

THE MIND—BODY PROBLEM AND BIOPSYCHOLOGY.
THE RELATIONS BETWEEN PSYCHOLOGY AND BIOLOGY
WITH A PSYCHOPHYSICAL QUESTION
IN THE BACKGROUND*

Browsing casually through Lawrence A. Pervin's paper I came to a quick conclusion: The Author mentions parallelism, epiphenomenalism and a double aspect theory, with apparent preference for the latter stance. Nothing particularly new, except for the Author's specialty—it looks like psychology of personality has stumbled upon the mind-body problem.

Having read the paper thoroughly, however, I had to revise my first impression. Pervin's essay brings forward many interesting thoughts and ideas, both referred and original: e. g. Miller's observation of the obvious, yet often unnoticed assumption of biological primacy implicit in phrases like "biological bases", "neural substrate", or "physiological foundations", or the Author's own argument that the opposition of biological and psychological factors is as artificial as in the case of the genetic and environmental variables, which never act in isolation. But my greatest mistake was the following: The Author did not in fact discuss the relationship between the neural and psychological *phenomena* but between the *disciplines* that study them: biology and psychology. Pervin does not directly address ontological issues. He mentions Cartesian dualism once, but only as an analogy of a position that regards psychology and biology as separate, isolated disciplines.

On the one hand, I agree with such approach, because—to caricature Descartes—the existence of psychology and biology is much less questionable than the existence of the substance (or two). On the other hand, it is probably not an accident that the three views of the relations between psychology and biology match the ontological positions so closely. It seems that the discussion tends to slip toward ontology even if the latter is not the intended subject.

* This paper is a revised version of an address delivered in September, 2006 at the Department of Psychology, University of Louisville, as part of the author's participation in the Grawemeyer Award selection process and is based, in part, on a chapter in Pervin (2002).

THE MIND-BODY PROBLEM SOLVED
—ANTICARTESIAN REBELLION OF NEUROSCIENCE

A TV reporter once asked Joseph Bogen, the initiator of the famous *split-brain* operations in the sixties, whom he admired most, and why. The scientist replied: “Historically, I suppose Descartes. I had a teacher once, a good teacher. His name was Barry Campbell. And he used to say, ‘You could tell how big somebody was by how long he held up progress.’ And Descartes has held up progress for about 400 years. I mean, that’s world class, you know?”⁵

On numerous occasions Daniel Dennet has argued against the delusion of a “Cartesian theater”—a showcase produced by the brain perceptual systems, picturing the external world to some undefined spiritual spectator (Dennett 1991). Miller, Galanter and Pribram (1960) invoked the famous metaphor of a homunculus inside the telephone switchboard to demonstrate the fallacy of Cartesian thinking. Donald MacKay (1969) remarked, that—apart from logical problems inherent in the notion of perception as watching an internal “screen”—the organism’s state of readiness to perform specific action is a representation itself, hence any additional one would be redundant and uneconomical. Problems that the Cartesian proposition has implanted into neuroscience have been discussed by Antonio Damasio in his popular book “Descartes’ Error” (Damasio 1994).

Due to evident infertility of Cartesian dualism, modern neuroscience virtually universally assumes—in the spirit of its founding father, Franz Joseph Gall—that no human mental life is possible without the corresponding activity of the brain (Harrington 1995). Dualist conceptions of the kind of Popper’s and Eccles’ interactionism (Popper and Eccles 1977) have been mostly ignored by mainstream research. Heuristic monism seems to have no viable alternative. The temperature of the discussion on the mind-body problem in neuroscience is quite low. It is perhaps hotter in the area of the consciousness study, but even there, new research results raise much more interest than new philosophical propositions (Koch 2004; Blackmore 2006).

The mystery of the self, as tackled in the question of *qualia* is hardly any closer to the solution today than it was in Descartes’ times. However, the mind-body problem in its most traditional form—of the relation between two kinds of “things”—seems to have been solved by acclamation. The majority

⁵ PBS. “Ask the Experts: Joseph E. Bogen M.D.” <http://www.pbs.org/kcet/closeto-truth/ask/bogen.html>

of brain scientists consent that brain and mind are two different manifestations of a single reality. The duality pertains to points of view, or levels of description, but not substances. Henry Marsh, a neurosurgeon presented by Susan Greenfield in her outstanding BBC series puts that in a more personal perspective: “We all think of mind and matter as being separate things, but it is very extraordinary, when you actually see the brain, particularly if you operate upon it, and if you think: ‘I am actually operating upon thinking... I am operating upon feeling’.”⁶

IT IS ALL ABOUT SUBJECTIVITY

Kagan, cited by Previn, declares that in the beginning of his career he regarded psychology as a discipline whose independence from biology was one of its main attractions. I find understanding such position somewhat difficult because my own preferences have always been opposite. I have felt that psychology can provide scientifically sound data only in as much as these data can be integrated with those produced by biology. I suppose that many psychologists might object against a more biological perspective because they are afraid of its allegedly reductionist nature and a possible takeover of psychology by biology. Given the increasing significance of psychological units in neurobiology departments and a number of neurobiologists working on classical psychological problems of consciousness or intentionality (not to mention perceptual mechanisms) these fears seem premature. It is rather neurobiology that is getting more ‘psychological’ than otherwise.

Behaviorism was probably the only major psychological school of a clearly reductionistic character. It offered unparalleled elegance of the basic idea, and precise method, but the price seemed too high to most psychologists—it required that one abandons or redefines many categories central to our personal experience, e.g. consciousness, empathy, or trust. Depreciation of subjective personal qualities have produced justified worries that the discipline was losing its core specificity (Hilgard 1980; Sperry 1981). A concern not to throw the baby out with the bath water again might be the reason for mixed feelings some psychologists have about the perspective of closer relations with biology. Fortunately, the history of interdisciplinary contacts has not hitherto given much reason to be afraid of any biologists’ excessive

⁶ Susan Greenfield “Brain Story”, episode 1 “All in the Mind”, BBC 2000.

fondness of reduction. Neurobiology is not too possessive. Cooperation with psychologists lets it explore previously inaccessible areas of social relations, emotion, or consciousness, while providing the psychologists with a unique chance to enhance and validate their theories, that would otherwise have to rely on speculative constructs. I am sure that personality theory, too, can only gain on cooperation with biology.

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