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Consciousness and its Contents

A Response to de Quincey[1]

The word 'consciousness' is used in different ways, but not all of these uses reflect clear concepts or should be retained in technical discussions. In his target article Christian de Quincey (2006) notes that confusion about consciousness is widespread and sets out to distinguish two main meanings of the word. To my mind, however, his treatment of the subject is itself confused and the proposed distinction misses the point.

The author states that 'consciousness' in its 'philosophical meaning … means the basic, raw capacity for sentience, feeling, experience, subjectivity, self-agency, intention, or knowing of any kind whatsoever'. This does not seem to be one capacity — as he puts it — but rather several different ones. He opposes this kind of consciousness to 'non-consciousness' which is 'the total absence of any experience, subjectivity, sentience, feeling, or mentality of any kind'. This seems to imply that the presence of mentality of any kind is enough for consciousness in this sense. However, this is a sheer identification of consciousness with mental life in general and thereby consciousness loses its specific character.

The 'psychological meaning' of consciousness is illustrated by the author by the contrast between 'being awake and alert' and 'being asleep and dreaming'. However, one may be awake and alert and yet unconscious of information that is being processed in one's mental activity, as recent cognitive psychology and neuroscience have

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[1] See Christian de Quincey (2006), 'Switched-on consciousness: Clarifying what it means', *Journal of Consciousness Studies*, **13** (4), pp. 7–12.

extensively demonstrated.[2] On the other hand, when one is dreaming one is conscious of what one is dreaming of. So the proposed distinction misses the relevant difference between conscious and unconscious mental activity.

The author claims that any being that has a mental life is conscious in the 'philosophical meaning'. Those that are non-conscious 'lack all psychic or sentient capacity'. It is sure that the adjective 'conscious' may be used either in reference to an animal that has the *capacity* of being conscious (even if it is not conscious at present) or in reference to an animal that is in the *state* of being conscious — the latter obviously being the most fundamental sense. But I claim that consciousness should not be identified with 'all psychic or sentient' capacity or states.

I think that the effort to clarify the meaning of consciousness should proceed in a different direction. We could first try to agree on some empirical criterion that allows one to distinguish between being conscious and being unconscious of something in some typical cases. Then we may try to envisage other cases in which a person or animal may be conscious or unconscious of something. Finally, we should try to understand what the difference is between these states, that is, to propose theoretical explanations of it. The latter is of course the most difficult part.

The most obvious empirical criterion consists in asking a person about whether s/he was conscious of something. The case more easily amenable to experimental control is that of perception. The experimenter presents a stimulus and asks the subject whether s/he perceived it. If the answer is affirmative — granting that it is sincere[3] — I guess no one would question that the subject consciously perceived the stimulus. There is a point of controversy concerning the negative answer. Some philosophers claim that a person may have been conscious of a stimulus for a very short moment and have kept no memory of this at the moment of reporting.[4]

There are conditions that may obviously lead to such a situation: a relatively long delay between the stimulus and the report, the occurrence of simultaneous or subsequent distracting stimuli, inattention, and so on. Suppose, however, that the subject was told to pay attention, knew beforehand that s/he would have to report, there was no

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[2] See, for example, Bornstein & Pittman (1992); Mack & Rock (1998).

[3] Or if a correct answer is extremely improbable, so that guessing is excluded.

[4] For example, Block (1995), concerning alleged cases of phenomenal consciousness without access consciousness.

interference distracting her/him from the task and the report was given immediately. In such a situation, I think there is no reason to consider that the subject may have been conscious of the stimulus when the answer is negative. There is no point in speaking of consciousness of something if the subject her/himself does not at any time identify having had it, in spite of being able and willing to do so.

There are other contents of consciousness in addition to perceived objects or events. Note that I am using 'content' in a phenomenological sense here. If a person with delirium tremens hallucinates a spider, I will say that the spider is the content of her/his visual experience, even though there is no real spider present. It is important to make this clear because some philosophers prefer to use the terms 'content' and 'object' only in reference to real objects. When we dream, we are conscious of many things, either visually or otherwise. Some of these objects exist in reality and are brought to the dreamer's consciousness by memory; others are imaginary and result from a recombination of features of objects perceived in the past.

Thoughts, feelings and intentions are among the other possible contents of consciousness, but I do not have space to examine them here. Some are difficult for the subject to express in words. Others may be such that the subject is unwilling to report or even to recall them. Some stay accessible to the subject's recollection, others very quickly become inaccessible.

Though the criterion of reportability serves to identify some cases in which the subject is or is not conscious of something, there is no reason to suppose that the actual capacity to report is an indispensable feature of consciousness. An animal may be conscious of something it sees, for instance, without being able to tell you so. An aphasic may lose her/his capacity to report what s/he is conscious of, but s/he certainly continues to be conscious. In such cases it is difficult to decide whether the subject was conscious of something or not. We know that brain activity is indispensable for consciousness, but we do not yet have a definite neural index of consciousness (though there are already many hypotheses concerning the neural correlates of consciousness), let alone of specific conscious contents.

The question of animal consciousness is certainly a challenging one. Few thinkers nowadays would agree with Descartes in refusing to grant non-human animals with any form of consciousness. But then the question is: Which living beings are conscious? Few think there is reason to suppose that plants or unicellular organisms are. By contrast, most cognitive scientists admit that higher animals have at least some form of consciousness. Where in the animal scale does

consciousness make its debut? This is certainly a very difficult question to answer.[5]

An important point is not to identify conscious activity with mental activity in general. Cognitive science has proven beyond any doubt that many processes that are instrumental in shaping conscious experience and behaviour occur unconsciously. Baars (1988) has argued for what he calls a 'contrastive analysis', which compares instances of a certain performance done with and without consciousness. If 'conscious' were just a synonym for 'mental', it could be discarded from the technical vocabulary. It certainly cannot and thus should not be used in this general sense in technical language.

What was said above about animal consciousness leads to the question of the different forms of consciousness. We may admit that at least all mammals have sensory consciousness. On the other hand, it seems clear that no other currently living species have all kinds of consciousness that *Homo sapiens* has. Humans seem to have at least one distinctive form of consciousness, but it is not so easy to specify which form this is. Besides, there seems to be gradations in the conscious capacities of different non-human animals. Primatology has shown that chimpanzees and bonobos seem to be conscious in a higher degree than monkeys and other mammals (de Waal and Lanting, 1997; de Waal, 1998).

Self-consciousness is often cited as a specifically human form of consciousness. However, the reference of this term seems not to be clearly circumscribed. Many non-human animals are probably conscious of their own bodily sensations and of their own movements, and in this sense can be said to be conscious of themselves. Another level of self-consciousness involves the ability to recognize oneself in a mirror. This capacity has been demonstrated to be absent in most animals and often present in great apes. It emerges in chimpanzees at 4.5 to 8 years of age (Povinelli *et al.*, 1993) while in humans it appears at 15 to 24 months (Anderson, 1984). It also seems to be present in dolphins (Reiss and Marino, 2001).

I would like to point out two higher levels of self-consciousness that may be specifically human. One is consciousness of being conscious of something. Suppose you see someone picking someone else's wallet. It is one thing to perceive what is happening and to think about the thief, the victim and the act. It is another to be conscious that you are seeing this and to think about what may be expected of you in that situation, what you yourself think you should do, whether you

[5] See Seth *et al*. (2005); Edelman *et al*. (2005).

will be in risk if the robber perceives you have seen the theft and your possibility of serving as a witness.

Another aspect of self-consciousness that seems important (and is closely linked to the previous one) is consciousness of decision making. An unconscious process may be responsible for the choice among different courses of action. However, a new dimension emerges when one becomes conscious of such an internal process of choice. When one is conscious of an intention to act before starting the action, one may not only anticipate consequences of the latter but also confront different possible courses of action (Gomes, 1999). One may check whether the envisaged action accords with other desires, objectives and values that one may have. It is this kind of consciousness that lead people to attribute a free will to humans that seems to be lacking in other animals.

We see that in relation to consciousness it is of paramount importance what one is conscious of. People may give different meanings to the word when they are thinking about different kinds of content of consciousness. This is related to the third meaning of consciousness that is mentioned in the target article (de Quincey, 2006), namely the 'spiritual' meaning, characterized by the author as referring to 'a heightened state of self-awareness that involves increased ethical discernment'. When one says that X is 'more conscious' than Y, in this sense, one means that X is able to include more relevant and important aspects and considerations in the contents of X's consciousness when forming an opinion or deciding about what to do.

References

Anderson, J.R. (1984), 'The development of self-recognition: A review', *Developmental Psychobiology*, **17** (1), pp. 35–49.

Block, N. (1995), 'On a confusion about a function of consciousness', *Behavioral and Brain Sciences*, **18**, pp. 227–87.

Baars, B.J. (1988), *A Cognitive Theory of Consciousness* (Cambridge: Cambridge University Press).

Bornstein, R.F. & Pittman, T.S. (ed. 1992), *Perception without Awareness* (New York: Guilford).

Edelman, D.B., Baars B.J. & Seth, A.K. (2005), 'Identifying hallmarks of consciousness in non-mammalian species', *Consciousness and Cognition*, **14** (1), pp. 169–87.

Gomes, G. (1999), 'Volition and the readiness potential', *Journal of Consciousness Studies*, **6** (8–9), pp. 59–76.

Mack, A. & Rock, I. (1998), *Inattentional Blindness* (Cambridge, MA: MIT Press).

Povinelli, D.J., Rulf, A.B., Landau, K.R. & Bierschwale, D.T. (1993), 'Self-recognition in chimpanzees (Pan troglodytes): Distribution, ontogeny, and patterns of emergence', *Journal of Comparative Psychology*, **107** (4), pp. 347–72.

de Quincey, C. (2006), 'Switched-on consciousness: Clarifying what it means', *Journal of Consciousness Studies*, **13** (4), pp. 7–12.
Reiss, D. & Marino, L. (2001), 'Mirror self-recognition in the bottlenose dolphin: A case of cognitive convergence', *Proceedings of the National Academy of Sciences*, **98** (10), pp. 5937–42.
Seth, A.K., Baars, B.J. & Edelman, D.B. (2005), 'Criteria for consciousness in humans and other mammals', *Consciousness and Cognition*, **14** (1), pp. 119–39.
de Waal, F. (1998) *Chimpanzee Politics: Power and Sex Among Apes*, Revised edition (Baltimore, MD: The John Hopkins University Press).
de Waal, F. & Lanting, F. (1997), *Bonobo: The Forgotten Ape* (Berkeley, CA: University of California Press).