our knowledge of the external world only on condition that claims about the world stand, quite generally, in need of justification on the basis of the "epistemologically prior" knowledge vouchsafed by "experience"—i.e., only if foundationalism is taken for granted. But this suggests that the way to deal with skepticism is to get off the defensive and make foundationalist ideas the subject of critical analysis.

However, I feel certain Stroud would reject such an account of the basis of skepticism. In his eyes, the general rift between "experience" and knowledge of the world *results from* the skeptical outcome of the traditional epistemological project and is not presupposed by it. And it is true that Stroud's initial case for skepticism—we cannot know anything unless we know we are not dreaming, which means that we cannot know anything—seems largely independent of tendentious ideas about justification.

Even so, I am not convinced. Stroud wants to trace skepticism to the project of assessing our knowledge of the word as a whole, a project that strikes him as *prima facie* intuitively intelligible. By contrast, I am inclined to think that the idea of such a project derives all its content from the picture of there being a more primitive stratum of knowledge which ought to, but perhaps cannot, provide the ultimate grounds for all claims about an objective world. Eliminate this foundationalist picture and we lose all sense of what such a general assessment of our knowledge of the world could possible involve.

In the end, the issue turns on Stroud's repeated claim that something deep in our *nature* responds to skepticism. I want to ask: why our nature? Why not our (philosophical) culture? Stroud thinks we haven't yet got to the bottom of philosophical skepticism, whereas I think that he may have got to the bottom of it himself. His case for the conditional correctness of skepticism brings out very clearly why the traditional epistemological project must always issue in skepticism. The question thus becomes: why persist in this project? Why hold on to the ideas that inform it? What would we lost if we ceased to take them seriously? To my mind, these are the decisive questions about the *significance* of skepticism. But since Stroud holds that skepticism appeals to something deep in our nature, ceasing to take it seriously is not an option, or not an option compatible with intellectual honesty, and so he feels no need to address them.

Would abandoning the traditional epistemological project amount simply to evading an issue? The answer depends on how definitive a response to skepticism it is reasonable to require. The abandonment of the project would not have to be mindless: rather, we could take the sort of careful arguments Stroud develops to show that the traditional project has run its course, that the ideas that inform it are unlikely to get us anywhere. But to see things this way would be to settle for a less than definitive response. Arguing that certain ideas have not proved fruitful, that they have led us into an intellectual cul-de-sac, is not the same as arguing that certain views were always less than fully intelligible, even incoherent. But to my mind, the lesson of Stroud's fine book is that no such definitive response to skepticism is likely to be forthcoming.

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Consciousness and Causality, D. M. Armstrong and Norman Malcolm Basil Blackwell, Oxford, 1984, 222 pp. \$24.95 cl; \$9.95 pbk.

DOUGLAS C. LONG

This is the second in a Blackwell series entitled "Great Debates in Philosophy," the stated

purpose of which is to "capture the flavour of philosophical argument and to convey the excitement generated by the interplay of ideas." In this volume two eminent philosophers with strongly opposed and controversial views discuss the nature of mind and mental phenomena, focusing their attention upon issues arising out of recent discussions of "functionalism." This is the thesis that any mental state is *identical* with a neurological state which plays a functional role as an effect of stimuli or as a cause of expressive behavior that is analogous to the explanatory role of that mental state itself. A version of this type of "materialist" view of mind has been proposed by Armstrong, which he calls "The Causal Theory of Mind."

Curiously, although Armstrong is the one with the brash "positive" thesis about the physical nature of the mind, Malcolm takes his turn first, using slightly more than half of the book to raise a number of related objections to the views of well-known philosophers whose claims about the nature of consciousness he finds mystifying. His targets include Brentano's thesis that all mental phenomena are "perceived only in inner consciousness" and only by their possessors (25); Dan Dennett's claim that the everyday concept of pain is inconsistent (10); the tempting speculation shared by many "materialists" that someday science may find out whether creatures widely divergent from the human paradigm, e.g., flies or machines, "possess consciousness" (32); and the "metaphysical" concern entertained by Thomas Nagel, Ned Block, and Sidney Shoemaker, that experience has a "subjective character" which the various forms of physicalism, especially functionalism, cannot "capture" (45, 56). Even though Malcolm is no friend of physicalism, he questions the suggestion that our experience has a qualitative character which is indescribable so that no one can say "what it is like to have it."

Malcolm's chief criticisms, however, are directed at Armstrong's views. He opens with an attack on Armstrong's suggestion that "consciousness is no more than awareness (perception) of inner mental states by the person whose states they are" (9), or more precisely, it is the brain's scanning its own internal states. Since the operation of scanning and the situation scanned must be "distinct existences," it is Armstrong's contention that being in pain, for example, is logically distinct from feeling a pain. Malcolm insists that this view has the "bizarre" implication that conceivably we have frequent sensations of pain without ever being aware of them, and also that whenever we seem to be aware of pain there may actually be no such sensation present. He believes these "supposed possibilities are so contrary to the way we speak and think of our sensations and of our awareness of them," that to take them seriously would mean that "we had no understanding of the language of sensation..." (9).

Malcolm finds the mind-brain identity thesis equally unintelligible because a physical state or process in the nervous system has what he calls (after Wittgenstein) "genuine duration," whereas many so-called "mental states" do not. For instance, the duration of a certain belief or intention is not a continuous "observable" process. It is more like the duration of a marriage than the duration of a musical performance. In addition, he argues against Armstrong's Causal Theory that mental states cannot in general be causes of behavior on the grounds that 1) the "cause" of a person's doing X is his *reason* for doing X and his doing X is not the *effect* of his reason or purpose; and 2) there is a conceptual connection between the character of a mental state and its expressive behavior. Armstrong's contention that there is a causal relation between the state and the behavior it produces implies that the relation is merely contingent. On his view it is *conceivable* that any sort of behavior might follow upon and hence be the expression of a particular intention.

Armstrong uses his half of the book to rebut Malcolm's objections one by one. Sometimes his strategy is to challenge the ordinary language data that Malcolm adduces for his point. For instance, in defense of his thesis that being in pain is a distinct state from being aware

of it, he cites the example of a person who is distracted from his pain and so is no longer aware of it (127). He asserts that "it is probable that the pain continues." At least it is an intelligible speculation. Malcolm strongly disagrees (15). Since one may not be able to report either that the pain stopped or that it continued while one was unaware of it, there is in this case no sense to the question "Did it continue or not?" Malcolm insists that we should not view this issue on analogy with the music which may or may not continue when one is not aware of it. Armstrong, like Descartes, is a captive of the "inner object" model of sensations—substituting neurons for Cartesian spirits.

Armstrong is not convinced by these remarks, principally because he is committed to the view that persons are physical systems. He is unmoved by Malcolm's claim that intentions and beliefs are not subject to genuine duration, since he believes that we are simply not able to access these states introspectively in a way that makes their processes in time observable. Mental states can be described in two different ways depending on our epistemological access. When they appear to us introspectively as mental, their properties may seem not to be those of physical states and their relations to their behavioral expressions are properly regarded as being conceptual. However, qua physical states and processes they have physical properties and, being distinct existences, are only contingently related to their associated behavior.

The debate concludes with a "reply" in which Malcolm restates his objections in a few pages, followed by a point-by-point response by Armstrong. Neither makes any noteworthy concessions to the other. Their assumptions and methods have so little in common that the debate often has the quality of a clash of opposed and entrenched political opinions. They argue at arms length, providing scant guidance to help the unsophisticated reader understand the philosophical price one might have to pay in adopting one view rather than the other. Second-order examination of their methods and assumptions is not a strong point of the book. That is perhaps characteristic of debate as opposed to dialogue.

Malcolm champions "common sense" and "ordinary language," resisting Armstrong's insistence that human beings are to be brought under the umbrella of scientific explanation. Nor does he present a "theory" of his own, doubtless on the Wittgensteinian grounds that this would only force our conceptions of mind, person, cause, etc. into distorting molds fashioned by our "a priori" demands. He thinks that Armstrong's tendency to use stock labels, like 'mental state' to include every sort of psychological phenomenon, from pains to beliefs to intentions, blinds him to the important differences among the varieties of psychological phenomena which we attribute to living *persons*—not to brains, machines, or physical systems.

From Armstrong's point of view, Malcolm appears to be dogmatic in his insistence on what is "absurd," "not intelligible," and "meaningless." Science has a respected history of revising "common sense," and Armstrong is convinced that mental states will turn out to be, like genes, physical items concerning which physiology can reveal more detail. What plausible alternative to his own view is there besides a thoroughly discredited Cartesian dualism of substances or an inadequate behaviorism?

Despite their radical differences, the authors do manage to speak to one another with sufficient vigor to make their exchange more lively than the usual introduction to the mind-body problem. The content of the discussion is rich and provocative. It would be useful in a small undergraduate course in which there were time to fill in the background and to unravel the claims and counterclaims. The level of discussion is neither technical nor difficult to follow, but it helps to have had prior acquaintance with recent discussions of materialism, the identity theory, and functionalism—to say nothing of Wittgenstein's attack on traditional views of the mental. For this reason, it would perhaps not be as easy to use in large introductory courses as the *Meditations* or J.J.C. Smart's early papers on the identity thesis.

More advanced students will gain more by reading the original articles and books written by these authors and the others cited in the discussion. Nonetheless, the volume as a whole does provide a clearer understanding of the key differences between the two philosophers and reveals something of the sources of those differences. And perhaps best of all, it presents an excellent opportunity for the interested reader to sort out the respects in which each is correct, with a view to working out a single sensible account.

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Matter and Consciousness, Paul M. Churchland

Cambridge, MA, MIT Press, 1984, 164 pp. \$8.95 pbk., 0-262-53053-3

KATHLEEN GILL

Anyone interested in using a contemporary approach to philosophy of mind in an introductory course will find Paul Churchland's *Matter and Consciousness* a useful text. The main theme is a comparison of behaviorism, reductive materialism, functionalism and eliminative materialism. While Churchland's bias towards eliminative materialism is undisguised, he gives a fair account of the advantages and disadvantages of each view that is accessible to the uninitiated reader.

Part of what makes the presentation of this difficult material accessible is its organization. Churchland has a wonderful talent for linking ideas together, so that the reader has a clear sense of how one view is responsive to the problems of another. Churchland's discussion of the various forms of dualism and the introduction of functionalism as springing from behaviorism are prominent examples, and smooth reasoning such as this is found throughout the book.

The shifts in perspective which form the bases of chapters 2-4 are an interesting organizational feature. Churchland first discusses the differences between views as an ontological problem, then as a semantical problem, and finally as an epistemological problem. This highlights major approaches in contemporary philosophy, but also results in a significant amount of repetition. At the same time, this gradual building of the views leaves initial discussions somewhat incomplete, e.g., the discussion of artificial intelligence, which is left until chapter 6, could be used to give a more thorough account of functionalism when it is first introduced. But of course the material can be used in any order. In general, discussing specific examples of each view is helpful in making Churchland's general characterizations more meaningful.

A major problem is Churchland's failure to develop clearly the notion of folk psychology. The claim that folk psychology is a theory plays an important role in Churchland's strategy; it's taken as an innovative way of unifying the various issues in the philosophy of mind and focussing the discussion in a way that will expedite a resolution. "If (it) is literally a *theory*, then the question of the relation of mental states to brain states becomes a question of how an old theory (folk psychology) is going to be related to a new theory (matured neuroscience) which threatens in some way to displace it" (61).

But what exactly is folk psychology? We are told that it consists of the "assumptions and principles that constitute our common-sense conceptual framework for mental states" (27), and includes such beliefs as "persons tend to feel pain at point of recent bodily damage" (58). This gives us some idea of what folk psychology is, but Churchland makes several