

Do we still need phenomenal consciousness?

Comment on Block

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In a recent Opinion paper in *TICS*, Ned Block [1] confronts the recent empirical and theoretical challenges to his distinction between two forms of consciousness (i.e. rich 'phenomenal' vs sparse 'access'). Although we value his attitude of facing these issues, we still believe that the proposed 'unaccessed phenomenal consciousness', which is the cornerstone of this theoretical proposal, remains unfalsifiable and can be accounted for by other, more parsimonious, explanations.

Block argues that the information prior to conscious access (e.g. letters prior to the cue in Sperling experiments) is phenomenally conscious. We have argued in previous work for the impossibility of probing the nature of these so-called 'phenomenal' contents without having subjects relying on some form of access to describe their experience [2,3]. As this would necessarily change the status of these contents, it renders impossible addressing whether they were of a phenomenal or unconscious nature prior to access [4–6]. Thus, an 'observer effect' might potentially render the whole issue immune to scientific investigation [7].

In his recent article [1], Block proposes a new strategy that consists of relying on measures of capacity as indirect evidence for phenomenal consciousness. According to this proposal, rich phenomenal consciousness translates to high capacity, as opposed to the scarce capacity of conscious access. However, Block omits the fact that capacity is a measure of informational availability, regardless of consciousness. As such, capacity may well reflect the amount of information that is unconsciously processed and that can potentially influence the cognitive system.

We contend that any evidence for phenomenal consciousness, whether it is of a functional or neural type, can be reinterpreted as reflecting either partial awareness (when subjects express the feeling of being able to see more than they can report) or unconscious processing (when subjects are denying any form of awareness but some supposedly indirect marker of consciousness is observed). Block relies on a view of conscious access that is too restrictive. Yet, it is possible to reframe the issue of dissociable forms of consciousness into dissociable levels of conscious access. We recently proposed that an observer's

experience involves many (but sometimes inaccurate) components that interact across various levels of representations [2]. For instance, when probed for consciousness, observers can fail to access higher levels (e.g. identity of the letter, words, etc.), but still have access to lower levels (e.g. fragments). Access to higher levels (e.g. letters) might, under conditions of perceptual difficulty (degraded, peripheral, unattended stimuli, etc.), reflect perceptual illusions resulting from the combination of low-level information (e.g. letter-like fragments) with top-down prior expectations. This offers a functional explanation of the impression of seeing a whole array of letters in the Sperling task, now described as a well-grounded perceptual illusion based on partial information.

Block is right to point out that there is more to consciousness than the scarce reports usually obtained in experiments under conditions of focal attention. There are indeed many situations leading, for instance, to the feeling of being able to grasp subjectively a large part of the surrounding world. However, it is not necessary to rely on a distinct and special form of consciousness to describe these phenomena. Functional descriptions might also do the job and, in addition, offer a more parsimonious description that: (i) allows the generation of predictions; and (ii) can be falsified empirically.

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