

Consciousness

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Conscious mental states include sensations, such as the pleasure of relaxing in a hot bath or the discomfort of a hangover, perceptual experiences, such as the visual experience of a computer screen about half a metre in front of me, and occurrent thoughts, such as the sudden thought about how a problem can be solved. Consciousness is thus a pervasive feature of our mental lives; but it is also a perplexing one. This perplexity – the sense that there is something mysterious about consciousness despite our familiarity with sensation, perception and thought – arises principally from the question how consciousness can be the product of physical processes in our brains.

The mystery of consciousness

Ullin Place (1956) introduced a precursor of central state materialism for conscious states such as sensations. But the idea that types of conscious experience are to be identified with types of brain process raises an important question, which can be made vivid by using Thomas Nagel's idea (1974) of WHAT IT'S LIKE to be in a certain state – and, more generally, the idea of there being something that it is like to be a certain creature or system. The question is: Why should there be something that it is like for certain processes to be occurring in our brains? Nagel's famous example of what it is like to be a bat illustrates that our grasp of facts about the subjective character of experiences depends very much upon our particular perceptual systems. Our grasp on physical or neurophysiological theories, in contrast, is not so dependent. So it may appear that subjective facts are not to be identified with the facts that are spelled out in those scientific theories. This Nagelian argument about the elusiveness of QUALIA is importantly similar to Frank Jackson's (1982, 1986) *knowledge argument* and similar responses have been offered to both (Churchland, 1985, 1988, and for a reply, Braddon-Mitchell and Jackson, 1996).

Ned Block's (1978) *absent qualia argument* is different from the arguments of Nagel and Jackson because it is specifically directed against FUNCTIONALISM: the idea that mental states are individuated by the causal roles that they play in the total mental economy, rather than by the particular neurophysiological ways in which the roles are realised. The problem for functionalism is that it seems that we can imagine a system (e.g. Block's homunculi-headed system) such that there is nothing that it is like to be that system even though there are, within the system, devices that play the various functional roles associated with sensations, perceptions and thoughts. This argument is not intended for use against a physicalist who (in the style of Place and subsequent central state materialists) simply identifies conscious mental states with brain processes (pain with C-fibres firing, for example). However, the examples used in the absent qualia argument may be used to support the claim that it is even logically possible that there could be a physical duplicate of a normal human being which nevertheless lacked qualia (a *zombie*: Chalmers, 1996).

It is a disputed question whether arguments like the Nagelian one can establish an ontological conclusion to the effect that consciousness involves something non-physical (see MIND-BODY PROBLEM, NON-REDUCTIVE THEORIES OF CONSCIOUSNESS). But even if they cannot, there still appears to be a problem about consciousness; namely, that it is mysterious why there should be something that it is like to undergo certain physical processes. This is what Joseph Levine (1983) has called the

EXPLANATORY GAP. Jackson and Block both join Nagel in seeing a puzzle at this point, and Colin McGinn (1989) has argued that understanding how physical processes give rise to consciousness is cognitively beyond us. (For a critical appraisal of McGinn's argument, see Flanagan, 1992.)

Demystifying consciousness

One possible strategy for demystifying the notion of consciousness is to claim that consciousness is a matter of thought about mental states. This is the *higher-order thought theory of consciousness*, which is favoured by David Rosenthal (1986). In this theory, consciousness, considered as a property of mental states, is analysed in terms of consciousness *of* mental states, while consciousness *of* something is analysed in terms of having a thought about that thing. Thus, for a mental state to be a conscious mental state is for the subject of that state to have a thought about it. If the higher-order thought theory were to be correct, then the occurrence of consciousness in the physical world would not be any more mysterious than the occurrence of mental states, which are not in themselves conscious states, plus the occurrence of thoughts about mental states.

However, there are some quite serious problems for the higher-order thought theory. One is that the theory seems to face a kind of dilemma. If the notion of thought that is employed is a demanding one, then, it seems, there could be something that it is like for a creature to be in certain states even though the creature did not have (perhaps, even, could not have) any thoughts about those states. In that case, higher-order thought is not necessary for consciousness. But, if the notion of thought that is employed is a thin and undemanding one, then higher-order thought is not sufficient for consciousness. Suppose, for example, that thought is said to require no more than having discriminative capacities. Then it seems clear that a creature, or other system, could be in a certain type of mental state, and could have a capacity to detect whether or not it was in a state of that type, even though there was nothing that it was like to be that creature or system.

More generally, work towards the demystification of consciousness has a negative and a positive aspect. The negative aspect consists in seeking to reveal unclarity and paradoxes in the notion of the subjective character of experience (e.g. Dennett, 1988, 1991). The positive aspect consists in offering putative explanations of one or another property of conscious experience in neural terms. Paul Churchland (1988, p. 148) provides a clear example of a way of explaining some structural features of our experiences of colour (for example, that an experience of orange is more like an experience of red than it is like an experience of blue). The explanation appeals to the system of neural coding for colours which involves triples of activation values corresponding to the illumination reaching three families of cones, and to structural properties of the three-dimensional space in which they are plotted (see COLOUR VISION). But while this is a satisfying explanation of those structural features of colour experiences, it seems to leave us without any account of why it is like *anything at all* to see red. Why there are *any* experiential correlates of the neural codes is left as a brute unexplained fact. The demystifier of consciousness may then reply that this appearance of residual mystery is illusory, and that it is a product either of fallacies and confusions that surround the notion of the subjective character of experience or else of an illegitimately high standard that is being imposed on explanation here.

Varieties of consciousness

The notion of consciousness that is associated with the idea of the subjective character of experience, and which generates the *hard problem* of consciousness (Chalmers, 1996) is

sometimes called *phenomenal consciousness*. There are several other notions for which the term ‘consciousness’ is sometimes used (Allport, 1988), including being awake, voluntary action, ATTENTION, monitoring of internal states, reportability, INTROSPECTION, and SELF-KNOWLEDGE. The distinctions amongst these notions are important, especially for the assessment of cognitive psychological and neuroscientific theories of consciousness (see NEUROBIOLOGY OF CONSCIOUSNESS).

One particularly useful contrast is between phenomenal consciousness and *access consciousness* (Block, 1995): ‘A state is access-conscious if, in virtue of one’s having the state, a representation of its content is (1) inferentially promiscuous, i.e. poised to be used as a premise in reasoning, (2) poised for rational control of action, and (3) poised for rational control of speech. ... [Access consciousness is] as a cluster concept, in which (3) – roughly, reportability – is the element of the cluster with the smallest weight, though (3) is often the best practical guide to [access consciousness].’ The two notions appear to be independent in the sense that it is possible to have phenomenal (P) consciousness without access (A) consciousness and vice versa. An example of P-consciousness without A-consciousness would be a situation in which there is an audible noise to which we pay no attention because we are engrossed in conversation. As an example of A-consciousness without P-consciousness, Block suggests an imaginary phenomenon of ‘superblindsight’ (1995, p. 233). In ordinary cases of BLINDSIGHT, patients are able to guess correctly whether there is, for example, an O or an X in the blind region of their visual field, even though they are unable to see either an O or an X there. The state that represents an O or an X is not a P-conscious state; but nor is it A-conscious. In superblindsight, there is still no P-consciousness, but now the patient is imagined to be able to make free use in reasoning of the information that there is an O, or that there is an X.

Consciousness and thought

While the notion of phenomenal consciousness applies most naturally to sensations and perceptual experiences, the notion of access consciousness applies very clearly to thoughts. It is not obvious whether we should extend the notion of phenomenal consciousness to include thoughts as well as sensory experiences. But the idea of an important connection between consciousness and thought is an engaging one. Sometimes, for example, it seems hard to accept that there could be a fully satisfying reconstruction of thinking in the terms favoured by the physical sciences. This intuition is similar to, and perhaps derives from, the intuition that consciousness somehow defies scientific explanation.

The question whether there is an important connection between consciousness and thought divides into two: Does consciousness require thought? Does thought require consciousness? The intuitive answer to the first question is that access consciousness evidently does require thought, but that phenomenal consciousness does not. (The appeal of this intuitive answer is the source of some objections to the higher-order thought theory of consciousness.) The answer to the second question as it concerns access consciousness is that there is scarcely any distance at all between the notion of thought and the notion of access consciousness. But when we focus on phenomenal consciousness, the answer to the second question is less clear.

John Searle (1990) argues for the Connection Principle: ‘The ascription of an unconscious intentional phenomenon to a system implies that the phenomenon is in principle accessible to consciousness.’ This is to say that, while we can allow for

unconscious intentional states, such as unconscious thoughts, these have to be seen as secondary, and as standing in a close relation to conscious intentional states. Searle's argument is naturally interpreted as being directed towards the conclusion that central cases of thinking are at least akin to phenomenally conscious states.

Even if one does not accept Searle's argument for the Connection Principle, there is a plausible argument for a weaker version of his conclusion. The INTENTIONALITY of human thought involves modes of presentation of objects and properties (see SENSE AND REFERENCE); and demonstrative modes of presentation that are afforded by perceptual experience of objects and their properties constitute particularly clear examples. (We think of an object as 'that (perceptually presented) cat' or of a property as 'that colour'.) Suppose now that it could be argued that some theoretical primacy attaches to these *perceptual demonstrative* modes of presentation (Perry, 1979). It might be argued, for example, that in order to be able to think about objects at all, a subject needs to be able to think about objects under perceptual demonstrative modes of presentation. Such an argument would establish a deep connection between intentionality and consciousness.

Finally, there is another way in which phenomenal consciousness might enter the theory of thought. It might be maintained that it is because a thinker's thoughts are phenomenally conscious states that they also have the more dispositional properties (such as reportability) mentioned in the definition of access consciousness. Also, this phenomenal consciousness property could figure in the explanation of a thinker's being able to engage in critical reasoning – evaluating and assessing reasons and reasoning as such (Burge, 1996). It is far from clear, however, whether this idea can be worked out in a satisfactory way. One question that would need to be answered would be whether the idea requires a sensational phenomenology for thinking. If it does require that, then it might be natural to suggest that phenomenally conscious thoughts are clothed in the phonological or orthographic forms of natural language sentences (Carruthers, 1996).

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