

THE JOURNAL OF THE AMERICAN SOCIETY FOR PSYCHICAL RESEARCH

Responsibility for the contents of any article appearing in the JOURNAL rests entirely with the contributor and not with the A.S.P.R.

VOLUME XL OCTOBER - 1946 Number 4

CONTENTS

Psychical Research and the Mind-Body Relation	Gardner Murphy	189
J. B. Rhine's "Telepathy and Clairvoyance Reconsidered"		208
A Summary, with a Digest of Comments by Six English Investigators		228
Society Notes		229
Perspective in Psychical Research	G. N. M. Tyrrell	241
Index to Volume XL		

Psychical Research and the Mind-Body Relation

GARDNER MURPHY

Introduction

While the intimate interdependence of body and mind is attested by every study of the normal or of the abnormal man—with continuous manifestation of the mental consequences of bodily functioning and the bodily consequences of mental functioning—it can hardly be said that great progress has yet been made in the search for the actual relation between the two. We still encounter in medical and in experimental psychology the same working conceptions which were developed in the seventeenth century—most of them, in fact, defined by the Greeks and the Hindus of two millennia ago. With all the exquisite subtlety of the modern methods of studying the living brain through electrical excitation and through observation of its electrical and chemical activity, and with all the knowledge gleaned by post-mortem studies of brain pathology brought into relation to the mental pathology of the living, one might expect better. Is it not, indeed, somewhat of a paradox that in an era of huge progress in neurology, psychiatry, and psychology, almost nothing new and clarifying has taken shape regarding the mind-body problem?

Of course, the problem may prove to be insoluble. Or perhaps its solution requires more and more facts of the same general sort we have already begun to accumulate and to use. Perhaps, however, we have been looking at the problem in the light of *too limited a kind of evidence*; it may be that we have not brought the full light of all our present knowledge to bear on the issue.

Indeed, the most striking thing about the present philosophical situation, as it relates to this and similar issues, is the inability or unwillingness to use some of the data which seem to bear most directly upon the problem. These are sober, factual data which were not known in any systematic way to the Greeks nor to the seventeenth-century European; but they stand before us today and wait to be used. These are the data of psychical research. Psychical research is concerned, every day of its existence, with the empirical relationship of body and mind. Not that any single group of data, however relevant, can claim to give a complete and satisfying answer. But it may rightly be claimed that the most useful witness has not been called. It would not be fruitful here to discuss the twentieth-century prejudices which prevent the calling of this witness; we shall simply proceed at once to call him ourselves. Our purpose, then, is to ask how the great classical conceptions of philosophy regarding the mind-body problem are affected—strengthened, weakened, or ruled out—by the evidence from psychical research, and what new philosophical conceptions the data seem to suggest. The whole undertaking is of course tentative; it is the speculative effort of one person, and asks only to be studied, not to be accepted as a demonstration.

In referring to the *data* or *facts* of psychical research, we would include nothing that is still controversial among research investigators, but only those general classes of data which have been repeatedly published, analyzed, and evaluated and subjected to the criticisms of alert readers. We have in mind especially the ESP and PK researches which have been reported in this JOURNAL, in the *Journal of Parapsychology*, and in the *Proceedings* and *Journal of the London*

S.P.R. It seems unlikely that any of our readers will see fit to challenge the statement that ESP and PK are facts in this sense. There is still some doubt as to the relative weight of the evidence for telepathy and for clairvoyance,¹ since some reported data can be explained either way; but no serious critic, so far as I know, offers to explain the contemporary results without one or the other hypothesis, and both, of course, are forms of extrasensory perception. Similarly, some critics accept precognition on the basis of spontaneous cases, some on the basis of experimental work such as that of Rhine and his collaborators,² or that of Soal and Goldney;³ but no critic, so far as I know, has undertaken to explain precognition away. So too, there may be argument about the dynamics of psychokinesis, but apparently the critics are now in agreement as to the strength of Rhine's case.⁴ We cannot in this article re-argue all these vast research issues, but we hope to have indicated what is meant by reference to the *facts* of psychical research which any serious student of the mind-body problem should take into account.

A survey of all the mind-body theories is out of the question; those interested in a systematic condensation of the various possibilities might do well to begin with C. D. Broad's *The Mind and its Place in Nature*,⁵ in which contending doctrines are expounded and discussed. It would be more fruitful to limit ourselves here to a few of the doctrines best known to the history of philosophy and to a few concepts of distinctly modern flavor. Of the six concepts to be outlined here, four are *monistic*; i.e., they state that mind and body are *one*. They assert the ultimate *identity* of mind and body, arguing that mind and body are different

¹ "Telepathy and Clairvoyance Reconsidered," by J. B. Rhine, *Journal of Parapsychology*, Vol. IX, September, 1945, pp. 176-193.

² Cf. "Precognition Reconsidered," by J. B. Rhine, *Journal of Parapsychology*, Vol. IX, December, 1945, pp. 264-277, in which the experimental evidence for precognition is reviewed.

³ "Experiments in Precognitive Telepathy," by S. G. Soal and K. M. Goldney, *Proc. S.P.R.*, Vol. XLVII (1943), pp. 21-150.

⁴ "A Critical Survey of the American PK Research," by Donald West, *Proc. S.P.R.*, Vol. XLVIII (1945), pp. 281-290.

⁵ Harcourt, Brace and Company, New York, 1925.

appearances of, or ways of apprehending, the same ultimate reality. Two of the concepts are *dualistic*; that is to say, they argue that mind and body are two distinct things.

I. Monism

1. *Idealism*: Both Hindus and Greeks were familiar with the view that the world of physical things, including the body, is an illusion; the one reality is mind. At times the term "illusion" is used loosely, or even playfully. But with Bishop Berkeley we have the reasoned insistence that real things are in fact simply the things *as we perceive them*, and that there is no real thing except insofar as it is perceived. There is no "objective world" beyond the world as we experience it. There is no reference here to "degrees" of reality; there is just one reality, that of our personal and conscious experience.

While Berkeleyan idealism is in poor repute today with professional philosophers, it is intriguing to note the resurgence among scientists, including physicists and astronomers, of ways of thinking which are almost as explicitly monistic as those of Berkeley. The late Sir Arthur Eddington was the most eloquent of those to whom the findings of physics lead more and more explicitly into the abstract, the mathematical, the purely ideal. In his last volume, *The Philosophy of Physical Science*,⁶ he became explicit as to the reality, the knowability, of the things of the spirit. In contrast to this world of the spirit he held that we have very little knowledge of the physical world; our knowledge of the physical world is shot through with the properties which our subjective make-up has placed there.

How does such a philosophy adapt itself to psychical research? Whatever the intellectual satisfactions of an idealism in which mind is the one, or the primary reality, the gravest difficulties appear when a simple case of telepathy or psychokinesis knocks at our door and demands an explanation. Take Mrs. Sidgwick's study of "hindrances" in

⁶ Macmillan and Co., New York, 1939.

telepathic communication.⁷ If there is no knowable body, but only a mind, the telepathic process can hardly be "hindered" or "impeded" except by purely mental impediments. There are in fact such mental impediments,⁸ but there appear also to be others. States of physical weariness, or drowsiness, or sleep; states induced by relaxing or stimulating drugs; states of deep trance involving circulatory changes, all these physical states seem clearly relevant to paranormal experience. Yet they must be denied to exist, as genuine aspects of *physical* reality, or they must be translated into purely psychical terms, by anyone who seriously holds to such a monism. Psychokinetic effects must, in the same way, be treated by the Berkeleyan monist as occurring in an ideal non-physical world, for there is, for him, no other. There is therefore for him no very clear and practical way of dealing with the partial—and complete—failures of PK; having no physical object whose motion has to be altered, he has no place for the struggle—successful in small degree or large—to cope with a world alien to that of the mind. He has, of course, the privilege of asserting that paranormal physical effects belong in the same category with normal physical effects; namely, the category of *perceptual* responses in the observers. But whereas he has agreed to reduce the perception of normal physical events to orderly lawful principles (which fortunately coincide in practice with the principles which we all agree govern the movement of objects) he has to invent another set of laws for the paranormal, and so might as well become a dualist. It is not an accident that Eddington avoids the paranormal; his orderly system has no place for it. What is ordinarily called physical becomes with him (he actually uses the word) spiritual; and the consequence is that there is no place for what we encounter as the invasion of a physical world by a non-physical force.

The conception which psychical research imposes upon

⁷ "On Hindrances and Complications in Telepathic Communication," by Mrs. Henry Sidgwick, *Proc. S.P.R.*, Vol. XXXIV (1924), pp. 28-69.

⁸ "Removal of Impediments to the Paranormal," by Gardner Murphy, *JOURNAL A.S.P.R.*, Vol. XXXVIII, January, 1944, pp. 2-23.

the investigator is that of a physical order into which there sometimes breaks, and from which there sometimes emerges, a non-physical order. The word "physical" is a great nuisance here. Everyday words are indeed poor things when one wishes to convey all that is foreign to the "common sense" from which they arise, and the word "physical" is certainly insufficient, both because it leads (as with Eddington) into the metaphysical, and because physics as a science may in time reach out to embrace more and more of the intelligible world, so that no boundaries can today be safely imposed upon it. But, as things now stand, we can distinguish between *physical energies* on the one hand, which obey certain definite laws as to distribution in time and space (such as reduction of energy with square of the distance), and on the other hand the energies known to psychical research, which behave in no such way—which, through the fact of precognition alone, slip through the mesh of the whole system of physics. As I have repeatedly tried to point out in recent articles in this JOURNAL,⁹ the nature of the events known to psychical research is trans-spatial and trans-temporal; the individual personality does at times *know* without making physical contact with the thing known in the ordinary way through the senses; and at times it makes contact with things which have not yet (physically) happened. The idealist's "one world" is beautiful in its simplicity, but its simplicity is misleading, for the world order which it lays down must either be a space-time world (as it is with Eddington) or a world of the trans-spatial and the trans-temporal, which would dissociate it from scientific laws as we now know them. If there are, as we have argued, two systems of processes, two worlds of reality, the idealist can embrace one, but not both of them.

2. *Mechanism*: A second variety of mind-body monism, known today generally as mechanism, regards "mind" as the name for a group of functions carried out by the body,

⁹ "An Outline of Survival Evidence," "Difficulties Confronting the Survival Hypothesis," and "Field Theory and Survival," by Gardner Murphy, JOURNAL A.S.P.R., issues of January, April, and October, 1945.

especially the brain. It is true that the term mechanism, like the term idealism, is in some disrepute today, owing largely to the common tendency of the older mechanists to make too close a parallel between the behavior of living things and the behavior of machines. But for all that, most of the "naturalistic" scientists and philosophers do believe in an essential continuity between the simplest physical events and the most complex brain activity, the latter serving as the *basis* for mental activity in about the same way in which the movements of a gaseous particle in a closed box serve as the *basis* of the pressure which the gas exerts on its sides.

From the point of view of one concerned with psychical research, mechanism and related philosophies are neither more nor less adequate than idealism. They are simply helpless when confronted by such phenomena as clairvoyance and precognition. Indeed, the mechanists, of all the philosophers, are the most afraid to study the phenomena of psychical research, the most insistent that they cannot exist because, considered philosophically, they have no "right" to exist.

Since both idealism and mechanism are self-contained systems which can easily be integrated with physical science but not with psychical research, it leads, I believe, to serious confusion to espouse the idealistic position and eschew the mechanistic on the basis of some vague feeling that higher realities are saved by the former and neglected by the latter. This bias arises from the notion that ideas are nobler things than physical particles. But the problem is not one of nobility; it is a problem of serviceability in making phenomena intelligible, and most idealists make no more serious attempt to come to grips with them than do the mechanists.

3. *Emergence*: Yet it would be a mistake to suggest that all the twentieth-century descendents of an earlier mechanism are equally naïve, or that the monistic, "naturalistic" science of today is incapable of moving in the direction of a philosophy which might ultimately do justice to psychical phenomena. Of the greatest importance in this connection

is the modern concept of "emergence," which defines the properties of a compound in terms transcending the properties of the single ingredients of the compound. Just as sodium chloride has properties which belong neither to sodium nor to chlorine, so the living cell has properties which belong to none of the atoms, none of the molecules, within its structure, but which do belong to the structure itself. Indeed, following this line of thought, there may well be emergent qualities of the living cell which are not properties of the non-living. A whole philosophy may be based upon this distinction; Broad calls this "emergent vitalism." So too, there are properties of the many-celled creature which could not be predicted from a knowledge of individual cells. Specifically, there may be properties of the human brain which are not predictable from the physics, the chemistry, and the biology of individual nerve-cells. Human brain-functioning may be a true "emergent," a kind of thing that never happened at all before in the evolution of living things. Indeed, personality may be an emergent, something really new under the sun. It might have properties incommensurable with any of the properties of other, simpler things in nature. This line of thinking would give us, we are sometimes told, a true and consistent naturalism, and at the same time carry us along into the open air of great human potentialities freed from the manacles of the older mechanism, which made complicated things behave, as do the simpler things, according to a "push me-pull you" system of mechanical thrusts and counter-thrusts.

This whole doctrine of emergence is surely music to the present-day philosophical ear. But we seem to be moving rather too fast. What the properties of an emergent whole can be depends on the ingredients. It is true that when a new integration is found, we may not be wise enough to predict what the emergent properties will be; but when we examine them, we find them depending upon an interrelation of specific components, and without the specific components the emergent cannot come into being. The new phenomena are in no conflict with the old. The basic laws which hold through

nature at a simpler level hold also at the higher level. The laws which a bio-chemist uses in predicting an individual's endocrine or nutritional needs are at a "higher level" than the laws of inorganic chemistry, but they do not violate the general laws which hold for all chemistry. If the doctrine of emergence is to be helpful in psychical research, it must show how paranormal phenomena can be reconciled with the general scientific laws that hold in the physical and biological sciences. Does the doctrine of emergence really help us with phenomena that decline to participate in the space-time order; does it help us with telepathy, clairvoyance, precognition, psychokinesis? It makes no difference at what level one puts these things; they simply do not belong in the monist's scheme. Emergent vitalism, with its derivatives just described, is useful for general biological problems, but it is still too safe, too conservative, too limited, to meet us in our new terrain. It is certainly a good theory, but a theory that stays too "close to home" to do the pioneer job that is waiting to be done.

4. *Panpsychism*: But the monist may take an utterly different direction. The boldest of all the mind-body theorists begins, as does the idealist, with the raw stuff of which experience, or personal consciousness, is made; but he works in the general manner of the mechanist. He postulates a primitive or elementary kind of consciousness, a sort of "mind-stuff," as William James called it, and undertakes to put it together into myriad combinations, to make the whole universe. He is generally called today a "panpsychist." I shall attempt here to present only one kind of panpsychism, taught me many years ago at Harvard by L. T. Troland. Here is Troland's theory insofar as I can do justice to it:

As you read, you are a conscious self; your experience is not just an event in a material brain, but an act of consciousness, or awareness. If someone watches you read, he observes your body, but he does not observe your consciousness. Even with electrodes attached to your head to observe your brain-waves, he would not observe your *thoughts*, but

only a *manifestation* of them. Our first premise, then, is absurdly simple; namely, that consciousness, or personal experience, is the one reality. But whenever there is consciousness there is an external *manifestation* of it, such as the brain-waves or the brain-cell changes, and this *manifestation* is a physical activity.

Now imagine the brain becoming simpler as we trace it back to infancy or to embryonic life. All the time the reality, which is consciousness, grows simpler; and the external manifestations likewise grow simpler. Even the single cell has its rudimentary consciousness. From physical and chemical studies of living and of non-living things we may conclude that the differences are relative rather than absolute. It is therefore not fantastic to suggest that an oil drop may have a consciousness not altogether different from that of a simple living cell. Indeed, the simpler the thing, the simpler its consciousness. But there is no reason to make a sharp break at any point; on the panpsychist theory, everything that exists has a consciousness of some sort. Thus all the events of the physical world—considered from the inside—are *psychical* events. Every chemical attraction or repulsion, for example, is in its inner reality a psychical pull towards or away from something else.

But when we say that there are external physical “manifestations” of each psychic event, what do we really mean? By “manifestations” we mean conscious events *in the observer*, such as a visual perception of brain-cell activity as evidenced in an electrical process such as brain-waves. What we call the “external” manifestation of one consciousness is actually the conscious experience of another, the observer. Thus, if another person watches you as you think, his experience of you, even his experience watching your brain-waves, is still *consciousness*, not a non-conscious physical event. If he opens your skull and watches the surface of your brain, or even if he could peer into its chemical reactions, he would still be dealing with consciousness—his own consciousness of brain surfaces and chemical reactions. With Bishop Berkeley, the panpsychist agrees on

one essential point: it is meaningless to speak of things as they would be if they were not observable; it is what is observed, experienced, by the thinker, or by the one who observes the thinker, that science can deal with.

On the other hand, it is the physical scientist with whom the panpsychist agrees when it comes to the way in which conscious elements are put together. In conceiving the universe he postulates a very large number of small, simple particles, each of which is a droplet of raw, primitive consciousness, such as a little ache, or a shrill simple tone, or a pure color. If you analyze the furniture of your mind, you will find it composed of such mental contents, sense-impressions and feelings, which when compounded, make aggregates like musical chords or sunset colors. Now these elementary particles of consciousness move about in what we call space; they obey all the laws of physics. But if they are to become the subject-matter of science they have to be *perceived*.

Of course the qualities of the observer's experience are not necessarily the qualities as they exist in and for themselves in the particles observed. For the qualities in the observer's mind are determined by those conscious particles which we know as his brain. To pursue the example given above, suppose you examined the observer's brain, and saw a pink, furrowed surface. This would not mean that the observer's *thought* is pink or furrowed. The thing which you observe as his brain is the guise in which the observer's consciousness is manifested to you; these are the obverse and reverse of the same coin. And, in turn, the pink and furrowed qualities are qualities which are primary elements of *your* experience, corresponding to those activities which a student of electrical brain-waves would report going on in your brain. The essence of anything is its conscious quality, but the qualities of color, size, extent, etc., present in anyone's experience are “projected” into an outer space, a world where they are taken to be real. Actually they *are* real, and occur in time and space just as they are observed to occur. But we, the observers, never perceive their inner quality, but only their location and motion; and as we perceive them we

impose upon them the qualities of our own inner experience. Thus to the panpsychist the whole world of physical objects is regarded as real, and science goes on exactly as it does for the mechanist.

The panpsychist theory has indeed great subtlety and great esthetic and religious appeal—it may, for example, lead into pantheism. It is probably the most consistent, the most free of paradoxes, of all the aspects of current monism. But, as it is usually taught, it has the weaknesses as well as the strengths of monism. And, having bound the psychic realities to the space-and-time laws of physics, just as idealism and mechanism have, it has given up all its opportunities to reach into the new trans-spatial, trans-temporal world to which psychical research has afforded a clue.

There is nevertheless much which panpsychism offers. It does combine two fundamentally healthy and absolutely necessary ingredients in any viable philosophy: first, a respect for immediate experience, which it tries to explain rather than to explain away; and second, a respect for the methods and the laws of physical science. It makes the impression of going in the right direction. It might be turned into something more adequate if it would forego the negative note by which it insists that psychical events can obey *only* those laws which are known to us in the form of the laws of present-day physics. This gratuitous assumption might well be stripped away, and we might find ourselves recognizing *two forms of psychical reality*, one form operating in space-time terms, and known to existing science, and the other operating across—or rather outside of—the spatial and temporal categories. The first form includes the ordinary data of physical and biological science, and of psychology, insofar as it is an expression of biological existence. The second form includes ESP and PK, and every other process which psychical research may discover in which a person makes contact with something which is not a part of the space and time in which he is placed.

But where will this lead us? Two kinds of psychical laws, the one bound by space and time, the other free from them?

And this still asks to be called monism? No, this surely will not do. It became clear that a real dualistic cleavage in nature is suggested to us—not between “mind” and “matter,” for in following the arguments of the idealist and the panpsychist we have found that we no longer know what matter is—but between those types of natural events which conform to physical laws and those which have a different kind of lawfulness of their own. The panpsychist had not intended us to go so far; but facts have priority over theories, and the panpsychist, who was willing for us to go up to the gates of dualism so long as we did not enter, will now have to allow us to go into new territory, armed with the ideas which he has lent us. We therefore turn to a study of dualism. But we start with a predilection for a dualism not of “material” and “immaterial” things, but of *two kinds of conscious operations*; the space-time kind and the trans-spatial, trans-temporal kind.

II. Dualism

1. *Parallelism*: There are many ways of differentiating between bodily function and mental function which still deny genuine dualism; for they regard “bodily” and “mental” as simply aspects or expressions of a single basic process (“double-aspect” theory). Thus Stanley Cobb¹⁰ writes: “Indeed, up to the present there is no hint of any fundamental difference between the ‘mental’ and the ‘non-mental’ functions of the central nervous system, whether they be studied by chemical, physical, or microscopical methods.” By dualism we indicate a much more profound cleavage of mind and body than is implied by such reference to two aspects; we mean a belief that mind and body are different *in kind*, differing as stars differ from virtues, or as words differ from pyramids.

The two great modern forms of dualism took shape in the seventeenth century, in the hands of Descartes and of Leibnitz respectively. Descartes differentiated between the

¹⁰ *Foundations of Neuropsychiatry*, by Stanley Cobb, M. D., 3rd edition, Williams and Wilkins, Baltimore, 1944, p. 82.

body as an "extended" thing, the soul as an "unextended" thing, but asserted that the influence of soul upon body must be exerted at a specific point in space. Indeed, he went on to argue that this point is the pineal gland, which "by inclining this way or that" in response to the soul's influence, caused this or that bodily response to occur. All body-mind views which postulate in one way or another that there are two distinct entities which *act upon one another* are bracketed together under the term "interactionism."

Leibnitz, on the other hand, could conceive no way in which a physical event could properly be caused except by another physical event, or a mental event except by another mental event. While the attempt to put the essence of Leibnitz' thinking into a phrase is even more misleading than in the case of other philosophers, we may best refer to his extraordinary analogy of the two clocks: If two perfect clocks are set going and continue to function independently, the time as given by one is always the same as given by the other, although neither ever "causes" the movement of the other's hands. In similar fashion, there is always perfect agreement between mind and body. A light flashes into your eye, and you see, but the light does not cause your seeing, which in the economy of nature, was predestined to occur at precisely that moment; and as you decide to reach out your hand to sign an agreement, your hand is concomitantly, but independently, extended by virtue of physiological processes in your body. This is the best known of the many forms of "psychophysical parallelism."¹¹

Parallelism seems clearly disqualified as a system of thought appropriate to psychical research. The psychical processes are inevitably straitjacketed within the same system of laws which govern the bodily movements, for the two systems can never get out of step. If normal perception

¹¹ The varieties of parallelism are all hard to assimilate to "common sense"; but the reader will see quite easily what guided Leibnitz' thought if he will ask himself how one thing can really influence another thing. For if it did so, neither of the two things would be what it was before. But the soul, as a unit, a "monad," must continue to be what it has been; therefore there can be no interaction.

is explainable through the parallel activity of brain and mind, then extrasensory perception involves the sheer omission of an essential link—it is a mental process without a parallel physical process—while PK involves the thing that parallelism can least of all admit, the action of mental upon physical.

2. *Interactionism*: We noted that parallelism is as inadequate for the purposes of psychical research as are any of the monisms treated earlier. Our phenomena require the establishment of a definite functional cleavage between orders or classes of events based upon the applicability or non-applicability of the familiar laws of spatial and temporal organization. To perceive that which is occurring at a point from which no appropriate physical energies have reached us, or to perceive that which has not yet physically happened, or by our thought to influence that which is not physically controlled by our bodies—all these are *prima-facie* cases of dualism, and of that particular kind of dualism called interactionism.

There are, however, two huge enigmas here. First, how can things which are fundamentally different *interact*? We may smile at the quaintness of Descartes' dutiful pineal gland, which took the whole onus of the interaction problem; but our own view is likely to appear just as quaint, unless, simply to avoid quaintness, we conveniently forget to indicate any specific organ or method for the facilitation of interaction—escaping the appearance of absurdity only by being evasive. We shall have to admit that interaction is possible only if the interacting things have some similarity, are governed somehow by similar laws; at the very moment of stressing the cleavage between the two, we shall have to acknowledge their sharing in a dynamic unity. There must be laws which transcend the limitations of mind as such, and of body as such.

Of all the monists, the panpsychist appears to be the readiest with assistance here, for he has already suggested that mental laws and physical laws are two aspects of the

same thing. Confronted with the data of psychical research, his task is to find a way to postulate *two kinds of interacting conscious activity*, one of which presents a physical appearance, the other of which does not. Admittedly this is a large order. But all fundamental progress in science and in philosophy is a large order, and it is doubtful whether the assignment is any more difficult than the successfully assumed assignment of reconciling corpuscular and wave theories of light. When the panpsychist determines, on the basis of evidence from psychical research, that he must become an interactionist, the beginnings of a workable philosophy of mind and body will be at hand.

This will provide the beginnings, but not the completion of the task. Much labor, both empirical and theoretical, will be needed. But with a view to the developmental unity of the living organism, and the general nature of the evolutionary process, the working assumption would be that behind a genuine working dualism there is some form of intimate articulation between the two realities. For all the conscious processes—normal and paranormal—of each living thing are in some measure integrated to make use of whatever realities there are in the environment that may be useful in meeting its needs. The paranormal processes (those which transcend the space-time order), whenever the individual is gifted with the capacity for their use, have indeed been found to be utilized in close integration with the normal processes. As C. E. Stuart¹² has conceived the problem, we may utilize the paranormal in the service of our life purposes in close conjunction with our everyday utilization of the normal, and without even realizing that our manner of knowing the world is two-fold.

The other enigma that is presented by interactionism is one about which there has been much uneasiness among psychical researchers in the last few years, brought to a head in acute form by Carington's theories. The question

¹² Personal correspondence with the author.

is this: Granting a world of mental or conscious events, are these events self-sufficient, to be taken at their face-value as an irreducible kind of reality, or are they simply aspects of a deeper, unobserved psychical reality—a soul or mind? Are mental events things in themselves, or are they reflections or shadows which betray a unitary reality beyond? (The issue reminds one of Berkeley and Hume, and even of Socrates and the Sophists.) Carington¹³ tells us flatly that the psychons (conscious elements or clusters) are to be taken as entities (of a non-physical character) in their own right; H. H. Price,¹⁴ among others, holds out for a deeper psychical reality, of which ideas are expressions. It is not the aim of this paper to debate this huge problem, but simply to observe (a) that the term interaction might mean interaction of the body *either* with the soul *or* with the psychon system, and (b) that while the introduction of an unobserved soul, lying beyond the actual mental processes known to us, may indeed ultimately prove to be philosophically necessary, nevertheless at present it simply complicates the picture. The evidence from psychical research seems to relate to interaction of knowable mental states (ideas, feelings, etc.) with knowable bodily states.

It is equally clear, however, that this interaction leaves *residues*; it does not, so to speak, cut through the empty air, leaving no after-effects, but definitely alters the world. Memory involves the re-presentation, within us, of earlier interactions; personality is an accumulation, a progressively integrated network of new and old impressions. Part, but not all, of memory, consists in impressions left within the brain; for, as Bergson¹⁵ contended, there are rote memories depending on brain mechanisms, and there are also mean-

¹³ "Experiments on the Paranormal Cognition of Drawings. IV. B. A Theory of Paranormal Cognition and Allied Phenomena," by Whately Carington, *Proc. S.P.R.*, Vol. XLVII (1944), pp. 155-228. See also Carington's *Thought Transference: An Outline of Facts, Theory, and Implications of Telepathy*, Creative Age Press, Inc., New York, 1946.

¹⁴ Presidential Address to the Society for Psychical Research, *Proc. S.P.R.*, Vol. XLV (1938-39), pp. 307-343.

¹⁵ *Matter and Memory*, by Henri Bergson, first ed., 1896. English translation, with special introduction by Bergson, published by Allen and Unwin, London.

ingful memories which appear to survive brain injuries, and to live on indefinitely, being subject to no principle of biological disintegration. If, then, we argue that part of the psychic existence of the individual is not governed by the familiar space-time laws, it is likely that this accumulated nexus of personal associations may be relatively unaffected by the physical disintegration of the body. Most of the survival evidence in hand cannot differentiate between continuity of a "soul" and continuity of personal associations (psychon systems); but this problem, too, can perhaps ultimately be solved by appropriate evidence.

As the matter stands today, our panpsychist interaction theory postulates that interaction generates, or gives rise to, a world of psychic after-effects, a psychic stuff, the components of which continue to be observed in individual life, and may perfectly well continue both to exist and to increase in complexity, post-mortem.

Conclusion

We have hinted at one among many possible solutions of the mind-body problem; at least the *direction* in which an answer might in time be found has been suggested. Many other possible solutions exist, and research alone can tell which is the most promising path to follow. It is possible, for example, that the most rigid of the dualisms, even the interactionism of Descartes, may be revitalized by new discoveries; and it is quite likely that the newer theories of emergence may find a way to obliterate the difficulties here pointed out. The advances of physics may, for example, find a clue to cosmic structure in which the paranormal appears as a kind of reality intimately expressive of laws which lie at the very heart of all physical processes; we may find that the spatial and temporal are simply two "special cases" of universal kinds of structural relations. We see in a glass darkly, and dogmatism is the only unpardonable sin.

Yet something is gained by emphasizing, for exploratory

purposes, one immediately promising direction. The mind-body problem has not been solved by the present essay, but it has perhaps changed its locus to a position in which it can be better observed. The attempt has been to suggest a new point of attack. The problems of psychical research appear today to call for a dualistic answer, but it has been suggested that these problems need no longer be stated in terms of two irreconcilable, incompatible elements, physical and mental. Rather, it may be a problem of two types of psychical functioning, one defined by the spatial and temporal orders, the other lying beyond them. If this points, as F. C. Constable¹⁶ believes, to the need for systematic use of Immanuel Kant's philosophy, or if it leads us into the magnificent *aperçus* of Henri Bergson's *Creative Evolution*, that is only because some of the greatest philosophers have seen the need for a dualism in which some of the psychic processes—those which we today call the paranormal—contend not against dead matter but against other psychic processes imprisoned as yet within the regions defined by space and time.

¹⁶ *Personality and Telepathy*, by F. C. Constable, Kegan Paul, Trench, Trübner and Company, London, 1911.