

Interactionist Substance-Dualism and Parapsychological Phenomena

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The mind-body problem, or the question of whether minds and mental contents should be a fundamental part of our ontology, is a very basic issue in any philosophy (see Smythies and Beloff, 1961, Madell, 1988, Churchland, 1988, Lockwood, 1989, Dennett, 1991, Penrose, 1991, Hodgson, 1991, Robinson 1993). Parapsychology has had a special relationship with this problem, because it is commonly (though not unanimously) thought that it is the only branch of science which actively supports a dualistic world-view. John Beloff (1985) has argued that the existence of psychic phenomena would support dualism.

Specifically, he argues that physicalistic theories (such as Marshall, 1960, Dobbs, 1967) of the psi process are "non-starters because they concentrate on the energetics ... while ignoring its even more intractable informational aspects" (Beloff, 1970). Two specific problems of this nature are presented in his papers. I would like to argue that these two problems can after all be overcome by physicalistic theories of psi, and to present some other features of psi which involve far deeper problems.

In this paper, I am not concerned with arguing for the existence of psi phenomena, but rather with the issue of what implications the existence of several kinds of phenomena would have for the mind-body problem. Likewise, I ignore idealism, as Beloff does in his paper, because though it may well be true, its nature is such that it never seems productive to think or act as if it were true. Such a truth is of dubious value. Even if the outside world is a grand illusion, it seems a very consistent one, and it is thus prudent to attempt to discover its "laws".

ESP is almost certainly non-electromagnetic in nature (Vasiliev, 1976), and there is no organ in the brain (or elsewhere) which would be a natural candidate for the role of ESP transceiver (though of course, not knowing the physical basis of ESP we might not recognize the organ when we saw it)¹. However, as the

¹ Interestingly, the pineal gland, which Descartes took to be the site of interaction of mind and brain, has been recently shown to be the likely locus of magnetic field sensitivity in man.

quote above shows, Beloff is mostly concerned with the information-bearing aspects of ESP. He cites two major problems for physicalist theories of psi.

The first problem concerns the symbol groundings for the telepathic process. That is, if telepathic information is to be transmitted by some modulation of an energy, then one has to show how it is that a person learns the meanings of the different symbols as they are expressed in this modulation (the code for different concepts). Since a particular modulation of some energy wave does not in itself bear any connection to any mental concept (it is an "arbitrary" code), one has to learn (via example, trial-and-error, or a meta-language) the mapping of symbols to concepts. The same is true even for vision: it is commonly known that people who have been blind from birth, upon having their vision restored, are not able to make sense of what they see, until they learn to associate visual images with objects, as do babies.

As Beloff points out, this problem is solved for the modality of sound (for example) in early age, when a child associates various modulations of sound waves with other stimuli and concepts already learned. The question is, if telepathy propagates as information carried on some physical energy, how is it that a person knows what the various aspects of the signal represent? This problem is sharpest when non-emotional, propositional information is transferred, because then universal, inborn, "standard" representations can be ruled out. I would like to suggest a simple biological solution to this dilemma: it is possible (and quite natural) that the meanings of the signals is learned at an early age, at the same time when the auditory, visual, tactile, etc. codes are resolved. Thus, when seeing an apple, hearing a parent say the word "apple", and sensing the emission of some ESP radiation which refers to an apple in the parent's mind, the small child learns to associate those particular symbols with the referent - an apple. With age and education (or by simply being around other people) a person is able to associate more and more complex concepts with what they "feel" like as sound, light, and

ESP energy emissions. Of course, for ESP this process would have to be completely subconscious (though note that except in specific cases of obvious instruction, the learning of concepts in childhood is mostly subconscious anyhow).

The second problem Beloff brings up involves the selective properties of ESP. Specifically, since telepathy (for example) seems to involve no obvious attenuation with distance, how is it that a sensitive subject is not swamped with everyone's thoughts, and is able to pick out the thoughts of some specific individual? This is an interesting question, but similar situations occur in engineering and psychology. Cognitive science is well aware of the "cocktail party phenomenon", where a person is able to hear what is of interest to him despite much louder conversation all around him. Likewise, short-wave radio transmission enables a large number of interpenetrating message streams to coexist and to be omnipresent in the atmosphere, while anyone tuned to the appropriate frequency can receive the message of interest amidst all others.

What is necessary to meet this objection by an energy-wave theory of telepathy is: 1) for the signal modality to have a very high bandwidth, to accommodate the large number of living things which have been shown to communicate telepathically, and 2) each message has to be modulated in two ways (as are radio transmissions for example): one which carries the message itself, and one which is a "signature" of the sender. Thus, it is easy to imagine that every being which emits this hypothetical ESP energy, due to its genetic and thus neurological differences from all other existing members of its species, emits signals which are characteristic of or specific to that being - much like social animals are able to recognize large numbers of individuals by smell and other characteristics. It is also easy to imagine that beings which have spent much time together have had a good opportunity to learn each others' "signatures"; the parapsychological literature certainly attests to the fact that such communication is most common between close relatives, and good friends.

The only cases which wouldn't fit under the above model would involve communication with people (or animals - Morris, 1970) one has never met; though these are extremely rare in the parapsychological literature, it is not clear that this is not due to a selection effect, since if one has never met a person, the chances are high that one never will, and thus messages from him or her will be attributed to hallucinations or dreams which do not come true.

Now, though I think these two problems do not present insurmountable obstacles to physicalistic theories of psi, I think that several others do. Note that in some sense, materialistic monism is an infinitely elastic concept - one can usually come up with an exotic theory involving new forces, fields, etc.; however, in the cases I describe below, the resulting world-view would be so wildly different from that which materialism is used to, that "materialism" would lose all meaning as a term. To avoid the charge which is often leveled against dualist theories (that the concept can be stretched to accommodate any possible objection), it seems reasonable to label as "materialist theories" those theories which operate with basic concepts (such as causality, locality, various conservation principles, etc.) as science knows them. This seems all the more a good choice of definition since one of the main reasons people often disapprove of dualist theories is that they introduce extra ontological or epistemological elements into the very successful framework of modern science.

Though pure clairvoyance (that is, instances that can not plausibly be due to information telepathically obtained from other minds which have or had direct physical access to the target location) is not easy to demonstrate, its existence would cast grave doubts on completeness of the physicalist world-view. This is because of the semantic nature of the targeting. That is, it would seem that for certain remote-viewing clairvoyance experiments, information on a target can be obtained by a subject who has never been there, nor knows how (physically) to get there. The connection is made semantically (the target is described to the subject

in enough detail to enable him to know what he is to try to observe). This is completely alien to any other form of energy-mediated information gathering, which always involves a specific spatio-temporal relationship between subject and target. A materialist theory of such a phenomenon would have to assume that every locale emits some form of radiation bearing information about it, and furthermore, that this information is accessible not according to physical location of the source, but according to a mental construct in the mind of the subject².

There are other facets of psi research which would strongly point to a dualist paradigm. These include past life research (Stevenson 1974), and precognition. The latter directly contradicts science's notion of time and causality (although it is far from clear that this cannot be fixed up - Broad, 1923, Feinberg, 1974), while the former would seem to directly implicate a non-material entity which survives bodily death. However, one of my favorite, and seemingly most common (according to my own personal observations) psi faculties which contradicts materialism is psychometry (the obtaining of information about past events concerning some object). For a physicalist model to explain this, one would have to postulate a field of energy around every object which carries information on not only things which happened in its vicinity, but things like what certain people thought of the object, etc. This hardly seems like a materialist theory...

Pure clairvoyance, precognition, and especially past life research are quite difficult to work with. It would seem reasonable to concentrate on these types of phenomena, especially the somewhat neglected psychometry, because they are most directly relevant to the mind-body problem (arguably, one of our most important problems). Lest it seem that this would only widen the gulf between parapsychologists and mainstream science, it should be pointed out that several arguments from various sciences (such as neurobiology, psychology, mathemat-

² Quantum mechanics does deal with non-local interactions, however these are specifically prohibited from bearing information, or being used as any sort of signal.

ics, quantum physics, cognitive science, etc., summarized in Smythies and Beloff, 1961, Penrose, 1991, Hodgson, 1991, Levin, 1994, forthcoming) also point to the inadequacy of materialistic monism.

Likewise I would suggest that what is needed, besides the arguments which show that materialism is insufficient³, is a framework which would show (at least in outline) how dualism avoids the problems that materialism has. Besides the much-discussed (e.g., Morowitz, 1987) problem of how mind interacts with matter without violating various conservation laws, we are badly in need of a theory of how mind-stuff is able to have intentionality (refer to concepts), indexicality (first-person perspective), and qualia; how it circumvents the problems of the Lucas argument (Lucas, 1961), and in general, what it is that enables "mind" to perform that for which matter has been shown insufficient. Some of the more analytical of the old dualistic traditions (Theosophy, Rosicrucianism, Anthroposophy, etc.) should serve as rich sources of insight for this much needed project (Besant, 1904, Ouspensky, 1931, Long, 1948, Steiner, 1961).

³ Anderson (1985) argues that to rule out materialism is insufficient to establish dualism, because idealism is an alternative. For reasons described above, I think idealism (while possibly true) is not a viable option for one interested in a scientific approach; nevertheless, a good dualist theory would be more satisfying than only insufficiency arguments against materialism.

References

- Anderson, A., (1985), Response to John Beloff's "Parapsychology and Radical Dualism", *Journal of Religion and Psychical Research*, **8**(1): 11-12
- Beloff, J., (1970), Parapsychology and its Neighbors, *Journal of Parapsychology*, **34**: 129-142
- Beloff, J., (1985), Parapsychology and Radical Dualism, *Journal of Religion and Psychical Research*, **8**(1): 3-
- Besant, A., A Study in Consciousness, Theosophical Publishing House, India: 1904
- Broad, C. D., The Mind and Its Place in Nature, London: Routledge and Kegan Paul, 1923
- Churchland, P. M., Matter and consciousness: a Contemporary Introduction to the Philosophy of Mind, Cambridge, MA: MIT Press, 1988
- Dennett, D. C., Consciousness Explained, Boston: Little, Brown and Co., 1991
- Dobbs, A., The feasibility of a physical theory of ESP, in Science and ESP, edited by J. R. Smythies, London: Routledge and Kegan Paul, 1967
- Feinberg, G., (1974), Precognition: a Memory of Things Future, in Quantum Physics and Parapsychology, Laura Oteri ed., New York: Parapsychology Foundation Inc., 1974
- Hodgson, D. H., The Mind Matters, Oxford: Clarendon Press, 1991
- Lockwood, M., Mind, Brain, and the Quantum, Oxford, UK: Basil Blackwell, 1989
- Long, M. F., The Secret Science Behind Miracles, California: DeVross & Co., 1948
- Lucas, J. R., (1961), Minds, Machines, and Gödel, *Philosophy*, 36: 112-117
- Madell, G., Mind and Materialism, London: Edinburgh Univ. press, 1988

- Marshall, N., (1960), ESP and Memory: a physical theory, *British Journal for the Philosophy of Science*, **10**: 265-287
- Morowitz, H. J., (1987), The mind-body problem and the 2nd law of thermodynamics, *Biology and Philosophy*, **2**: 271-275
- Morris, R. L., (1970), Psi and Animal Behavior, *Journal of the American Society for Psychical Research*, **64**: 242-260
- Ouspensky, P. D., A New Model of the Universe, New York: Vintage Books, 1931
- Penrose, R., The Emperor's New Mind, New York: Penguin Books, 1991
- Robinson, H., ed., Objections to physicalism, Oxford: Clarendon Press, 1993
- Smythies, J. R., and John Beloff, The Case for Dualism, Virginia: Univ. Press of Virginia, 1989
- Steiner, R., An Outline of Occult Science, New York: Anthroposophic Press, 1961
- Stevenson, I., Twenty Cases Suggestive of Reincarnation, Charlottesville: University Press of Virginia, 1974
- Vasiliev, L. L., Experiments in Distant Influence, New York: Dutton, 1976.