

Consciousness and Behavior

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1.1 With such a provocative title one expects a book delving into the great questions of psychology: why are we conscious, what is consciousness, what is it good for, how does it work? Instead we get a book that dances around these issues without seriously addressing them. Indeed, most of the book concerns not consciousness itself but various altered states of awareness such as drug states, hypnosis, biofeedback, and sleep. There is even a chapter on parapsychology. It is not clear why these fringe issues, many suffering from a shaky empirical base and a lack of adequate theory, are more appropriate approaches to consciousness than the study of perception, reasoning or planning, where consciousness normally functions.

1.2 The great issues are attacked in a short section at the beginning, about pp. 2-9, that reviews modern definitions and theories of consciousness. But at the end it gets bogged down in a theory of Julian Jaynes, who came up with the astonishing idea that the modern conscious mind developed from an abrupt but fundamental reorganization of the relationship between the brain hemispheres sometime in the 2nd millennium BC. The details are not important, because the whole idea is so preposterous, and ethnocentric as well. According to Jaynes, the voices that the ancients heard in their heads were ascribed to the gods; at some magical point, they began to ascribe the voices to themselves. This caused a change in the division of labor between the two hemispheres, but with no time for biological evolution and no particular evolutionary pressure. The newly self-conscious Greeks must have been genetically identical to their god-driven ancestors. And if the Greeks bestowed consciousness on the early Europeans, who gave it to the Africans, the Chinese, the native Americans? Or did consciousness appear in them when

they first were blessed by contact with Europeans? At this point the whole concept breaks down. The failure of the authors to offer a critique of such ideas characterizes the reviews in the book; they seem passive, rather than actively evaluative, and therefore their discussion doesn't come alive. Consistent ideas well supported by research are given equal billing with wishful thinking and empty speculation.

1.3 The remainder of the book is a set of reviews of research areas on the fringes of consciousness; these are competent enough reviews for the most part, but lacking in critical edge. The pharmacological actions and symptoms of several psychoactive drugs are given in some detail, but it never becomes clear how these facts relate to the earlier questions that motivated the study of consciousness.

1.4 The chapter on parapsychology is an extreme case of the failure of critical evaluation. Parapsychology investigates various seemingly impossible phenomena such as direct communication with other distant minds, foretelling the future, or influencing physical events without motor action. The voluminous literature is reviewed and critiqued, with the (inevitable) conclusion that not much progress has been made. But there is no real discussion of why all of these studies will never and can never make any contribution. If any of the claims were true, they would contradict the very basis of 300 years of physics and physiology. This idea is noted in passing, but its implications are not explored. Authors of such studies have the responsibility to explain either how their ideas can be made consistent with physics (usually they cannot), or how physics is wrong. Overturning physics has happened before -- Einstein did it -- but none of the parapsychologists provides the slightest hint of a mechanism or a physiologically consistent explanation of the supposed phenomena. The very phrase 'extrasensory perception' is an oxymoron. Sensory systems are hard to hide in the nervous system -- they have transducers and complex processing machinery in the brain. None of the advocates of extrasensory perception has even looked for these. Again, the lack of the sort of critical review that I have hinted at here leaves us hanging. Similar problems hamper other chapters on areas where sloppy research is all too common, such as hypnosis, biofeedback, and meditation.

1.5 If a reader is looking for clear, simple but unevaluative reviews of some of the literature on the edges of psychology, this book might be worth a look. Those interested in what consciousness is and how it influences behavior would do better to look elsewhere.