

Afterword

Writing this book has been an arduous but interesting and rewarding experience. Looking back over what I have written and trying to anticipate the responses of readers and reviewers, two comments occur to me. First, I have tried to maintain a critical and scientific approach to the various topics and problems of consciousness and altered states. Many “pop” psychology books have been written on topics of consciousness, but this is not one of them. Some readers may be disappointed that I have not actively promoted such “far out” ideas as miraculous cures achieved through hypnosis and guided imagery, life-after-death revealed by out-of-body and near-death experiences, transcendental states reached through meditation or psychedelic drugs, or dream interpretation for personality revelation, problem solving, or prediction of the future. Rather, I have tried to rescue the psychology of consciousness from pop psychology by evaluating such creative, sometimes wild, ideas in light of empirical investigations and current psychological theories. On the other hand, I have not hesitated to offer my own evaluations and speculations where appropriate, while making clear the distinction between my personal comments and the empirical data.

Second, I have tried to provide a broad treatment of topics of consciousness, including both normal consciousness and altered states. Some readers may feel that I have not given enough attention to their favorite topic, and that I have given too much attention to topics of lesser interest to them. Some students, for example, might prefer a book exclusively on altered states of consciousness, with more discussion of topics such as dream

interpretation and mystical states, and less on conceptual and philosophical issues and the brain. My own interest in consciousness was originally stimulated by questions about altered states of consciousness. However, these questions led to more fundamental questions about the nature of consciousness and its relationship to the brain. Currently, problems of normal consciousness are being actively debated by psychologists, brain researchers, and philosophers, and I am convinced that these issues should be an important part of a general course on the psychology of consciousness (Marcel & Bisach, 1988). I hope I have managed to convey the excitement of some of these topics of normal consciousness.

Readers who are mainly interested in topics of normal consciousness may feel that I have not given sufficient attention to some of those topics. For example, I might have said more about theories of consciousness, the development of consciousness in children, the relationship between language and consciousness, and the concept of intentionality (“aboutness”) of consciousness. These are worthwhile topics, but I had to make some hard choices based on space limitations, my areas of interest and competence, and my guesses about the interests of the majority of my readers. Some pertinent topics, such as perception, attention, and mental imagery, were given light treatment because they are adequately covered in textbooks of perception and cognitive psychology.

In my opinion, the most important issue that I have not systematically discussed is the question of the function of consciousness. This is a difficult problem and I do not propose to solve it here, but I want to elaborate on it to show why it is important and controversial.

From introspection, it seems obvious that consciousness, or the conscious self, is the executive decision maker that controls our behavior. To be sure, most of our behavior—other than simple reflexes and habitual responses—is accompanied by conscious awareness of what we are doing, and our actions are usually preceded by conscious feelings of intention to act. It seems to be only common sense that if consciousness attends so closely to behavior then consciousness must have something to do with controlling behavior. Furthermore, the folk-psychology belief that human actions are consciously and voluntarily controlled is fundamental to our religious, moral, and legal ideas about people bearing personal responsibility for their actions.

Yet, a number of important lines of psychological theory and research call into question the common-sense view that consciousness controls behavior. For example, as a radical behaviorist, B. F. Skinner denied that conscious thoughts and feelings have any role in causing or explaining behavior. Rather, he argued that the causes of behavior lie in the history of the species, the individual, and the culture. He emphasized operant conditioning, in which the individual's behavior is selected according to its consequences, that is, its history of reinforcement and punishment. Though behavior is accompanied by thoughts and feelings, such subjective experiences are an epiphenomenon and play no role in causing behavior, in Skinner's view. Introspection does not reveal the causes of behavior. Rather, it is more likely that “what we see through introspection are the early stages of our behavior, the

stages that occur before the behavior begins to act upon the environment” (Skinner, 1990, p. 1207–8).

Contrary to Skinner’s emphasis on environmental control of behavior, cognitive theorists emphasize the role of inner mental processes. However, most cognitive theories make no distinction between conscious and nonconscious processes, and in fact, conscious awareness plays no role in most cognitive-psychological explanations of behavior. Rather, some cognitive theorists have argued that the attempt to explain human behavior in scientific terms necessarily requires that people be approached as automata, that is, as machine-like or computer-like objects.

The theoretical deemphasis or disregard of consciousness is supported by research on introspective access to the causes of behavior. As we saw in Chapters 3, 5, 6, and 7, introspection does not reliably reveal the causes of behavior, contrary to popular beliefs. At best, introspection can give a partially accurate report, under certain conditions. But if consciousness controls behavior, and if introspective reports are reports on consciousness, then we would expect introspective reports to more accurately reveal the causes of behavior.

This brings us back to fundamental questions about the concept of consciousness. In Chapter 1, I defined consciousness as “the subjective state of being currently aware of something.” I argued that consciousness as subjective awareness is the most fundamental concept of consciousness. Some cognitive theorists have identified consciousness with working memory or an executive control system, though conscious awareness per se plays little or no role in such theories. Yet, if we did not have the personal experience of conscious awareness, we would not think to ascribe it to human decision-making systems. Artificial intelligence theorists have argued that decision functions can be explained without assuming conscious awareness.

In contrast, Anthony Marcel (1988) argued that conscious awareness per se has causal efficacy. Consciousness may permit or enable certain forms of behavior to occur, without being the direct, efficient cause of the behavior, and perhaps not always being necessary for the behavior to occur. For example, conscious self-monitoring, which enables us to evaluate our performance and current situation in comparison with our past experiences and future goals, seems to be critical for behavioral decision making. Also, I would add, consciousness as the output of a high-level interpreter system could be critical for executive decision making. Joseph Rychlak (1988) defined awareness in terms of knowledge of alternative possible future situations and actions. His “rigorous humanism” approach to explaining human action in terms of final causes—consciously known purposes or goals—implies a functional role for consciousness.¹

I do not mean to argue that conscious awareness has no role in controlling or influencing human behavior. Rather, I wish to point out, first, that the role of consciousness is not as obvious as it seems from introspection, and second, that the role of consciousness is a fundamental, unresolved issue in psychological theory. The subjective fact of conscious awareness cannot be denied. Our theoretical view of the nature and role of consciousness is basic to our view of the nature of human beings, and to how we treat them

and morally and legally judge them. It may be that folk psychology gives too much credit to consciousness and volition, and that cognitive psychology gives too little credit. In future research and theorizing, in order to better understand human experience and behavior, psychology must come to grips with the problem of the functions of consciousness.²

ENDNOTES

¹Recently White (1990) has provided a helpful overview of ideas about the nature of causation in philosophy and psychology, and Sappington (1990) has provided a thoughtful discussion of the issue of free will versus determinism in human behavior.

²References for the afterword:

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