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Epi-arguments for epiphenomenalism

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Velmans demonstrates a fine grasp of current experimental research as it bears on consciousness. It is crucial to get as clear as possible about what cognitive activities are conscious, what are not conscious, and what relation obtains between conscious and nonconscious domains. One virtue of Velmans's target article is that it brings these issues to the fore. But Velmans thinks his specific analysis supports epiphenomenalism (sect. 9.3), and this is a problematic conclusion. Among other difficulties, it rests on a logical misunderstanding and a substantial overgeneralization of the evidence.

1. At best, Velmans presents evidence that certain cognitive functions are not *necessarily* performed by consciousness; yet he wants to conclude "that consciousness performs none of these functions" (abstract). As a logical matter, this conclusion simply doesn't follow.

To show that *X* performs function *Y* does not show that function *Y* can *only* be performed by *X*. A tiger can kill with its teeth, but it can also kill with its claws. We can detect light with either the rods or the cones in our eyes. Biological systems often overlap, and often provide an organism with more than one way to accomplish a given end (even though there is generally an optimum profile for a particular condition). Even if, for the sake of argument, we were to accept all the specific interpretations Velmans places on his evidence, it would show only that the processing that others attribute to consciousness can *sometimes* occur without the agency of consciousness. Velmans's argument is much like claiming that people don't really play the piano with their hands because, occasionally, we can find people who play the piano with their feet.

2. On its face, then, even if we grant Velmans's suggestion that functions usually attributed to consciousness can be executed by nonconscious processes, much more must be shown before he can justify his epiphenomenalist conclusion. Among other things, he must rule out the possibility that when the normal function of consciousness is skewed or inhibited or blocked by a peculiar experimental manipulation, various nonconscious systems that usually work to *support* conscious activity can themselves take over and execute some of consciousness's functions.

This is hardly an ad hoc objection. We have good reason to accept both its underlying assumptions: that consciousness is functional, and that nonconscious mechanisms are in constant contact with consciousness. Velmans already accepts the second point: He willingly grants that neurological processes, specifically those responsible for focal attention, produce conscious effects (sect. 10).

And even Velmans's own discussion can be used to generate three reasons why consciousness would seem to be functional: (a) From a biological, "Darwinian" perspective (Velmans's first paragraph), it would be very odd that something as remarkable as consciousness evolved and yet did not execute a cognitive function. (b) In fact, there is an almost universal first person conviction that consciousness *is* doing something functional (sect. 9.3), and thus our inner experience converges with the biological presumption. Furthermore, (c) Velmans argues that although focal attention, in its information processing sense, is

something quite different from consciousness, the two are nevertheless very difficult to separate: "In practice . . . a complete dissociation of consciousness from focal-attentive processing is difficult to achieve, as the disruption of consciousness is also likely to interfere with at least some aspects of (normal) focal-attentive processing" (sect. 8). This presents a problem for Velmans's account. If consciousness and focal processing are distinct, we must then try to explain why they are still so closely correlated, *and yet capable of partial dissociation*. Why doesn't consciousness spend its time, say, contemplating the fine points of digestion, or remaining fixed on a single long-term memory trace? Why should consciousness arise only at the focal processing level, and yet not always be co-extensive with the focal processing that supposedly produces it? On an epiphenomenalist account, both the "location" of consciousness and its close but imperfect "correlation" with attention are inexplicable. Both must be accepted as happenstance. On the functional account, there is a straightforward explanation: Consciousness performs the functions it appears to perform, but at times some of its cognitive functions, especially lower level functions (see below), can overlap with the nonconscious processing mechanisms that normally support consciousness.

There is still the mystery of the interaction of consciousness with the physical brain. But this mystery is already accepted by epiphenomenalists, in that they grant that the brain generates consciousness. This means that there is a physical, causal link between the brain and consciousness – and something produced by a physical process is to some degree physical. It is, then, just as mysterious to assert that the physical brain has a causal relation to consciousness as it is to assert that consciousness has a causal relation to the brain. For the moment there is no way to explain the physical nature of this link, nor how consciousness is generated. Both sides of the argument share this problem.

3. It is significant that little experimental evidence discussed by Velmans considers the high-level cognitive abilities usually said to be paradigms of conscious activity.

Velmans recognizes that many theorists take the function of consciousness to involve the processing of complex, novel information. As he says in his abstract, in the view of many theorists, "conscious processing is needed to identify complex, novel stimuli. Conscious processing has also been thought to be necessary . . . for the organization of complex, novel responses, particularly those requiring planning, reflection, or creativity." But Velmans tends in practice to focus on relatively simple cognitive acts such as the nonconscious recognition of familiar words and simple visual patterns. Or he points to the rapid execution of already well-learned responses: "The manipulation," in an emergency and without conscious deliberation, "of steering wheel, accelerator, and brake . . . with a very high level of competence and accuracy" (sect. 5.3). But Velmans's investigation becomes very thin when considering perhaps the most significant point at issue – the role of consciousness in processing complex, novel information to be used to plan, reflect, and create.

Consider section 2.3, for example. Given its title, "Pre-conscious analysis of complex messages in the attended channel," one might expect the section to get at the crux of the dispute about the role of consciousness in processing complex information. In fact, the section takes up evidence for the preconscious analysis of single, familiar words: The most "complex" and "novel" nonconscious message to be considered is a single sentence: "The forest ranger did not permit us to enter the reserve without a permit." This is not exactly Proust. The great bulk of Velmans's evidence does not address even moderately complex cognitive capacities analogous to, say, the ability to understand a VCR manual – let alone the ability to discover the ecology of a rain forest, plan an escape from prison, or compose a concerto. It should go without saying that even the most paradigmatic conscious activities must be supported by

vast amounts of nonconscious processing. This has been a constant refrain from Mandler (1975a) to Baars (1989). If Velmans wants to show that conscious processing is really just nonconscious processing in disguise, then he must look much more carefully at the cognitive role consciousness appears to play at the upper end of the cognitive spectrum, where consciousness seems most in evidence and most crucial, rather than at the lower end, where many theorists already agree that consciousness' role can be minimal, and naturally shade off into nonconscious processing.

References

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