific ground level.

Now so far, this is fine; there's no problem in holding that some facts or regularities in nature should be considered unanalyzable. However, most scientists go further and assume that these fundamental regularities can exist only at the level of the very small—say, the atomic, microscopic, biochemical, or neurological level, and never (say) at the level of observable behavior. But that's simply an assumption, not an empirically established fact, and I believe anti-mechanists have marshaled powerful arguments against it.

Moreover, stopping the search for vertical explanation at this point is neither unscientific nor a failure in understanding. In fact, it's a *victory* of understanding to figure out where analysis comes to an end and where regularities can't be analyzed further in terms of more primitive constitutive processes. Besides, not all explanation stops once we identify unanalyzable phenomena; only vertical explanation (explanation by analysis) grinds to a halt. Scientific explanations take many forms; explanation in terms of lower-level processes is only one of them.

Scriven's comments in this connection are also worth quoting. They concern what he called "the doctrine of explanation by assimilation."

> The proper first move in the scientific explanation of a novel phenomenon is reduction of it to pre-existing and well-understood ones. But of course this does not always work—it can never always work since there has to be at least one basic phenomenon for which it will not work. We are facing a situation in physics and parapsychology where it may fail on an unprecedented scale. But that is no limitation of science, only of simplicity. What is irreducible is not thereby inexplicable. This situation may require us to turn from "vertical explanation" (derivation) to "horizontal explanation" (analogy, correlation, etc.); but we may finally and correctly come to understand the new phenomena, the old supernatural, just as well as any other fundamental phenomenon. (Screven, 1976, p. 194)

So I suggest we ignore the tired skeptical complaint that parapsychology is hobbled by its reliance on so-called negative definitions. The complaint is naïve and shallow, no matter how loudly or frequently some parapsychologists and psi-skeptics express it. As Mark Twain once noted: "Noise proves nothing; often a hen who has merely laid an egg cackles as if she had laid an asteroid."

NOTE

[1] As I've pointed out elsewhere (Braude, 2007) in connection with astrology.

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