

Susan Blackmore: Consciousness: An Introduction

William Seager
University of Toronto at Scarborough
Humanities Building Room 523
215 Huron St.
Toronto, Ontario
Canada M5S 1A2
© William Seager 2005
seager@utsc.utoronto.ca

## **PSYCHE 11 (4), May 2005**

**REVIEW OF**: Blackmore, Susan, 2003. *Consciousness: An Introduction*. Oxford: Oxford University Press. US\$42.95 ISBN: 019515343X

There are plenty of books about consciousness, but none of them is like this book. On the first page we discover that 'a great deal of this book is aimed at increasing rather than decreasing your perplexity'. At this Blackmore certainly succeeds. This is a testimony not only to the subject matter but her own deft and relentless exploration of every facet of consciousness as well as its study. It is her positive aim to lead the reader to the mystery inherent in even the most everyday forms of consciousness and to show conversely that truly exotic forms of consciousness are not that out of the ordinary.

The book is written in a deceptively breezy style suitable, as publishers like to claim, for the undergraduate and the educated layperson. It would serve admirably as the core text for a compendious introduction to consciousness studies course (if there are any such courses besides Blackmore's own). But such a course would require a highly focused teacher, for Blackmore steadfastly refuses to settle into any one subject matter. The book covers a huge range of topics, more I am sure than any other book on consciousness yet written.

This must have posed a tactical problem of organization which Blackmore has solved in an intriguing fashion whose virtues only really hit home as one nears the end (as we shall see). The book begins with the overtly philosophical themes of fundamental ontology wherein the reader meets the usual suspects: dualism, physicalist monisms such as the identity theory and functionalism, the despairing monism of mysterianism and the bizarre monism of eliminative materialism (though Blackmore seems somewhat to mischaracterize the Churchland's position on consciousness as opposed to their relatively clearcut eliminativism about intentional mental states). But she also notes other, less mainstream, possibilities such as neutral monism and panpsychism. She introduces us to

the explanatory gap and gestures towards the so-called representational theories of consciousness. As with all of her chapters, Blackmore has not the time or space to go deeply into these matters. Although the book is over 450 pages long, its ambitious agenda permits only a cursory look at each issue, as befits what eventually defines itself as the *only* fully comprehensive introduction to the problems and study of consciousness (it would be no exaggeration to note that the book could, with the help of an appropriate army of helpers, be expanded into a 4500 page encyclopedia – the framework is in place).

Although Blackmore is by training a psychologist I was struck by how so many of her chapters are anchored in a core philosophical puzzle. This is obvious for themes such as the ontology of mind or the nature of qualitative experience, but distinctively philosophical questions arise everywhere, from the neurophysiology of blindsight to semantic priming. This focus aids and abets the search for perplexity; everywhere we turn when studying the mind we find mystery uncomfortably close. Perhaps the measure of maturity of a science is how long it can hold out against this intrusion of mystery; as Hume put it: 'even the most perfect philosophy of the natural kind only staves off our ignorance a little longer'. By this measure, the science of consciousness is decidedly less than perfect.

But though imperfect, there is nonetheless a vast amount of science that deals with consciousness, more or less directly, and we get treated to a tour of the highlights of consciousness science. Blackmore gives rapid but excellent accounts of a great many puzzling, intriguing and fruitful areas of mental research. Let me at least mention some of them. There is the psychological phenomenon of 'change blindness' – the bizarre, but absolutely normal, inability of people to notice quite massive changes to a scene so long as the changes are masked by an interval where no scene is presented or where the change is very gradual. This leads naturally to the big question of whether what we call visual experience is a kind of 'grand illusion', lacking the depth, continuity and qualitative richness which it 'appears' to possess. Another psychological-level phenomenon involves the misattribution of agency. It is remarkably easy to get people to believe with complete conviction that they intentionally performed an action which was not at all their doing. As Blackmore notes, such findings put considerable stress on our conceptions of freedom, agency and self.

From ethology, we get an entry into the debate about animal cognition and self-recognition, deception and its relation to the issue of whether animals can be said to possess some kind of theory of mind. There are also enlightening results from real world studies of animal preferences (it seems that how we think chickens would prefer to live does not accord with how chickens see things) and imitative learning. Here, Blackmore's skepticism about imitative learning even in apes may suffer from confusing the existence of imitative learning with its efficiency (field reports seem clearly to confirm imitative learning in chimpanzees, but the chimps are slow on the uptake). Of course, Blackmore does not miss the opportunity to link what we know and what we speculate about animal minds to Nagel's famous question about 'what it is like to be a bat' and the general issue of subjectivity and perspective at the heart of the problem of consciousness.

It is the advances in neuroscience that have had the biggest impact on consciousness studies over the last twenty-five years, particularly improvements in instrumentation which permit real time measurement of the active brain. Blackmore gives us introductions to neural based theories of consciousness (such as Edelman's 'neural Darwinist' account and Crick and Koch's neural synchronization theory), considers the search for (and nature of) so-called neural correlates of conscious state (she includes an especially fascinating discussion of the brain scan research into binocular rivalry, a phenomenon that directly engages consciousness and seemingly could not exist without it) and discusses many of the bizarre and terrible deficits of consciousness which result from brain trauma along with their links to normal states of consciousness.

Nor does Blackmore neglect the impact computers and computation theory have had on the study of the mind. We get nice accounts of the philosophical side of this: the connectionism debate, the infamous Chinese Room argument and the perennial issue of whether qualia can be accommodated within functionalism. She also has a good, if brief, discussion of the situated or embedded cognition vs. 'internal' cognition debate in robotics and machine intelligence.

This is but a small sample of the range of topics covered. And although each one is only sketched out, from a pedagogical point of view they provide an excellent entry point for the student, or any reader wishing to dig deeper into the particular topic at issue. There's lots of extra reading pointed to, and Blackmore goes out of her way to extend the sober research into more speculative concepts. One example is her fanciful thought experiment of having direct neural linkage to the 'database' of the World Wide Web. She speculates that the outcome of such technology—should it be feasible (she skips over the issue of content addressability which would have to be solved, not to mention neural integration)—might be the extension of consciousness beyond the boundaries of the individual once we all share a common base of knowledge and 'memory'. It strikes me, however, that there is an interesting and perhaps quite deep philosophical point lurking here. There is a fundamental difference between the envisaged memory enhancement and our current experience of memory, which might be called its 'facticity'. When I recall something, I experience it as veridical. This is utterly different than one's experience of merely retrieved information. It is a fascinating thought experiment nonetheless.

Despite its range, Consciousness: An Introduction cannot quite cover everything. There is nothing on the issue of the 'language of thought' hypothesis and its links to putatively essential features of thought: systematicity and productivity, nor how connectionism re-conceives this problem (the whole topic of conscious thought, as opposed to qualia, is perhaps given insufficient attention). And there is no discussion of the debate between simulationists and theory-theory theorists about our knowledge of and awareness of the mental states of others (along with the intriguing possible connection of this debate with autism). But perhaps it could be argued that these are not especially problems of consciousness (doubtless a professor from each discipline could come up with topics they might like to see included, but I bet they couldn't come up with anything that really had to go into the book). And one could quibble over a very few tiny errors. I noticed that Ray Jackendoff is characterized as a philosopher rather than linguist, and Louis Albert Necker's name is consistently mis-spelled as 'Neckar'.

There are also some places where Blackmore's analytic powers appear to go temporarily 'awol'. In her discussion of hemi-neglect she ends with the observation that 'we all live our lives in a profound state of neglect' because we 'neither see in the infrared nor notice its absence' (p. 262-3). But what is 'paradoxical' about neglect is that its

victims are perfectly able to perceive the objects on their neglected side from certain viewpoints and ought to be able to recognize their impairment, but they do not. This is not analogous to being unaware of stimuli for which one has no receptors, but which lack one is fully capable of appreciating once it is discovered and pointed out to one. Perhaps she meant only to strike an analogy between the way it seems to suffer from neglect and the way it 'feels' to us to miss the infra-red signals all about us. Even so, the analogy seems forced, and misses the curious epistemic dimension involved (I am perfectly well aware that I am 'missing' the infra-red while those suffering from neglect are in altogether different and very strange epistemic state). I will also mention that Blackmore seems to miss an opportunity—and they are rare—to refute a philosopher's position. Dennett—who seems to be her favorite philosopher—once claimed that there is no fact of the matter whether dreams are occurrent conscious experiences or merely false memories (perhaps laid down, unconsciously, while we sleep or as we awake). Even as she goes on to discuss the phenomena of lucid dreaming, in which dreamers can signal with consciously intended eye movements that they are aware of themselves within their dream, she does not connect this to Dennett's hypothesis. While the no-dream hypothesis can of course still be maintained, the theoretical contortions necessary completely undercut the verificationist idea that there is no fact of the matter about whether we are conscious during dreaming.

Thus far I've made it sound as if this book was just a compendious, instructive but entertaining assortment of the standard philosophical and scientific aspects of the study of consciousness. This is not at all the case. I alluded above to the problem of organization this book must have presented. The problem is to avoid the 'bag of tricks' approach to writing on a particularly rich subject. The way Blackmore avoids this trap is to my mind the book's best feature. In the first place, and not so significantly, we find in every chapter small 'practical' exercises for the reader to engage in while away from reading. To take an example, one such exercise demands the reader to 'as many times as you can every day, ask yourself "is this experience a unity"?' (p. 243). Another one involves trying to frequently ask oneself if one is dreaming or not, with the aim (quite likely to succeed) of inducing lucid dreaming. I don't know how many of her readers will take her up and actually engage in these exercises, but even thinking about them is an excellent way to remind us of what this subject—consciousness—is all about.

But most striking is the shift, towards the last third of the book or so, away from more centrally scientific or philosophical concerns to the investigation of more or less exotic *forms* of consciousness. The shift begins with an investigation into the borderline science of the paranormal. Everyone who has taught anything about consciousness will have noticed an apparently natural link in the minds of students between consciousness and the 'spiritual', parapsychological and/or new-age claptrap (of course I use this term in an *entirely* non-judgemental way). Here Blackmore is a very knowledgeable and sympathetic albeit hard-minded guide through some pretty strange country. I think it should be very sobering to anyone who professes a rational belief in ESP to find that after long investigation Blackmore, once a believer, has become a skeptic. Blackmore also asks what is the really central question for the topic at hand. What does the paranormal have, exactly, to do with consciousness? If, for example, the so-called ganzfeld experiments, which involve subjects wearing half ping-pong balls over their eyes

essentially trying to guess what you are doing right now, were to succeed it would seem to be a kind of blind sight and not necessarily anything to do with consciousness at all.

From the paranormal, Blackmore moves on to altered states of consciousness, whether induced by drugs of various kinds, transcranial magnetic stimulation of the temporal lobe (as in the laboratory of the Canadian researcher M. Persinger who can produce semi-religious experience almost on demand), brain hypoxia or other extreme conditions conducive to heightened, or at least altered, experience. Her final section discusses the effect on consciousness and one's attitude towards the mind and self of certain quasi-religious practices such as Zen meditation as well as modifications in our outlook on the nature of consciousness we might derive from traditions such as Buddhism.

It is through these explorations of the range of 'consciousness in action' that one gains a new appreciation for the scientific and philosophical work that has been slowly increasing our understanding of consciousness. The grand ambition of this project—perhaps the last scientific frontier—is highlighted by the spectacular range of experience of which humans are capable. It is good to be reminded of what it is we seek to study and I think readers will be especially drawn to these sections of the text.

Is there a theme or overarching conclusion? As befits a wide ranging introduction there is no overt thesis which is defended in a sustained argument. But Blackmore is not a neutral observer and her own views are honestly discernible. I venture to summarize them thus. Consciousness is real, and bears a problematic relation to its undeniably physical underpinnings. But the study of consciousness will likely reveal that standard views of mind and self are radically mistaken in that there is no unified self and free will is an illusion. I have no doubt that many of the future researchers who may or may not vindicate these ideas will have been turned on to consciousness by this book.