

Consciousness: Rethinking Phenomenology and Accessibility

Summary of main argument

1. Consciousness is a mongrel concept for various phenomena. One of the most discussed distinctions is Ned Block's (1995) between phenomenal and access consciousness. *Phenomenally conscious* states are 'experiences' like pain, for which there is something it is like to have them. Phenomenal properties are supposed to be distinct from cognitive or functional properties (where 'cognitive' means "essentially involving thought"). *Access consciousness* is a cognitive notion, defined in terms of a state's causal effects within a cognitive system: A mental state is access-conscious if its content is processed to the executive systems for reasoning and behavior. Paradigmatic access-conscious states are propositional attitudes like beliefs and desires. Block introduced this as a conceptual difference – one may occur without the other. To illustrate *access without phenomenology*, he imagines a superblindsight-patient, who spontaneously guesses and reports what – apparently – he does not experience phenomenally. Block agrees that this case may be empirically impossible. Block's (2007, 498) case for *phenomenology without access* – i.e. a kind of consciousness "that the subject not only does not know about, but ... cannot know about" – is based on his interpretation of psychological experiments by Sperling (1960). Furthermore, he argues that different neural substrates of phenomenology and accessibility can be determined (in the case of vision), which can support and explain this conceptual difference. The substrate of phenomenology is supposed to be, roughly, in the back of the head, while the neural base underlying access is allegedly in frontal areas (including the mechanisms of attention). – In this paper, it is argued that Block's argument is unconvincing. First, a more conservative interpretation of the data is developed, leaving the link between phenomenology and access intact. Secondly, a methodological problem resulting from Block's position is pointed out. Finally, I show that Block's claim is incompatible with his endorsement of the 'same-order'-theory of phenomenal consciousness.

2. Sperling (1960) determined that the memory span is limited to approximately four items. He first presented subjects with an array of letters (e.g. four letters arranged in three rows) for a short period of time and asked them what they saw. Although they claimed to see all letters, they could only report 4 or 5. In a second experiment, Sperling asked only for partial reports. After presenting the array, a high-, medium- or low- pitched tone indicated the row to be reproduced. Since the tone directed the participant's attention to one row, they could generally give accurate partial reports. But since the subjects did not know in advance which line they would have to report, the information must persist after the end of the presentation and remain accessible for a short time. Thus, in some sense they saw all the letters. Block claims that subjects are not only phenomenally (and access-) conscious of the generic content "an array of letters" but *also* of all specific letters, without this specific information being accessible and reportable.

This interpretation is unwarranted. A simpler interpretation can be put forward using Block's distinction between generic and specific content on the one hand, and the distinction between three senses in which a stimulus may "persist" after its offset (Coltheart 1980): (1) only neural activity persists, (2) information about the stimulus remains available to the perceiver, or (3) the stimulus remains even consciously visible. Following Coltheart, the data only demonstrate (2), but not (3): While the *generic* content persists in all three ways, the *specific content* of all items persists only informationally but is not phenomenally conscious.

Subjects are phenomenally conscious of and have access to a generic visual representation of the array, which explains their initial reports. There are also *specific* representations of all letters because otherwise we cannot explain that the subjects can access four of them in any case. But they don't need to be phenomenal *before* (or without) being accessible. The successful partial reports can be explained using *informational persistence* of the stimuli plus the power of attention. Due to the informational persistence of all specific letters, subjects can make any of them, or a subset, conscious by turning their attention to them, led by the auditory signal. It has been shown that attention can make us conscious of a stimulus which was formerly unconscious (Carrasco et al. 2004). This interpretation leaves the link between phenomenology and access intact.

3. Adopting Block's position regarding phenomenology and accessibility raises a methodological problem: How should we investigate inaccessible phenomenally conscious representations and how

can we distinguish unconscious perceptual processing (blindsight) from phenomenally conscious yet inaccessible representations (since in both cases, subjects will deny that they see anything)? Introspection and reports have to be replaced as the primary data in the investigation by a third-person neuronal criterion that determines what is conscious and what not. But this move presupposes that we know the neural substrate of phenomenology, e.g. recurrent processing (Lamme 2006). If recurrent processing takes place, then the subject is phenomenally conscious of the stimulus, if not, then there is no phenomenology. But this move has the consequence that consciousness is no longer a subjective first-person phenomenon, which seems to be a contradiction in terms. In order to justify the use of this criterion, a correlation of recurrent processing with visual experience is not enough (Levine 2001). The neural process needs to illuminate why conscious experiences feel a certain way but recurrent processing leaves an explanatory gap just like any other physical process.

4. Block separates phenomenology from access but also accepts the same-order-theory of consciousness, saying that “when one has a phenomenally conscious experience, one is in some way aware of having it”, i.e. that it “comes with a sense of ownership” (Block 2007, p. 484). These two positions are incompatible. As will be shown, Block’s assessment of the patient GK, suffering from visuo-spatial extinction, is in conflict with this theory.