

[Unpublished response to Fred Dretske's Saturday morning Presidential speaker's presentation "What Good is Consciousness?" Annual meeting of the Southern Society for Philosophy and Psychology, Virginia Beach, VA, April 15th , 1995].

## A PSYCHOLOGIST'S RESPONSE TO PROFESSOR DRETSKE'S

### 'WHAT GOOD IS CONSCIOUSNESS?'

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The points on which I agree with Professor Dretske or, perhaps I should say, since I think I can claim to have held these views longer than he has, on which he agrees with me, are greater in number than points on which we disagree. The points of agreement are:

1. Consciousness, in the sense he and I use that term is only a part of the mental life of those living organisms that possess it.

2. Consciousness is a biological phenomenon which has evolved as a biological characteristic of those living organisms that possess it by virtue of the contribution it makes to ensuring the reproductive success of those organisms.

3. Consciousness is not, as Descartes thought, an exclusive prerogative of the human species. Many animals, most if not all vertebrates and perhaps many invertebrates have it too.

4. Consciousness in this sense is concerned primarily with the processing of sensory input; though not all sensory discrimination involves consciousness.

5. Higher Order reflexive self-awareness of mental states is not an essential feature of consciousness in this sense.

6. Questions concerning the nature and function of consciousness are empirical questions to be decided in the light of the evidence of neuropsychology.

7. The most relevant neuropsychological evidence is that provided by studies of the effect of lesions of the striate cortex, both in man as reported in Larry Weiskrantz's (1986) book *Blindsight* and in the rhesus monkey, Helen, studied by Nick Humphrey between 1965 when the operation to remove virtually the whole of her striate cortex was carried out and her death in 1973, as reported in his 1974 paper in the journal *Perception*.

In contrast to these points of agreement there are three issues on which Dretske does not commit himself where I would want to be and indeed have been much more positive.

1. What is the ontological status of consciousness? Is it, as I think, a process, something which is extended over time with continuous change? or is it an instantaneous event, such as suddenly seeing something, a thought occurring to one or deciding to do something, which involves a change at a moment of time, but without extension over time? Or is it perhaps a discontinuous sequence of such events? Alternatively, is it, as some of the things Dretske says about it might be taken to suggest, a dispositional state, like believing, wanting or intending to do something which is extended over time, may or not manifest itself from time to time over the period of its existence, but, so long as it remains unmanifested, does not involve any kind of change?<sup>1</sup> I suspect that Dretske's answer to these questions is that consciousness in the various

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<sup>1</sup> In a footnote on p. 2 of the printed text of his paper [Dretske, 1997, fn 4] Professor Dretske claims to "ignore dispositional senses of the relevant terms." This would suggest that he rejects a dispositional interpretation of consciousness. However, the example he gives (the adjective 'conscious' in the noun phrase 'conscious being,' a description which can be applied to someone who is currently unconscious in another sense of the term, e.g. in a state of dreamless sleep) suggests that he may not have noticed that to describe someone as currently conscious as opposed to unconscious is *also* to ascribe a dispositional predicate; though this is what Ryle (1949) calls "a short-term tendency," a disposition which exists only so long as the individual is in that temporary dispositional state and which colours everything that the individual does so long as it does so. In this respect it differs from long-term dispositions such as knowing, believing, wanting, intending or being a conscious being which may, as in the case of some

senses he distinguishes embraces things belonging to all these different categories; but if that *is* his view, I wonder how he reconciles it with the conception of consciousness as a unitary biological phenomenon which has evolved by virtue of its contribution to the survival of the species.

2. What is the relation of consciousness to the brain? Is it, as I think, an actual ongoing process in the brain of the conscious organism? Or is it, as I would conclude if I were to accept that it is a dispositional state, a performance characteristic of the organism comparable to the horse power of an engine which depends causally on, but is not and could not, for sound Humean reasons, be identical with the state of the entity's microstructure on which it depends? Or is it, as I would conclude, if I thought it was an instantaneous event or a discontinuous sequence of such events, a bit of both? Or perhaps Dretske holds, as some do, that consciousness is a dispositional state, but is identical with rather than causally dependent on a state of the brain? Again it is possible, though I would have thought unlikely, that he holds with Descartes that consciousness is an on-going process, but one which is taking place somewhere outside the realm of spatio-temporal extension and location.

3. Does Professor Dretske accept, as I do, that what makes consciousness unique amongst biological phenomena is that we identify it in the first instance in our own case as something going on inside ourselves, something that other human beings can report and describe in their own cases, but whose occurrence in the case of pre-linguistic organisms, animals and human infants, we only infer from their behavior? Some of the things he says about "conscious experience" suggests that he *does* accept the traditional view that consciousness is essentially private. On the other hand, his description of what he calls "creature consciousness" makes it sound as if it might be something publicly observable, a discriminatory event or ability whose presence we can detect just as readily in animals and other human beings as we can in our own case.

I am not sufficiently familiar with Professor Dretske's other writings to know if he has committed himself on these issues elsewhere. All I can say that I can see no evidence of his having done so in the present paper.

There is only one issue on which I find myself in serious disagreement with Dretske and that is over his initial characterization of consciousness by reference to the predicates 'being conscious' (as opposed to 'unconscious') and 'being conscious of' or 'aware of some object, event or state of affairs' as they occur in ordinary language. I accept that consciousness *qua* biological phenomenon has left its mark on what Ryle (1949) used to call "our ordinary psychological concepts". In a little known paper entitled 'The concept of heed' which I published in the *British Journal of Psychology* in 1954 to which my much better known paper 'Is consciousness a brain process?' (Place 1956) was intended as a sequel, I criticized Ryle's attempt to give a behavioral dispositional analysis of what he calls "heed concepts," that is to say mental activity verbs such as 'watching', 'looking at', 'looking for', 'listening', 'savoring', 'observing', 'paying attention to', and 'concentrating on.' These verbs of selective sensory attention, I argued, join other more obvious cases of private mental activity verbs, such as 'think' in the sense of 'ponder' or 'calculate', in so far as those activities are performed without talking out loud or writing things on paper, 'seeing things in the mind's eye', 'having a tune running in one's head', 'imagining', 'dreaming' and 'day-dreaming' to form a group for which I used the collective term 'consciousness' when speculating as to what kind of activities these might be supposed to be. But in using the term 'consciousness' in this way, I was deliberately and consciously appropriating a technical term of scientific psychology which would be familiar to the audience of psychologists to which both these papers were addressed.

That 'consciousness' in the sense we are using it for the purpose of the present discussion is a technical term of scientific psychology and is consequently of relatively recent origin, is shown both by the very different use of the term which we find in Locke's theory of personal identity and by the fact that

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beliefs, exist only for a moment, but which may equally well persist, once acquired, for the rest of one's natural life. Unlike short-term tendencies, long term dispositions apply even when their owner is in a state, such as a coma or dreamless sleep, when no manifestation of the disposition can occur. I conclude from this that while Dretske has ruled out an interpretation of consciousness as a long-term disposition, he has not ruled an interpretation of it as a temporary dispositional state or short-term tendency.

'consciousness' in this technical sense includes the phenomenon of dreaming which, in the ordinary sense of the term, occurs during periods of what we would ordinarily describe as a state of unconsciousness.

This technical usage of the term, I submit, was first developed just over a century ago by William James (1890) aided and abetted by Edward Bradford Titchener (1897). It was adopted as a replacement for Wundt's (1897) concept of 'immediate experience' in defining the subject matter of the new science of Introspective Psychology which James and Titchener between them were responsible for introducing to the English-speaking world. For James the point of the substitution was to emphasize the active constructive role of the mind in creating what is introspectively observed in contrast to the purely passive receptive connotation of Wundt's term. We owe to Titchener the insistence both that consciousness in this technical sense is a process and that it is essentially sensory in character.

But if consciousness in the relevant sense is a technical term of relatively recent origin, this is not inconsistent with the view to which both Dretske and I subscribe, that it nevertheless picks out a genuine biological phenomenon with a specific and empirically specifiable biological function, a universal which like

most scientific concepts has had instances long before the concept itself was introduced, in this case indeed, long before human language was invented. In this respect consciousness in this technical sense is no different from the quark where the concept has only existed since 1964, but where the universal has, we believe, had instances since the beginning of time with the "big bang".

Recognizing that consciousness is a technical scientific concept has the important consequence that we can expect to be able to refine and enrich it in the light of empirical evidence which was not available to James and Titchener. And the important evidence for this purpose, as all three participants in this discussion are agreed is the

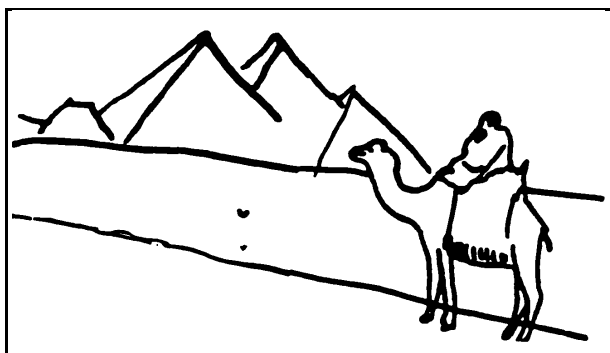


Figure 1. Picture used in Tyler's (1968) study of a patient with dorsal simultanagnosia.

neuropsychological evidence concerning the effects of lesions of the striate cortex in humans and other mammals. In other words we can now adopt as our working definition of consciousness that it is that which is lost from the affected portion of the visual field in the case of lesions of the striate cortex. That definition agrees with the James-Titchener characterization in two respects. Firstly, it identifies consciousness as a phenomenon whose function is to process sensory information. Secondly, since the most striking effect of striate cortical lesions in human subjects is to permanently abolish conscious experience in the affected part of the visual field, it agrees with the characterization of consciousness as that to which each of us has direct access in our own case, but for knowledge of which we are dependent on their verbal reports in the case of others.

But given that definition, we can take the question of the precise function of consciousness in this technical sense very much further. For we can use Nick Humphrey's (1974) study of the rhesus monkey Helen as evidence of what functions are and are not abolished when consciousness is eliminated from the *whole* of the visual field. In this connection the key quotation from Humphrey's paper is on that Dretske alludes to, but does not actually quote. It reads as follows:

With the important exception of her spatial vision [a reference to Helen's ability to use vision to reach for small objects and negotiate obstacles] she appeared in fact to be totally agnostic. After years of experience she never showed any signs of recognizing even those objects most familiar to her, whether the object was a carrot, another monkey or myself. (Humphrey, 1974, p. 252).

I take it that what this means is that the function of consciousness in our sense is object-recognition, both object types and object tokens. But, as Martha Farah's (1990) analysis of the phenomena of visual

simultanagnosia suggests, object-recognition is only the beginning.<sup>2</sup> What these studies, particularly the studies of what is known, because of the location of the lesion, as "dorsal simultanagnosia" (Figure 1) appear to show is that after the individual objects in an input array have been identified, and only then, there is a further focusing of attention on and categorization of the relation between them. What happens in such cases is that, while retaining the ability to identify the individual objects in picture such as this, the mountains, the camel and the human figure, the patient is unable to identify the relation between them. So much so that she may be unaware that the picture containing the mountains is the same picture as that containing the camel. What this seems to show is that recognizing the relations between objects in an array only takes place *after* the objects themselves have been identified. Only then can the organism go beyond object-recognition to a recognition of the events and states of affairs, the "situations" to use Barwise and Perry's (1983) term, into which the objects enter. Given the ability to recognize situations as well as the objects involved in them, we have, at the level of sense perception, the rudiments of what, once it is translated into the form of a sentence in natural language, becomes an item of propositional knowledge, the kind of knowledge on which, so the philosophers tell us, human action is based. Dretske, I take it, is making the same point in different language, when he distinguishes between object-awareness and fact-awareness. But what he does not point out, perhaps because he thinks it would be too much of a concession to the HO [Higher Order] theorist, is that among the situations/facts on which the human subject can report, once perceptual recognition of them is combined with the ability to characterize them by means of sentences in natural language is the occurrence of the conscious event which makes such a description possible. The subject, in other words, can give us an introspective report on the current or recent state of the ongoing process of consciousness inside her to which, given the present state of neuropsychological knowledge, she alone has access.

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<sup>2</sup> I am indebted to my co-respondent Professor Michael Tye for drawing my attention to this evidence. See his Tye (1993).