

problem

A HISTORICAL REVIEW OF THE BODY-MIND ~~PROGRAM~~
THE NEED FOR A NEW PARADIGM.

The Mind-Body Problem, (M.B.P.), has been a major and persistent problem in psychology. It is not a single issue but a constellation of technical and philosophical questions. ^{The age of} This problem must be measured in millennia. There is no question that from the earliest writings of the Greek-Scientists-Philosophers, through ~~the great ages of~~ the Middle Ages, to the modern psychologists, there has been a monumental concern with ^{what} ~~when~~ is probably history's most profound question: What is the relation between the body and the mind? The last few decades have seen extraordinary conceptual developments and a vast accumulation of new and relevant empirical knowledge in this area. The search for an explanation of this relationship has come to be known as the 'Mind-Body Problem', an issue of such consequence that one philosopher (Schopenhauer) referred to it as **The World Knot** -- a play on words both of magnitude and of complexity.

Each human and each society is concerned with the problem, for it is intricately tied to our concepts of metaphysics, epistemologies, immortality, God concept, theories of life, survival of mind, will and ego, memory, the afterlife, the entire concept of consciousness, and our place and purpose in the cosmos. The past centuries have witnessed a shift from the theological/mystical concepts to a reductionistic or psychobiological approach. There has been a profound revolution in our classical view of mind as an **entity** to the contemporary view of mind as a **process**. The proposition of a psychoneural or mind-body equivalence is the basic credo of psychobiology (reductionism), and it has important implications ^{for} ~~to~~ humanity as it conflicts in a fundamental way with the predominant theologies in our society and with certain traditional Eastern and Western mysticism. *and some psychologies*

The M.B.P. is indeed rather complex and involves a mixture of many different sub-problems of varying degrees of intricacy. It seems quite clear that all scientists working in the sister fields of psychology and neuroscience are more or less directly attacking some specific aspect of the M.B.P.

The difficulties, major paradigms or theses and biases in this area will be presented and it will be proposed that major conceptual biases exist within the contemporary reductionistic (psychobiological) paradigm, ~~and~~ ^A new heuristic method of thinking about the problem ^{will then be} proposed. It is suggested that elucidating the nature of consciousness and a wave mechanics view, will go a long way in solving the M.B.P.

Difficulties With The Mind-Body Problem

a. The root of the M.B.P. is in our epistemology and metaphysics. The task of metaphysics is a substantive one; what is the nature of that reality. ~~While~~
The task of epistemology is a strategic one; ~~to~~ how to go about acquiring knowledge about reality. Our metaphysics and epistemologies have generated the reductionistic, dualistic and monistic paradigms (already discussed in a previous paper). Depending on one's personal paradigm, his/her conception of the M.B.P. will be quite different. Today the reductionistic (psychobiological) paradigm is the mainstream academic view. Furthermore, on the nature of reality there is great controversy. For example, Locke asserted that there was a real physical environment, even though we are constrained by the limits of our sensory apparatus in acquiring full knowledge of it. ~~While~~ ^{On} the other hand, Bishop Berkeley championed a classic form of idealism, ~~and~~ denied the very existence of the physical

world, and maintained that reality consisted only of minds and ideas.

b. In addition to the array of epistemologies, metaphysics, theories and paradigms, the M.B.P. is made even more intractable since students of the M.B.P. constantly return to the problem of consciousness which requires elucidation before we can understand the M.B.P. Yet consciousness is perhaps the most elusive of the many targets of psychobiological research.

The problem of consciousness is in a terrible tangle, but this question, or issue, is at the very heart of the mind-body problem. Without self-awareness, there would be no mind-body problem, no psychobiology, and very little sense of our culture and history. Therefore, the study of consciousness -- as difficult a problem as it is -- is of considerable importance to the M.B.P. In this area, certain fundamental concerns arise and must be addressed. Some of these are:

(i) Is consciousness an actuality, reality, emergent property (epiphenomenon) or an illusion? Is it a process, function or entity?

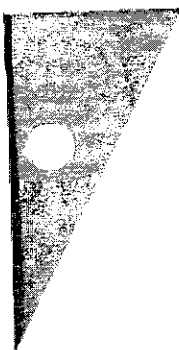
(ii) Are there, in fact, "states of consciousness"? How best can we conceptualize and study consciousness?

(iii) Are there, in fact, "levels of consciousness"? Especially the three basic levels we commonly refer to: objective, subjective, and subconscious..

(iv) Exactly what constitutes 'mind'? -- Who is minding?

(v) If mind exists, can/does it affect the brain? Is the reverse possible? If so, how? *Sperry says yes*

c. Another major problem is the refusal of researchers to shift from their paradigmatic positions or to create a synthetic paradigm. There appears to be a complete disregard on the part of most contemporary philosophers for the enormous amount of empirical neuroscientific information that has



accumulated over the recent decade. It also seems as if there is an equal lack of concern on the part of many physiologists and psychologists for certain non-reductionistic philosophical and mystical (metaphysical) paradigms. Indeed both sides seem to be trapped within their own conceptual "ruts" and are equally guilty of polarized thinking. The creativity literature suggests that it is by engaging in oppositional, yet unified (non-polarized) thinking that we can create new theories. Synthesis, not opposition, is required.

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d. Then there is the major issue of "emergent properties". Philosophers and physicists have argued for years whether or not the premise of predicting global behavior from a full knowledge of the characteristics of the parts is valid in principle, if not in practice. Indeterminists suggest that it is not just a matter of technical difficulty, but that it is **theoretically impossible** to go from the sum of the parts to the whole. Determinists, on the other hand, suggest that the difficulty is only a practical one, and if we are unable to predict global behavior from the parts, it is only because the number of interacting variables exceeds our computational capabilities. This issue is crucial since the very concept of whether consciousness is an epiphenomenon or an emergent property depends on this systems theory argument. Added to this is the question of whether it is the organization pattern of the parts or the nature of the parts which is important.

e. Additional problems arise from our existing research methodologies and their limitations such as:

(i) Measurement Issue -- What/how do we measure? Is it behavior, E.E.G. waves? Is psychophysics sufficiently valid?

(ii) Do ablation, electrophysiological and localization studies, or contemporary neurosurgical techniques, provide us with accurate data?

If we ablate ~~the~~ Wernicke's area, and the person loses the ability to understand the spoken word or meaning, is it correct to say ~~that~~ that region is responsible for that function. How does one explain then the phenomenon of recovery of function? Is the localization concept correct? What is being localized? Certainly not memory as Lashley has proposed.

Finally, a particularly serious problem in this M.B.P. and consciousness studies is the "confusion of terminology". There are over one hundred (100) definitions of consciousness, numerous interpretations of reductionism, dualism, and monism. For example, the monism of Eastern psychology or mysticism is quite the **opposite** to the monism of psychobiology. There seems to be shades of each paradigm mixing with others. Without a precise and common definition or consensus of what we are discussing or investigating, our researches will continue to be futile.

✓ However, in spite of the wide array of paradigms, there are two main genera of solutions to the M.B.P.: (a) psychophysical dualism and (b) psychophysical monism. The former assert that the mind has an existence apart from the brain, while the latter asserts the psychobiological credo that the mind is a neural function.

Dualism

✓ Since the dawn of humankind, (for at least 20,000 years), anthropological, archaeological and other data suggest that the idea of a disembodied soul was held by primitive humans. This belief was well entrenched in the religions prevailing at that time. Indeed, religion and belief in an immaterial (possibly eternal) soul go hand-in-hand. In sum, psychophysical

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dualism seems to be the oldest philosophy of mind on record. Plato upheld a strict dualism while Descartes upheld interactionist dualism, while Hume (1739) poked fun at the notion of an insubstantial and external soul.

Numerous reasons have been advanced in support of psychophysical dualism. According to Bunge (1980) some of these are:

- (a) Dualism is part of religion -- in particular, Christianity.
- (b) Dualism explains personal survival and E.S.P.
- (c) Dualism explains everything in the simplest possible way.
- (d) Mind must be immaterial because we know it differently from the way we know matter: the former knowledge is private -- the latter is public.
- (e) Phenomenal predicates are irreducible to physical ones so the mind must be substantially different from the brain.
- (f) There must be a mind animating the brain machinery, for machines are brainless.
- (g) There is ample evidence for the power of mind over matter -- eg. voluntary movement, planning, or even psychokinesis.
- (h) Dualism "squares with emergentism and the hypothesis of the level structure of reality" (pp.14-15).

While these are the major reasons for dualism, there are several reasons against dualism. Some of these are, according to Bunge (1980):

- (i) "Dualism is fuzzy.
- (ii) Dualism detaches properties and events from things.
- (iii) Dualism violates conservation of energy.
- (iv) Dualism refuses to acknowledge the evidence for the molecular and cellular roots of mental abilities and disorder.
- (v) Dualism is consistent with creationism, not with evolutionism.

(vi) Dualism cannot explain mental disease except as demonic possession or, an escape of mind from body.

(vii) Dualism refuses to answer the six W's of the mind: what, where, when, whence, whither, and why.

(viii) Dualism is not a scientific theory but an ideological tenet.

(ix) Dualism is inconsistent with the ontology of science." (p.19)

In view of the objections that can be raised even against the PRO views of dualism, and these CONTRA arguments, psychobiologists assert that psychophysical dualism is NOT a viable scientific option and strongly propose psychophysical (emergent) monism as the best paradigm.

There are several reasons to support this position. According to Bunge (1980), some of these are:

- (a) "It is far more compatible with the scientific approach.
- (b) It is free from fuzziness.
- (c) It fosters interaction between psychology and the other sciences.
- (d) Unlike dualism, which postulates an unchanging mind, it accords with developmental psychology and neurophysiology, which exhibits the gradual maturation of the brain and behavior.
- (e) It jibes with evolutionary biology and refutes the superstition that only humans have been endowed with mind.
- (f) It does NOT ignore emergent properties and quality of the mental". (p.24).

It is necessary to note that in spite of the powerful arguments for monism and against dualism, many brilliant neuroscientists and Nobel Laureates such as Penfield, Sperry, Popper and Eccles support the dualism. In fact, according to Uttal (1978), Eccles -- a Nobel Prize recipient, proposes a tripartite reality and talks about a "pure ego" as being in many ways

equivalent to the theological use of the word "Soul". I concur with his views on the existence of soul and mind as separate entities from the brain; yet, agree with emergent monism.

Rejections of the Mind-Body Problem

Certain schools of thought even reject this problem and even consider it as a non-issue or pseudo problem. Some of these viewpoints come from:

- a. Solipsism;
- b. Positivism (Empiricism)
- c. Logical Positivism which regards the M.B.P. as a meaningless question;
- and, finally,
- d. Behaviorism, which rejects any consideration of such issues ^{as} ~~like~~ consciousness, mind, soul, etc.

In spite of the arguments for monism and against dualism, I propose that there are many biases within the reductionistic (psychobiological) paradigm and that a much stronger case can be made for dualism (as per Penfield and Eccles). Some of these biases are:

- (a) Bunge is extremely derogatory of dualism even before he begins to discuss the issue. He suggests, in his preface, that, "There is no harm speaking of mental states, or events provided we do not assign them to an immaterial entity, but identify them instead with states or events of the brain" (p.x). What is the basis for this assumption? The word 'harm' creates even more bias. Furthermore, he goes on to say "that his work intends to show that the idea of a separate mental entity is an unwarranted stumbling block to science, and that the concept of the soul

I don't necessarily see him as arrogant or dogmatic - just clearly stating his position and his reasons for it.

is a myth" (p.x). Again, how arrogant can one be? Absence of evidence does not equal proof of absence, and according to Wilber (1985) because his "eye of the flesh" cannot see what the 'third' eye can see, he/she denies its existence. His opinion that the concept of a soul is a myth is no more valid than the mystics' concept of the actual existence of a soul. Furthermore, greater Luminaries in the neuroscience have conceptual positions opposite to Bunge's. It is this kind of dogmatism that is the stumbling block to scientific progress.

(b) ^{Elsewhere Bunge} ~~In another related issue~~ he suggests that ^{Who does prob and?} the meditation practiced by the Yogis is not evidence for the superiority of mind over matter. That such a state of blank mind and abnormal metabolic rate cannot be characterized as 'expansion of consciousness' or 'experiencing pure consciousness', for it is nothing but ^{Reductionism} the lowest and thoroughly non-verbal state of the brain⁽¹⁾ (p.88). Again, clearly this author has not experienced "peak experiences" nor will he ever, given his dogmatism; hence, his own incorrect reductionistic viewpoint will be reinforced. Consider the loaded words he uses to argue: "blank mind, abnormal, and lowest". Certainly a 'blank mind' description is quite incorrect. ^{Zen calls itself the "doctrine of no mind."}

(c) On a final, crucial issue, Bunge (1980) asserts that "if the mental were immaterial, it would be impossible to influence it by physical, chemical or surgical means. Since it can be so influenced, even to the point of total destruction, it follows that the mental is NOT immaterial" (p.154). Moreover, Churchland (1988) asserts that "an intractable problem confronting substance dualism concerns the nature of the interaction between the two radically different kinds of substance..." (p.318).

This type of logic and argument is used time and time again to inveigh against dualism, for, they say, how can the material influence or be

Maybe you are right! He does seem dogmatic here.

influenced by the immaterial? Since it cannot, there cannot be the immaterial. Both Bunge, Churchland and other reductionists are wrong and guilty of being trapped in their paradigms when one considers that:

- (a) The brain at its fundamental level is molecules, atoms and wave forms while,
- (b) The immaterial is energy (wave forms) presumably at a higher frequency.

Then by the physics principles of resonance, constructive and destructive interference of wave forms, we can easily understand how both wave forms can and will interact to produce a third manifestation. That is, the PHYSICAL (MATERIAL) AND NON-PHYSICAL (IMMATERIAL) are, according to Physics, one and the same. Finally, many of the so-called psychobiological credos, or principles in support of reductionism (emergent monism) are in fact quite flawed, based on questionable assumptions, and end up being merely opinions or at best representing a narrow limited conceptual paradigm.

While contemporary reductionistic psychobiology has apparently succeeded in becoming the dominant paradigm in attempting to understand the M.B.P., I ~~would~~ suggest that in view of its fatal conceptual flaws and tunnel vision, that we move very quickly to regain a **balanced** perspective on the problem. Simply because the reductionistic (monistic) approach is more scientific or more amenable to research is certainly not sufficient to banish dualism. Tolerance and a more synthetic (interdisciplinary) approach rather than arrogance, must prevail. It is quite dangerous to assume that because our theories are 'scientific', they are correct. Wilber's elegant work on the metaphors of the three eyes are quite instructive to all researchers especially our monistic colleagues. Science and its methods cannot understand or even begin to have knowledge of mind, soul, pure consciousness, etc. since it continues to use its monocular vision (1st eye) in an effort to understand

the all, which requires (trinocular) vision or the use of all three "eyes". It is felt that the theological/mystical approach has been around for thousands of years and have not 'solved' the 'world knot' so we should now use the tools, paradigms, and techniques that have served us quite well over the past decades -- that is, the scientific/reductionistic approach. It seems to me that all we have done is shifted from one end of the spectrum to the other -- again polarized thinking.

In academic circles, it's almost ~~heresy~~^{heretical} or unprofessional to include concepts such as consciousness, soul or even God into our work and this is where I feel we are sadly lacking. We reject or deny the possibility of the very entity we seek, simply because its not within the mainstream thinking. Is it not possible that:

(a) Consciousness is an emergent property -- an epiphenomenon (as the psychophysical monists) propose;

and also

(b) That mind/soul or consciousness may be an actual entity pervading the cosmos and all therein?

One can then speculate in the following manner:

Let us assume that there are three (3) levels of consciousness.

Objective = OB_1 Subjective = SB_1 Unconscious = UC_1

and that OB and SB are "emergent" when appropriate stimuli interact with neural networks. Further that UC is not emergent and is associated or related to the fundamental frequency of the Cosmos. This fundamental frequency (f_1) comes about since all matter is made up of electrons which are "wave forms". Thus the entire cosmos is and is imbued with this (f_1) which is rhythmic, pulsating and periodic. It also u (as energy) cannot be created nor destroyed. We may call this pure consciousness, which is thus

immanent in all things.

"Mind", then, could constitute the "Net" wave form produced by the interaction among:

$$OB_1 + SB_1 + UC_1/f_1 = M_n \text{ (mind)}$$

where (UC_1/f_1) could constitute soul.

M_n as a net wave form energy packet could conceivably (according to modern physics) interact with, influence and be influenced by the body's net wave form (B_1). Thus:

$$M_1 \longleftrightarrow B_1 \text{ are in continual interaction}$$

These are, of course, speculations, but suggest that a heuristic approach focusing on quantum wave mechanics/wave form interactions would conceivably allow us to transcend the present M.B.P. and create a new synthetic paradigm which would be very much in accordance with the holographic paradigm. We need to reconceptualize the M.B.P. and consciousness in terms of quantum physics, fourier transform and modern physics. Whether or not the reductionists are comfortable with it -- the fact remains that modern physics most definitely concurs with the mystical view that all that exists is vibratory energy of a fundamental frequency.

Thinking in terms of material and immaterial is quite obsolete and quite a stumbling block to science and the evolution of knowledge. This wave mechanics approach allows us to entertain the possibility of previously mutually exclusive concept -- being able to exist simultaneously -- that of:

(a) consciousness as emergent

and

(b) the soul/mind as an actual entity.

I propose that this should be the future direction in M.B.P. research in our search for a synthetic meta-paradigm.

The M.B.P. is indeed exceedingly complicated and frustrating, yet, its solution will be invaluable to the evolution of humanity. If future researchers determine that there are, indeed, individual minds and a "Cosmic mind", and that pure consciousness and soul do exist, humanity would have truly made an vast leap in its evolution of consciousness of the "Cosmic". We would have a revolutionary and refreshing view of immortality, theories of life, or purpose and place in the universe and many more fundamental problems will be illuminated.

The world knot continues to be an intractable issue for humankind and the consequences of its solution are bountiful for humanity. We need, moreso now, when materialism and reductionism pervade our thinking, to develop a new meta-paradigm of the brain, mind and consciousness. This will only be possible when we revamp and recreate our existing metaphysics and epistemologies to incorporate the fact of "pure consciousness".

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