

PARAPSYCHOLOGY AND THE PHILOSOPHY OF MIND

Ramakrishna Rao played an important role in parapsychology during the second half of the 20th century, both experimentally and conceptually. Other contributions in this volume will discuss his empirical work. I might mention, however, that, as a young parapsychologist, I used his *Experimental Parapsychology: A Review and Interpretation* (1966) as my primary source on the status of the empirical findings in parapsychology, a book that was lucid and insightful in summarizing the achievements of the discipline at that time. Furthermore, Rao has also been important for parapsychology conceptually by offering a unique perspective. The field of parapsychology grew out of Western science and philosophy, and Rao continually reminded us that the problems and the solutions in parapsychology might be different from the way those in the West have conceptualized them.

The focus of this paper will be general, discussing the several issues in the philosophy of mind that relate to parapsychology. I will not attempt a summary of the issues and stances in the philosophy of mind, not only because that subject is far too broad, but also because a number of issues do not overlap with parapsychological ones. Therefore, I will be focusing solely on several areas of mutual concern, especially dualism and the mind-body problem. I want to show that both the philosophy of mind and parapsychology have been infected with the Modernist commitment to both atomism and to dualism, and we should reject both in favor of a naturalism, a view I believe Rao has argued for.

HISTORY OF PARAPSYCHOLOGY AS A REACTION TO MATERIALISM

Parapsychology began as an “official” science in 1882, with the founding of the Society for Psychical Research in England. As a result, parapsychology has contained an implicit

commitment to the Modernism that was influential at that time. Among the founders of the Society were scientists and philosophers who held a strong dedication to Western science, but within mainstream science there existed a growing commitment, both in ideology and in experimental evidence, to reductive materialism, a conclusion that the founders of the Society for Psychical Research deemed unacceptable. As a reaction to this movement, the Society dedicated itself to investigating phenomena that seemed to undercut the conclusions of reductive materialism, but since the founders were also dedicated to scientific investigation, they committed themselves to careful scientific investigation. They wanted their scientific investigation to give evidence for dualism rather than materialism.

C. D. Broad (1962) tried to encapsulate the conflict between science and parapsychology in his Basic Limiting Principles, general statements which he thought that anyone raised in modern Western society would assume about the world. The first Basic Limiting Principle said, essentially, that we cannot gain knowledge except through our senses or from inferences based on sense experience. The second Basic Limiting Principle stated that we cannot know the future, except based on inference from the present and the past. The third Principle stated that we cannot affect the world except by direct contact, and the final one stated that survival of personal consciousness will not occur after biological death.

Thus, the tension between dualism and materialism is basic in parapsychology, but it also forms a part of the story of the philosophy of mind. Where did this tension come from? What are its sources? And how have these assumptions played a role in the formation and work of parapsychology?

PARAPSYCHOLOGY AND DUALISM

Rene Descartes has been designated as the Father of Modern Philosophy, and rightly so. Most of Western philosophy since Descartes seems to be in response to him, either trying to improve his system or to refute it. Nevertheless, I believe that it is important to see the pivotal role that he played in clearly stating the Modern position (not all of it originated with him, but he expressed it clearly and in a straightforward system). The Cartesian system is basic to understanding both the philosophy of mind as well as parapsychology.

The story that Descartes tells about his method and his conclusions focuses on his desire for certainty; as Euclid laid out his geometry, starting with unassailable premises and deducing certain conclusions from them, so Descartes strove toward producing an indubitable starting point. However, another story can be told about the founding of this system: Descartes was a good Catholic, and he saw that Galileo had been put under house arrest for championing the New Science. To solve this conflict in retaining both Catholicism and the New Science, Descartes leapt over the horns of the dilemma by dividing the world into two radically different kinds of substances, mind and matter. Schematically, the descriptions of the two kinds of entities follows:

MIND:	MATTER:
Thinking	Non-thinking
Non-spatial	Spatial
Purposeful	Mechanical
Free	Determined
Private	Public
Locus of value	Avaluable
Subject	Object

Given that dualism describes matter this way, as unthinking and purely mechanical, Descartes could propose that the Church had no reason to be concerned with matter, since its fundamental

concern was with morality, with salvation, and with the state of the soul. Thus, the domain and ultimate authority of the Church was legitimately the mind; the Church had no concern about unthinking matter, and therefore science could be free to pursue its studies in complete freedom. Hence, this story about Cartesian dualism does not concern an abstract epistemological issue of arriving at certainty; rather, it concerns the ontological issue of different kinds of being in the world, and who legitimately has the ability to speak authoritatively about each of them. The importance of this story is that it points out that Descartes was not simply defining the difference between mind and matter, but he was defining the nature of science. By definition, science became the discipline that studied non-thinking, spatial, mechanical, determined, public and available objects; thus these methodological assumptions and commitments became a founding part of the New Science.

The implications of this fact are enormous, I think, for both the philosophy of mind and for parapsychology, both of which accepted dualism and subscribed to these assumptions in the 19th century. Let us first talk about parapsychology's traditional commitment to Cartesian dualism.

PARAPSYCHOLOGY'S TRADITIONAL COMMITMENT TO CARTESIAN DUALISM AND TO ATOMISM

Although the founding of the Society for Psychical Research in 1882 marked the beginning of scientific parapsychology, it was certainly the opening of the parapsychology lab at Duke University under J. B. Rhine that marked the beginning of a focus on the laboratory approach to a scientific parapsychology. William McDougal, who had recently been appointed to head the psychology department at Duke University and was one of the foremost proponents

of dualism of his time, brought J. B. Rhine, also a committed dualist, to head the lab. In *The Reach of the Mind*, Rhine (1947) says, “Psi researches show that the natural human mind can escape physical boundaries under certain conditions” (p 205). He asks: “Is there anything extraphysical or spiritual in the human personality?” and he responds, “the experimental answer is yes” (p 206). For Rhine, parapsychology supported the view that, “man is something more than a physical being” (p 209), concluding that “the nonphysical activity of the mind is demonstrated” (p 214). As I (1985) have argued, Rhine viewed parapsychology as supporting the characteristics of a specifically Cartesian mind.

The second assumption both of Modernism and of parapsychology that I want to discuss is atomism. In its move to reject the Catholic Church as the authority, the New Science also rejected the Church’s Aristotelian view of the world, accepting the alternative ancient Greek theory, atomism. The atomistic approach to the physical world made three assumptions: 1) reality is composed of indivisible, independent, self-sufficient atomic units. 2) the atoms are separated by a void, or space. The function of space is to emphasize the separateness and independence of the individual atoms. 3) the job of science is to investigate the laws of how these atoms associate and congregate to form larger units.

Atomism thus became the default position for science, and causing parapsychology to become anomalous. Atomism implies that there is no action at a distance; rather, one atom must directly affect the other, originally conceived in a billiard ball mechanistic system. In contrast to this view, J. B. Rhine argued for the non-physicality of parapsychological events based on the fact that distance did not seem to be a factor, and thus that paranormal functioning seemed to be space-independent. Atomism denies action at a distance, and hence science cannot accept the reality of parapsychological phenomena. Psychokinesis is the action of mind on a physical

object without any physical intervening medium. Likewise, ESP is the reception of information under circumstances where there is no intervening medium, nor does this reception seem to be mediated by the senses. Thus, parapsychology seems almost to be defined as a study of phenomena that don't conform to this atomistic, physicalistic model.

Thus, we see that dualism and atomism are fundamental assumptions both of Modernism and of parapsychology, and these assumptions are used to define parapsychology as a science--to define its content as mental, and even to define parapsychological events as anomalous. Unless we understand these commitments of Modernism, accepted in general by both parapsychologists and non-parapsychologists, we won't be able to understand problems in the philosophy of mind, or problems in parapsychology.

PARAPSYCHOLOGY AND THE PROBLEMS OF DUALISM

Given the assertion of dualism, Descartes was naturally expected to explain how the interaction between mind and body occurred. His own explanation, that there were animal spirits in the pineal gland that mediated the mind body interaction, was quickly, and correctly, rejected. The very notion of "animal spirits," with its attempt to combine both mental and material properties in one kind of entity, was noted to be inconsistent with his radical dualism, the existence of diametrically opposed substances.

Even if we reject the idea of animal spirits in the pineal gland mediating the interaction, the disjunction of mind and matter poses a more general problem; how can anything so diverse as minds and bodies affect each other? It is not clear how a system extended in space can be affected by a system not extended in space, and vice versa.

Let us turn to the question of the interaction between mind and body and examine whether or not parapsychology helps us understand it. Frank Dilley (1988; 1989; 1990) has written extensively on this problem, and I will depend heavily on his analyses. He goes so far as to argue that “The problem of mind-brain interaction and the problem of psi is the same” (1988, 476). In other words, in order to make mind-brain interaction intelligible, one must rely on psi powers, but also psi powers assume a dualistic interactionism. Thus, “clairvoyance can be made as intelligible as interaction is” (1989, 241).

Let us examine the possibilities for interaction of mind and brain. The typical view, taken from our understanding of the material world, is that some sort of energy transfer occurs between the cause and the effect. The energy of one billiard ball is directed against and used by the second billiard ball when it rolls away after it has been hit. Something like that analysis works on the material level, as the principle of the conservation of energy demands that the energy remains within the system. The problem with mind-brain interaction, if one uses the same analogy, is that one must conceive of the mind as having energy, which it uses to affect the brain. There are three things wrong with this analysis. The first one is that it would increase the amount of energy in the physical system, thus denying the principle of the conservation of energy. Secondly, if the mind has energy, it is part of the physical system, and thus it denies dualism! Finally, the idea of the mind exerting energy sounds strangely similar to the Cartesian notion of animal spirits. Descartes obviously wanted to explain interaction on this kind of model, but the analogy works no better in the 20th century than it did in the 17th century. We cannot think of mind-brain interaction on the model as energy transfer.

Can we conceive of the interaction without energy transfer? David Hume was right in saying that there is no necessary connection between a mental event and a physical event in

volition; what one experiences is the will to raise the arm, and then the arm rising, but one does not experience any causation or energy transfer. But if this is true, as Dilley points out, “Psychokinesis, as generally understood, involves exactly the same sort of relation of mind to matter. Mind decides that something is to happen and it does” (1988, 476). How we decide that psychokinesis has occurred is to set up experimental conditions in which energy transfer cannot occur. Indeed, psychokinesis is virtually defined in terms of the lack of outside physical effect onto a physical system. Thus, one could argue, as Dilley does, that volition, the act of willing, can be made intelligible only in terms of psychokinesis. The mind is able to act in the world precisely because of psychokinesis. For him, every act of volition is an act of PK, and he admits he is surprised that stronger evidence for PK, even dramatic instances of it, have not been forthcoming, given that every instant of volition seems to be an example of PK.

Further, it may be helpful to look at clairvoyance as a way of making intelligible the effect of the brain on the mind. In clairvoyance the mind is able to directly “read” a distant object in the environment. Analogously, we can think of normal perception as a distant physical object affecting the eyes through light waves, these signals being transferred into the brain, and then the mind reading the brain to get the information. In fact, the two situations can be brought even closer together by remembering that the mind is non-spatial for the dualist, and thus there is not a dissimilarity between the mind reading the brain, and the mind reading the environment a mile from a person’s body, since mind itself is not in space. “The supposed ‘action at a distance’ problem as a special problem about clairvoyance is thus dissolved. Objects may be remote to the *body* in ordinary space, but that does not thereby make them remote to the *mind*” (Dilley, 1989, 245).

I have been trying to analyze the problem of interaction, and offering the arguments that psi may be able to make the interaction intelligible. In this argument, it has been suggested that the interaction of brain on mind is a psychokinetic one, and the interaction of brain on mind is a clairvoyant one. Thus, dualistic interactionism and parapsychology seem to be intimately entwined, one needing the other to be made intelligible. Dilley (1988) understands that this solution to the interaction problem might worry some, saying, “Perhaps my putting parapsychological powers and interaction into the same boat will sink them both as far as the reader is concerned” (479).

I admit to being sympathetic to those who worry about this solution. It is attempting to explain a problematic phenomenon (interactionism) by something even more problematic (psi). In the first place, experientially we are well familiar with volition and its effects, as well as receiving impressions about the world. On the other hand, the data from parapsychological experiments are sparse compared to our daily experience. The paranormal is less familiar than the normal, so intuitively, psi does not seem to give much of an explanation since the explanation refers to relatively uncommon events.

But more than that, one might want to ask whether or not the concepts of psychokinesis and clairvoyance are explanatory concepts, and if so, in what way? If we examine what happens in a PK experiment, what we literally experience is that there is volition exerted by an individual, and a physical change occurs at a distance from her body, and we can give no physical explanation for this change. Strictly speaking, what is noted in a PK experiment is that some change occurs for which we have no explanation. Saying that it is due to psychokinesis appears to offer an explanation because it has the same linguistic structure as saying that the light bulb broke because it fell to the floor, but we can give an explanation of the relationship between a

glass bulb hitting the floor and its shattering. We can give no explanation of the connection between volition and the change in the physical world. This is why the phenomenon is called *paranormal*, or, as some parapsychologists prefer, *anomalous*. It does not fit into the explanatory scheme, at least yet. But if that is true, then any appeal to it as an explanatory concept seems to fail. Saying that the mind affects the brain psychokinetically gives us no more of an explanation than saying that volition causes the arm to rise. We can't even say that the same processes are involved, simply that these are two mysteries (so far as explanation is concerned) and they are structurally similar and that they appear to contain a relationship between volition and something happening in the world, in one instance on the brain, and in another instance in the outer environment. Certainly, if one accepts the data from parapsychology, it is legitimate to point out the striking similarities between it and what happens traditionally in the mind-body interaction, but it provides little help in making the interaction intelligible.

MATERIALISM AS AN ALTERNATIVE TO DUALISTIC INTERACTIONISM

If, then, we reject dualistic interaction, what alternatives do we have? Logically, if we assert that there are two different kinds of things, and yet we cannot explain their interaction, nor does it make sense to us that they simply run parallel courses, another alternative is to simply eliminate one of the realms. Given the rise of science over the last centuries, and the success of the materialistic approach to explaining nature, it was perhaps inevitable for philosophers to investigate the adequacy of philosophical materialism.

Two main types of materialism have arisen over the past half-century, and they may very well have grown to be the dominant view in the philosophy of mind, as well as the common

sense view of the general public. The two forms of materialism I want to discuss are the identity theory and eliminative materialism, but I will merely mention the first.

The classic early statement of the identity theory was an article by U.T. Place (1956); this view asserts that we can identify mental processes with brain processes, and thus be able to reduce the former to the latter. This kind of reductive materialism has been given up because its empirical assumptions no longer seem valid.¹ An assumption of reductionism is that when two people have the same mental event, for instance, looking at a tree, they each should be in the same brain state, but no evidence for this has been forthcoming, in spite of widespread attempts. Moreover, it does not even seem to be the case that when an individual at two different times is in the same mental state, he is in the same brain state. Our mental language does not divide up in a similar way to the way the brain works. Our mental language “does not carve the brain at its neurophysiological joints.” Reductive materialism depended on there being a strict one-to-one correlation between mental events and brain events, and these have not been found.

The second kind of materialism I will discuss, eliminative materialism, does not attempt to reduce mental events to brain events. Rather, it asserts that someday it will be recognized that mental events simply do not exist. Just as we did not try to reduce ghosts to hallucinations, but we simply denied that ghosts exist and that talking about ghosts did not explain anything, and so we have eliminated ghost-talk and simply started talking about hallucinations, so the progress of neurological investigation will allow us one day to eliminate mental language. It may be possible, although these philosophers do not assert that it will always be wise, to eliminate any

¹ Another kind of reductive materialism asserted that it was possible to reduce the meaning of mental statements to topic neutral statements, and thus in turn allow for reductionism, but this kind of meaning reductionism has also been abandoned as impossible.

talk of pain, for instance, and in the future simply talk about C-fiber 25 firing in the brain (or whatever neurological process we correlate with pain).

This version of materialism is much more sophisticated than the previous one, and particularly in the version propounded by the Churchlands, it still has a great deal of influence in philosophy. This view has philosophical appeal, because it does seem correct that the variety of the ways to describe human experience differs greatly across cultures. For instance, there are over 2000 English words for emotions, while Howell (1981) asserts that the Chewong in Malaysia have only five terms referring to mental processes (want, want very much, know, forget, and miss or remember – not even “think” is among this list). Therefore, our conceptual categories seem to differ greatly, and there is a good deal of evidence that language influences the way we experience. Let us take another example. In the West, the assertion of the existence of mind seems to imply that it is the center of awareness and decisions, but we note that this idea of the self seems to be denied in other cultures, or at the very least it is not pursued. The Pintupi of Australia (Myers, 1986) show an extraordinary lack of interest in trying to discern what another person’s motivation is in acting. Fajans (1985) goes so far as to say that the Baining of Papua New Guinea do not even possess a folk psychology, and while this may be an overstatement, at the very least it points out that the West’s description of the mental life does not seem to be present in all people. This evidence seems to suggest that, at the very least, it is not necessary to use the mentalistic language developed in Western culture. So perhaps it can be eliminated, and this is precisely what eliminative materialism suggests.

Let me say that I believe something like an eliminative version of mind is quite plausible. In a sense, the argument for eliminativism is an empirical question, and when you look at the evidence, we see that language is changing from talking about a mental state to often talking

about a brain state. For instance, if we have a hard time remembering something we may say something like, “My brain just isn’t working this morning,” as opposed to “My mind isn’t working.” Therefore, it looks as if the elimination of mental language is occurring already, so there is no a priori reason that we can’t continue to eliminate all of Cartesian language. However, in spite of eliminative materialism being possible, I find philosophical reasons for rejecting it, at least in its present form.

I object to eliminative materialism because it implicitly retains the Cartesian worldview by arguing something like this: Let us define mind as Descartes defined it, and then let us define matter as Descartes defined it, and finally let us assert that talk about the Cartesian mind can be eliminated in favor of talking only about the Cartesian material world. In other words, it retains the Cartesian world but it simply eliminates one of the two substances. However, it is my position that it is precisely Cartesianism that has gotten us into this trouble, and so it seems more likely to me that the whole Cartesian worldview must be eliminated, and not simply one part of it. To assert that Descartes was absolutely right in describing the world from a material perspective, but absolutely wrong in describing it from a mental perspective, stretches credulity in my mind. What needs to be eliminated is the whole Cartesian picture, not simply the Cartesian mind.

I want to make two further points derived from this conclusion. The first is that contemporary versions of the mind are functionalist, and thus they at least began to question this traditional Cartesian framework. I will quickly discuss functionalism and the hard problem that it faces, and then I will examine an even more radical worldview, a relational naturalism, and in both cases relate parapsychology to these views.

FUNCTIONALISM

Contemporary views of mind tend to be functionalist. As opposed to reductive materialism, which says that we can reduce the mental activity to brain activity, and as opposed to eliminative materialism, which says that we can eliminate the mental in favor of the material, functionalist theories of mind assert on the one hand that mental activity exists and on the other hand that we cannot and should not eliminate it. However, it redefines the mental and at least it loosens up the definition of the physical. In short, functionalism says that the mind is a function of the body. We can use the analogy of the relationship between software and hardware in a computer in order to understand the relation between mind and body. Software is not hardware, just like mind is not body; software cannot be reduced to the computer or eliminated; rather, software can run on many different kinds of platforms and computers. Analogously, the mind is an abstraction from the level of the material. It is how the material works. The human body functions in such a way that it shows intelligence because of its output. Theoretically, we could develop a computer that is not silicone based, but as long as the outcome gave appropriate information, it would be appropriate to call it intelligent. Likewise, we can conceive of a species from another planet that is not carbon based, but we would call it intelligent if it acted in certain ways. A functionalist understanding of pain, therefore, does not view it as some peculiarly mental event going on inside the mind, but rather pain is the role that pain plays in the functioning of the organism, say in producing pain avoidance behaviors. Therefore, when we ask about mental activity, we don't look to some internal theater, but we look to how the physical system functions.

The functionalist view of mind derives from the analogy of computers, and its emphasis is on computational functions. If we want to understand software, we don't do it by looking at

the hardware, nor do we understand the mind by studying the brain. As Marr (1982) has pointed out, that is like trying to understand flight by examining a bird's feathers. Psychology thus does not focus on the functioning of the brain, but it examines how the person processes, stores, and retrieves information, for instance.

The implication of the functionalist view is that mental processes do not depend on any *particular* physical processes, so that it is appropriate for us to ask, for instance, whether a computer can think, since thinking is not dependent on our carbon based system. The Turing test (Turing, 1950) suggests the following test. Suppose a person is in a room with only a microphone and a speaker, and she is told that in the adjacent room is either a person or a computer, and her task is to decide which it is, based upon the answers coming through the speakers. Turing argues that if the person cannot tell the difference, then just as we would say that a person thinks and has intelligence, we would want to give those same attributes to a computer.

The discussion surrounding the Turing Test has given rise to the Chinese room example, proposed by John Searle (1980). In asking the question whether computers can think, Searle proposes the following thought experiment: What if he, Searle, is locked up in a room with a large selection of Chinese symbols plus some rules (written in English) for systematically supplying the appropriate Chinese characters as response to an input of Chinese characters. In other words, if he received as input a certain set of Chinese characters, he would be able to use the rules to produce as output another set of Chinese characters, and these would appropriately answer in Chinese the question asked. As far as examining the input and output of the Chinese room, it would appear that Searle is acting like a fluent Chinese speaker. However, he doesn't understand a word of the language. Analogously, he points out that we can't say that the

computer speaks Chinese or that it is intelligent when it correctly computes or produces the right symbols.

Searle is pointing out that an important aspect of the mental is the factor of meaning. The computational or purely functional approach to the mind cannot adequately deal with the mind as processing meanings. Parapsychology can provide an interesting illustration of the importance of meaning. The introduction of ESP cards by J. B. Rhine was an important tool in developing a scientific methodology for parapsychology, allowing for statistical analysis. However, even in the development of the symbols, Rhine had to take into account the fact that ESP communication often seems to be on the level of meaning, and not simply transfer of representations or symbols. Rhine sought five symbols to use on the cards that were as neutral as possible, but one can imagine problems still arising in using the five symbols he chose. One can imagine a subject having an image of a cross, and that would be a “direct hit,” but what if he imagines a church; although it is not a direct hit, it might be an interpretation of the cross on an ESP card. Likewise, could imagining a beach scene point to the wavy lines as the target? In other words, the human mind seems to function on the level of meaning, constantly interpreting and giving an array of meanings to symbols. Typically, part of the process of psychic development in popular classes entails trying to find the meaning behind one’s own imagery in order know how to interpret the imagery. The techniques developed by SRI in remote viewing (Targ, 1977) try as much as possible to eliminate the level of meaning, trying to get a subject to focus purely on symbols, for instance, lines that appear in the mind should not immediately be interpreted or named in any way. But it looks as if the mind, as well as the psychic, functions through meanings.

ANOTHER SOLUTION

Chalmers (1996) has designated the question of how the body can give rise to consciousness as the Hard Problem. In doing so, he takes us back to the original problem of asking about the relationship between mind and body. The original problem of interaction arose because it was not clear how mind and matter could affect each other, since they are radically different kinds of things. In a sense, we are still at the same point Descartes was. The Hard Problem is simply a restatement that philosophy of mind has not adequately dealt with the “problem” of consciousness, the fact that consciousness exists, and it exists in its subjectivity and in its power to produce and understand meaning. Does there exist another alternative to this problem, a way to solve the Hard Problem? There is, indeed, another alternative, and it is one in which Ramakrishna Rao was interested and one to which parapsychology speaks.

In a presidential address in 1978 (1979) and in two recent papers (1997, 1998), Rao suggests that Hindu thought might offer us better understanding in parapsychology and in the philosophy of mind. His interest in these three articles is different from mine, and so I will not discuss his specific suggestions, which are wide ranging and important, but I will, rather, take his general suggestions and try to apply them to the topic that I have been dealing with in this paper, the connection between mind and body. For instance, Rao suggests that we should distinguish between mind and consciousness, thinking of mind as the activity of the individual in intentional acts, thus implying a subject-object distinction, and consciousness, which is pure, non-local, non-intentional, and where there is no subject-object distinction. He also suggests that parapsychology could fulfill the job of being a science of religion. I will not speak directly to these issues; however, I will use Rao’s emphasis on the connection between parapsychology and consciousness as my starting point.

Rao reminds us that parapsychology has emphasized from its inception that psi does not seem to be constrained by physical parameters, and so it suggests that the phenomena are non-local. Descartes used this idea to distinguish the non-spatiality of mind from the spatiality of matter, giving rise to dualism, and this in turn giving rise to the problems that I have discussed in this paper.

What is important to remember, and Dilley reminded us of this point, is that non-locality applies also to psychokinesis, and thus it begins to infect the physical world. Remember that the two hallmarks of the Modern world, exemplified in the Cartesian worldview, were atomism and dualism. In a sense, atomism is the more fundamental, because the dualism stems from conceiving of the world as being composed of two different kinds of *atomic things*. The atomistic worldview, with its emphasis on the void, said that there was no action at a distance; in other words, non-locality is impossible, and, hence, psi phenomena are *paranormal*. As Rao (1997) has suggested and as I (1997) have examined, parapsychology seems to undercut this atomistic ontology. Rather than emphasizing the separateness of things and events, the non-locality of psi emphasizes its connection, and since we have been able to empirically set no limits to the functioning of psi, the implication is that this interconnectedness is indefinite. Rao discusses this idea in terms of pure consciousness, but I am interested in this paper in examining a solution to the problems in philosophy of mind that are a result of Modernism.

Given atomism and dualism, we have not been able to solve the problem of how matter could affect mind, or even how matter could give rise to mind. However, if our metaphysics is a relational one rather than an atomistic one, not only do we emphasize the interconnectedness of mental events and the interconnectedness of physical events, but we can see that mental and physical events can be related in a different way. If we want to emphasize the interrelationship

of all things, and we have found that the Cartesian worldview is at odds with this approach, let us then eschew its dualism, and investigate the possibility of a monism, but not a monism of things, since we reject atomism, also. I have no better suggestion here than to turn to William James, a philosopher who also engaged in fundamental work in parapsychology, who incidentally created the first psychology laboratory in America, a parapsychological one (Eugene Taylor, personal communication)! In a seminal article, “Does Consciousness Exist?” James (1967) suggested that we not think of mind and matter as separate things, but to think of them as separate functions of pure experience: “Its subjectivity and objectivity are functional attributes solely, realized only when the experiences is ‘taken,’ i.e., talked of, twice” (p. 177). So, mind and matter are simply pragmatic ways of connecting different parts of our experience; they serve different functions. Therefore, in an interesting way, James was a precursor of contemporary functionalism. If we take his approach seriously, we will also adopt a functionalist perspective. Where contemporary functionalism goes wrong is that it accepts the traditional Cartesian worldview with its distinction between mind and matter. If we accept James’ analysis, we have a monism of experience, where mind and matter are functional aspects of experience. The advantage of this view is that we need no longer to ask the question of how matter can give rise to consciousness, or how mind can affect body or body can affect mind. These are questions that are legitimately raised in an atomistic worldview when one is talking about individual objects and their causal connection. One simply does not find a need to ask that kind of question in this functionalist, monist world.

I am well aware that I am only gesturing toward a solution to the problem, and much more analysis needs to be performed. However, I think something like this suggestion is the solution. And it also raises questions about parapsychology. As I indicated earlier,

parapsychology arose in an atomistic and dualistic framework, and it suggests that it has scientifically shown that there are anomalies in this framework. But remaining within the dualistic framework, parapsychology assumed that psi phenomena must be a function of consciousness, since they do not adhere to the characteristics of matter. Therefore, parapsychology has almost always emphasized the connection between psi events and the mind. Psi has been a function of consciousness, rather than of nature.

What I am suggesting is that we should begin thinking about, and even experimenting into, whether or not we can conceive of psi being a function of nature. Rejecting dualism, and subsequently thinking of mind and matter as functional concepts of experience, suggests that we are dealing with one natural world. And it can be the case that psi is a function of the natural world, and not simply of a subsection of it, the mental. Some years ago, Rex Stanford (1978) offered a theory which he called the Psi Mediated Instrumental Response (PMIR) theory,” for which he and others offered empirical evidence. At the time, I (1978) wondered whether or not this theory could suggest that psi was a function of nature and not simply of mind, but empirical work has not proceeded in this direction. It seems to me, however, that if parapsychology could offer evidence in that direction, it might help us reconceive not only parapsychological events, but also reconceive the mind, and thus solve some of the traditional problems in the philosophy of mind.

REFERENCES

- Broad, C. D. (1962). Lectures on Psychical Research. London: Routledge & Kegan Paul.
- Chalmers, D. J. (1996). The Conscious Mind: In Search of a Fundamental Theory. New York: Oxford University Press.
- Dilley, F. B. (1988). Mind-Brain Interaction and Psi. The Southern Journal of Philosophy, XXVI(4), 469-480.
- Dilley, F. B. (1989). Making Clairvoyance Coherent. The Journal for Psychical Research, 55(814), 241-250.
- Dilley, F. B. (1990). Telepathy and Mind-Body Dualism. The Journal for the Society for Psychical Research, 56(819), 129-137.
- Edge, H. (1978). A Philosophical Justification for the Conformance Behavior sesrl. The Journal of the American Society for Psychical Research, 72(3), 215-232.
- Edge, H. (1985). The Dualist tradition of parapsychology. European Journal of Parapsychology, 6, 81-93.
- Edge, H. L. (1997). Spirituality in the natural and social worlds. In C. T. Tart (Ed.), Body Mind Spirit Exploring the Parapsychology of Spirituality (pp. 153-162). Charlottesville: Hampton Roads Publishing Company, Inc.
- Fajans, J. (1985). The person in social context: The social character of Baining "psychology". In G. M. White & J. Kirkpatrick (Eds.), Person, self, and experience (pp. 367-400). Berkley: University of California Press.
- Howell, S. (1981). Rules, not words. In P. Heelas & A. Lock (Eds.), Indigenous psychologies . New York: Academic Press.
- James, W. (1967). Does "Consciousness" Exist? In J. McDermott (Ed.), The Writings of William James (pp. 169-183). New York: The Modern Library.
- Marr, D. (1982). Visions. New York: W. H. Freeman.
- Myers, F. R. (1986). Pintupi Country, Pintupi Self: Sentiment, Place, and Politics among Western Desert Aborigines. Washington: Smithsonian Institution Press.
- Place, U. T. (1956). Is Consciousness a Brain Process. British Journal of Psychology, XLVII, 44-50.
- Rao, K. R. (1966). Experimental Parapsychology: A Review and Interprettion. Springfield, IL: Charles C. Thomas.

Rao, K. R. (1979). Presidential Address: Psi: Its Place in Nature. In W. G. Roll (Ed.), Research in Parapsychology 1978 (pp. 159-184). Metuchen, NJ: The Scarecrow Press.

Rao, K. R. (1997). Some Reflections on Religion and Anomalies of Consciousness. In C. C. Tart (Ed.), Body, Mind and Spirit: Exploring the Parapsychology of Spirituality (pp. 68-82). Charlottesville, VA: Hampton Roads.

Rao, K. R. (1998). Two Faces of Consciousness: A Look at Eastern and Western Perspectives. Journal of Consciousness Studies, 5(3), 309-27.

Rhine, J. B. (1947). The Reach of the Mind. New York: William Sloan Associates.

Searle, J. (1980). Minds, Brains, and Programs. Behavioral and Brain Sciences, 3, 417-457.

Stanford, R. G. (1978). Toward a Reinterpretation of Psi Events. The Journal of the American Society for Psychological Research, 72(3), 197-214.

Targ, R., and Puthoff, Harold. (1977). Mind-Reach: Scientists Look at Psychic Ability. New York: Delacorte Press.

Turing, A. M. (1950). Computing Machinery and Intelligence. Mind, 59, 433-460.

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