

too indicative: One referee thought that only Block's access-consciousness "deserves the name 'consciousness,'" yet the other wondered "why access is called . . . access-consciousness? Why isn't access just . . . a purely information processing (functionalist) analysis?"

Block tries to give both sides their due and work out a *modus vivendi* between (roughly) functionalist and antifunctionalist concepts of consciousness. P-consciousness is the robust, phenomenal, what-it-is-like concept; A-consciousness "is the information processing image of P and thus a good candidate for what P is in information processing terms" (p. 277). But while I find Block's general program refreshing, I am still confused about the precise interpretation of A and P, especially at the empirical level.

Block argues in detail for the conceptual possibility of the P/A distinction (e.g., p. 231) in order to "reveal the fallacy in the target reasoning" about a function of consciousness. But he also uses the P/A distinction to frame the empirical hypothesis that there are two different kinds of consciousness in the world: P and A are said to "interact" with one another (p. 231), to be distinct cognitive systems with presumptively different loci in the brain (p. 233), to have "something to do with the joints of nature" (p. 277), and so on.

The P/A distinction, then, looks as if it plays two very different roles – one narrowly logical, the other broadly scientific. Apparently Block thinks these roles dovetail: If the concepts of P and A are logically possible and help clarify a line of reasoning about consciousness, then we have plausible grounds to believe that two different "consciousnesses" exist.

But this is a problematic transition, open, first of all, to a purely formal objection: A concept can help clarify a line of scientific reasoning and yet refer to almost anything – to a completely imaginary entity, for instance. Block himself uses concepts about a Martian experiment on Pentagon drinking fountains to help clarify a related problem in reasoning about the function of consciousness (Note 25). But I doubt Block thinks that Martians exist because the concept of Martians is logically possible and can help isolate a formal problem in a scientific argument.

Of course the great practical difficulty with the thesis that A and P are separate kinds of consciousness is that Block cannot show us in any straightforward way how to tease them apart. Even in extreme cases such as blindsight, we are told that A and P are both absent. At one point Block straightforwardly concedes that "perhaps P-consciousness and A-consciousness amount to much the same thing empirically even though they differ conceptually" (p. 242).

But even conceptually, I am not sure that the P/A distinction is viable. One example: At first P and A seem to incorporate a clear-cut phenomenal/functional split: for example, "A-consciousness is a functional notion . . . P-consciousness is not a functional notion" (p. 232). Yet at this point, in a footnote, Block begins to pull back: "I acknowledge the empirical possibility that the scientific nature of P-consciousness has something to do with information processing" (note 10). So Block's notion of P-consciousness will bear functional attributes after all. This becomes increasingly clear in later sections, for instance, when Block says that P-consciousness could function in the senses proposed by Marcel (1986; 1988) or Schacter (1989, p. 242), or when he concludes that "learning something about the function of P-consciousness may help us in finding out what it is" (p. 245). Whatever distinguishes P from A, it is not functionality per se. So, to the degree that P's functionality can be captured in information processing terms, P collapses into A.

I do not see why Block maintains that there are two distinct kinds of consciousness. Certainly we do not need a "two consciousnesses" premise to (1) identify the logical limitation in the target reasoning or (2) distinguish, for scientific purposes, phenomenology from those cognitive function(s) consciousness may execute.

The old fashioned "single-consciousness" assumption will do much the same work as Block's A and P duo. It, too, is compatible with the view that phenomenology and cognitive function have no necessary connection, and this is enough to show the logical gap in

## Empirical status of Block's phenomenal/access distinction

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**Abstract:** P/A (Block's phenomenal/access) confounds a logical distinction with an empirical claim. Success of P/A in its logical role has almost no bearing on its plausibility as an empirical thesis (i.e., that two kinds of consciousness exist). The advantage of P/A over a single-consciousness assumption is unclear, but one of Block's analogies for P (liquid in a hydraulic computer) may be used to clarify the notion of consciousness as cognitive "hardware."

Block (1995t) is certainly right about one thing: Two different concepts of consciousness now prowl the cognitive landscape. The reaction of two of Block's referees (p. 235) is, I can attest, all

the target reasoning (with, say, arguments similar to those used for epiphenomenalism). And, at the empirical level, there is nothing in a single-consciousness assumption to prevent us from either distinguishing cognitive function from phenomenology, or looking for systematic links between them. In particular the single consciousness assumption is able to handle some of the more puzzling phenomena Block himself mentions – imageless thought, “just knowing,” feelings of relation – when considering (without resolution) the possibility of A without P (p. 275). Both phenomenological and functional analysis of these puzzles are already underway using experimental support and standard information processing notions (Mangan 1993b) without the need for Block’s more radical option.

Finally, I have a question about P and A that I don’t believe Block addresses. At one point he speculates that “perhaps P-consciousness is like the liquid in a hydraulic computer, the means by which A-consciousness operates” (p. 242). Now if A “is the information processing image of P and thus a good candidate for what P is in information processing terms” (p. 277), it looks as if we have the following consequence: A could be instantiated in an indefinite number of information-bearing media without loss, but P, *qua* P, cannot. For P can only be a liquid or it isn’t P. P-consciousness is, by analogy, “part of the hardware,” while A retains the classic functionalist indifference to its particular physical manifestation. This captures one crucial feature of the functionalist/antifunctionalist dispute about consciousness (Mangan 1993a, pp. 10–14), though probably not as Block intends, since he generally takes A and P to constitute an interacting system. A-consciousness captures those features of P-consciousness that can be instantiated (functionalist “consciousness”), but A cannot capture *everything* that it is to be P (antifunctionalist “consciousness”). Or, for Block, can A *completely* instantiate P?

## AUTHOR'S RESPONSE

**Mangan** agrees that there is a conceptual possibility of P diverging from A, but he is certain that in fact P = A. He seems to think that I argue as follows: a difference in concepts, therefore difference in fact. But that is not my argument. I say that we do not know whether P = A. There is certainly reason to take apparent cases of P without A (and one apparent case of A without P) seriously. Mangan says that research on P is doing well on the assumption that P = A. But is it really doing well when we have no idea how anything physical could have P, when we have proposals that the field seriously considers drawing on quantum mechanics, whose rationale seems to be that both quantum mechanics and consciousness are mysterious? Mangan mentions my analogy: perhaps P is like the liquid in a hydraulic computer, and A is like the computation. P is the hardware implementation of A. Mangan wonders whether P can "completely" implement A. But if the analogy is correct, then we have to wonder whether there are other implementations of A, just as a given computation may be realized electrically instead of mechanically. There can be hydraulic fluid without the hydraulic computer and an electronic version of the computer without any fluid. How does Mangan rule out the analogous possibilities in the case of P and A?

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## Continuing Commentary

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