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A Pre-Epistemology of Consciousness

Max Velmans' target article and response to commentaries in the *Journal of Consciousness Studies*, Vol. 9, No. 11, 2002, can be seen as something of a milestone in the history of consciousness studies.¹ In them he takes this elusive subject to the limits of rational discussion. Through exhaustive analysis and theorizing, he fills the gaps in our understanding of the multifaceted mind–brain issue. On the one hand, he establishes the mutual irreducibility of the two. On the other, he elucidates their causal interactions. As he explains on page 91, this is possible only because both mind and brain ‘are grounded in something deeper’ — a ‘self-revealing universe’. The ultimate nature of that universe is neither pure matter, nor pure spirit. It is a combination of the two.

The important thing about Velmans' treatment of the mind–brain issue isn't only that it forms the outline of a highly plausible theory of consciousness. It is that he argues for it from within his opponents' territory. He not only remains well within the evidence secured by science. More significantly, he remains within the confines of the scientific mode of thinking.

Velmans' work calls for an examination of the very conceptual basis of a science of consciousness, and he points in such a direction himself. At the end of his response to commentators, having effectively summarized his arguments against mind–brain and brain–mind reducibility, he writes: ‘If the thing-itself [i.e. physicality] and mind-itself [i.e. non-physicality] are *fundamentally* psychophysical, one avoids such problems [i.e. the first-person/third-person conundrum]’ (p. 94).

But if psychophysicality ‘avoids the problem’ on the pragmatic level, what avoids it on the conceptual level? We need to start from the subject/object duality, which informs the first-person/third-person debate.

The way out of this duality is pointed to by the term ‘consciousness’ itself, which applies to both the first- and the third-person perspectives. As Velmans has said in the past, you cannot become conscious of otherness before first

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[1] This review was submitted in response to the publication of the November 2002 issue of *JCS*, and for convenience is published here with further commentaries on Velmans' target paper — *Ed.*

becoming conscious of your self. For me this means that the initial step toward avoiding the first-person/third-person problem is honest and systematic self-reflection. There can be no science of consciousness without a consciousness of that science. As Aristotle puts it, ‘understanding is the understanding of understanding’ (*Metaphysics*, 11. 10741).

The first great exponent of Aristotle’s self-reflective epistemological premise was Socrates. He criticised the thinkers before him because they expounded on nature without first examining their own selves. As both Plotinus and Goethe reformulated the Socratic position, the understanding of the knower must be adequate to the thing known. Velmans has performed miracles while using a scientific language that is inadequate to the task of investigating consciousness. How many more would he perform if he had an adequate language at his disposal — a self-reflective one?

A degree of self-reflection on the part of consciousness investigators — but also of scientists in general — would allow them to establish a level of discussion that would be better suited to examining their subject. Modern science is concerned that concepts should be clear, grounded, logical and specific. A future discussion of the mind/brain issue should also take into account two additional factors. The first is experimental data showing robust interactions between human intention and animate, as well as inanimate, systems (Tiller *et al.*, 2000). The second factor is the various mental attitudes, professional interests and paradigmatic constraints mentioned by Velmans, which shape most thinking in the scientific discussion of the mind–brain issue.

Both these factors demand that the consciousness investigator go much deeper than is demanded by paradigm psychology, brain research, air-tight protocols or even epistemology. A level of understanding needs to be accessed which, for lack of a better term, I call ‘pre-epistemic’. What does it mean?

Conception is not possible without perception, perception is not possible without representation and representation (recognition) is not possible without objectification (reification). Thus, if epistemology is concerned with how you know what you know all the way down to representation, pre-epistemology is concerned with how you objectify what you objectify, so that you can know what you do know.

The question of objectification relates directly to Werner Heisenberg’s uncertainty principle. People usually take it to mean that knowledge of physical reality is uncertain. I take it to mean that you can never know the world in its entirety, or even only a portion of it, through the objectification process. The whole enlightens the parts. The parts don’t enlighten the whole.

But if perceiving objects and conceiving their relationship to one another is not enough, what is? Objectifying reality is imperative in science. However, at least in consciousness studies, we need to understand the processes by which it happens. Based on the work of Libet and others, Velmans repeatedly draws attention to the issue of gradual representation (I would call it here objectification) from the unconscious to the pre-conscious and the conscious. The numerous chaotic phenomena and their strange attractors, which have been

observed in the brain, also speak of something similar. Objectification processes in the brain seem to be gradual — in electrochemical terms.

Objectification has many aspects and involves several questions. One is the starting point of objectification. Does it begin during the initial sensing stage, when we just feel that something may be happening without yet having a picture of what it is? Or does it begin during the actual observation stage, when we give specific form to what's happening through one or several of our senses?

A second question is whether we choose to objectify certain entities rather than others. The next is whether (and why) we choose to objectify certain kinds of entities rather than others. Another is how we evaluate what we objectify both in itself and in relationship to other entities. Who or what dictates the criteria informing this evaluation? Are there perhaps different evaluation systems informed by the particular purpose for which we objectify certain entities?

A very significant question is whether we extrapolate from vision² to how we work our objectifications into representations, conceptions and thoughts, as Aristotle did. On its heels comes the question of whether we have the inclination to extend the rationale of what we conceive in one area, or at one moment, into other areas or moments, glossing over the contextual differences.

But the most important question of them all is the following: do we release our objectifications after they've served their purpose, or do we lock into them, thereby influencing future apprehensions? The fact that on the whole we don't release our objectifications, has bedevilled civilization ever since the invention of alphabetic writing, if not earlier. The discovery of chaotic dynamics both in the physical world and in the brain means that we must now fashion an equally dynamic way for apprehending reality.

The realization that what we apprehend doesn't reflect faithfully either what is going on in the brain or what is going on in the world, has profound implications.³ In inorganic matter the scientist is more in a position to apprehend what's happening by observing physical and chemical interactions. In organic matter he can do this less effectively. Physicist Walter Elsasser and biochemist Marian J. Wnuk point out why.⁴ Organic matter, they say, is more complex functionally than it is structurally. A complicated operation doesn't require an equally complicated physical substrate of the kind that correlates function to structure in inanimate matter.⁵

- [2] Alfred North Whitehead (1920/1953) wrote a whole book to show that even such seemingly objective concepts as time and space actually originate in the senses — and are therefore aspects of conscious experience. They cannot be considered objective components of reality.
- [3] See also *Is the Visual World a Grand Illusion?* (Noë, 2002a), especially the articles by Noë (2002b), Hoffman & Rodriguez (2002) and Rowlands (2002).
- [4] This idea is expressed by Marian Wnuk in 'The Electromagnetic Nature of Life' (2001) and by Walter Elsasser in *Reflections on a Theory of Organisms* (1987, p. 41). Having first made the point that living organisms are much more complex than inorganic matter, Elsasser observes: 'If a complex heterogeneous structure . . . is large enough, the number of possible patterns [of interaction] might vastly exceed the number of members of the class that can exist in a finite world'.
- [5] This applies particularly to those levels of organization determined by unchanging basic laws — those rooted in Planck's constant.

This is an additional reason for claiming that brain states are not reducible to conscious experiences. When applied to the mind/brain issue, a combination of Leibniz's symmetry law and Velmans' dual aspect reflexive monism, yields a picture that should satisfy both reductionists and non-reductionists. Consciousness appears in it as producing the brain on the strength of the fact that the brain is producing consciousness. The psychophysical universe sees to it that there is both something more and something less to consciousness than its physical transformer.

So, though Velmans will probably disagree with this interpretation of psychophysical action, one can finally assume that brain constitutes an instrument for localizing, enhancing, fine-tuning and modulating initially weak conscious impulses — perhaps not unlike those emerging from the quantum vacuum. Our neurones generate states capable of becoming conscious experiences — but only because consciousness moulded them over millions of years to be able to do so. All organs in living organisms grow in response to need.

The question of a pre-epistemology of consciousness, which will undertake to investigate systematically the various aspects and repercussions of objectification outlined above, is vast and cannot be developed in a short commentary like this. But Max Velmans' work calls for it. A pre-epistemology is essential for further investigating not only consciousness as the most significant phenomenon of living matter, but its research by the scientists currently involved in the task. As Velmans gently puts it in his response to some commentators, there is a tendency among scientists in the field to objectify (and therefore attach importance to) only those aspects of the subject that appear relevant to them under some respectable rubric such as 'science', 'reason' or 'plausibility'.

This is only human. But if we want to create a science that is not only about consciousness but of it, we must find a way to become aware of what we invest in it — and why. It is the only way to secure that we can objectify our apprehensions without compromising our objectivity.

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