

Philosophy 101

Varieties of Consciousness

May 21, 2014

The Function of Consciousness

Consciousness — What, Why, & How

- Distinguish three questions:
 - ① What is consciousness (what is its nature)?
 - ② Why is there consciousness (what is its function)?
 - ③ How could there be beings with consciousness (given assumptions about what kinds of things there could be)?

The “Target Reasoning” — Functions of Consciousness

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- Consciousness has a function
- We can find out what the function of consciousness is by studying the cognitive psychology of patients with specific cognitive impairments or abnormalities

Consciousness & Abnormal Psychology

Two Kinds of Abnormal Psychology

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- Blindsight
- Epileptic Seizure
 - 'petit mal' or 'absence' seizure

Blindsight

Blindsight is a syndrome involving patients who have brain damage in the first stage of visual processing, the primary visual cortex. These patients seem to have "holes" in their visual fields. If the experimenter flashes stimuli in these holes and asks the patient what was flashed, the patient claims to see nothing but can often guess at high levels of accuracy, choosing between two locations or directions or whether what was flashed was an X or an O (Block, 278)

Blindsight



Blindsight

- 'Blindsighted' patients lack consciousness (in some sense) of regions of their visual field but have a better than chance ability to discriminate objects in those "blind" parts of the visual field

Absence Seizures

In such cases [of epileptic seizure], electrical disorder leads to a loss of function in the higher brain stem...As a result the patient suffers a loss of conscious experience in the phenomenal sense although he can continue to react selectively to environmental stimuli

The Function of Consciousness

The Function of Consciousness

- ① Abnormal psychological conditions, such as blindsight and "absent" seizures, may indicate the function of consciousness
- ② When consciousness is missing under such conditions, subjects cannot
 - ① report or reason about the relevant nonconscious representations, nor use them in guiding action
 - ② exhibit flexibility and creativity in their thought and action
- ③ \therefore Consciousness enables information represented in the brain to be used in reasoning, reporting, and rationally guiding action
- ④ \therefore Consciousness promotes flexibility and creativity in thought and action

Confusion about Consciousness

The Concept of Consciousness is a 'Mongrel' Concept

- The concept <consciousness> is a 'mongrel' in the sense that it is ambiguous between a number of different and independent notions of being 'conscious'

The Concept of Consciousness is a 'Mongrel' Concept

- ① **Sentience:** being able to discriminate, categorize, and react to environmental stimuli
- ② **Wakefulness:** being awake and capable of attending to something
- ③ **Autonomy:** deliberate control of one's behavior
- ④ **Introspection:** the internal accessibility of one's mental states
- ⑤ **Communicability:** the reportability of one's mental states
- ⑥ **Phenomenal consciousness:** the first-person experience — what it is like to be something

Two Kinds of Consciousness

Two Kinds of Consciousness

Phenomenal Consciousness: A mental state with "experiential properties" that constitute "what it is like" to experience something

- A state is P-conscious if it has experiential properties
 - We have P-conscious states when we see, hear, smell, taste, and have pains
- The totality of the experiential properties of a state are "what it is like" to have it

Two Kinds of Consciousness

Access Consciousness: A mental state that is poised for free use in reasoning and for direct "rational" control of action and speech.

- understands mental states in terms of information and its transfer, not what it is like to have or be in a mental state
 - believing that the desk is brown on the basis of seeing that the desk is brown
 - Perception of visual form on the basis of belief or suggestion

Access Consciousness



Figure: Old Woman

Access Consciousness



Figure: Young Woman

Block's Worry

- Phenomenal and Access consciousness are distinct kinds of consciousness but are easily confused in both philosophy and in empirical research on consciousness

Block's Worry

- Cognitive scientists and philosophers often begin discussion consciousness by pointing to phenomena involving P-consciousness.
- But the theories they construct to explain the relevant phenomena typically end of addressing cognitive issues involving A-consciousness

Access without Phenomenal Consciousness

Two Examples of A without P-Consciousness

Two Examples of A without P-Consciousness

- Cases of 'super' blindsight
- Phenomenal 'Zombies'

Blindsight

Blindsight

- lack visual 'consciousness' of some region of their visual field
- are nevertheless sensitive to information contained in regions of the blank field
 - better than chance basis to correctly answer questions
- *does the blindsighted patient have access consciousness?*

Blindsight

- Block says ‘no’ — Why?
 - not ‘globally’ available for rational control of thought and action
 - a thirsty blindsighted patient won’t reach for a glass of water in their ‘blind’ visual field

Super-Blindsight

Super-Blindsight

Now imagine something that may not exist, what we might call super-blindsight. A real blindsight patient can only guess when given a choice from a small set of alternatives. But suppose...that a blindsight patient could be trained to prompt himself at will, guessing what is in the blind field without being told to guess. The super-blindsighter spontaneously says "Now I know that there is a horizontal line in my blind field even though I don't actually see it." Visual information from his blind field simply pops into his thoughts in the way that solutions to problems we've been worrying about pop into our thoughts, or in the way some people just know the time or which way is north without having any perceptual experience of it (Block, 283)

Features of Super-Blindsight

Features of Super-Blindsight

- No P-Consciousness
- Spontaneous access (the super-blindsighter is "self-prompting")
- Information available to the blindsighter is poised for use in reasoning and rational action
- The super-blindsighter plausibly has A-consciousness but no P-consciousness

Phenomenal ‘Zombies’

Phenomenal 'Zombies'

If there could be a full-fledged phenomenal zombie, say a robot computationally identical to a person, but whose silicon brain did not support P-consciousness, that would do the trick. I think such cases conceptually possible, but this is controversial. (Block, 283)

Phenomenal 'Zombies'

- *Global* lack of P-consciousness
- Possesses A-consciousness
 - Information available to the 'Zombie' is poised for use in rational control of thought and action
 - Behaviorally indiscriminable from a non-zombie

Phenomenal without Access Consciousness

Three Examples

Three Examples

- Brain damaged animals
 - still have phenomenal awareness but such states play no role in reasoning or the rational control of action
- Cognitive subsystems (e.g. visual or auditory)
- Lack or conflicts of attention

Attention – The Conversation and the Drill

Suppose that you are engaged in intense conversation when suddenly at noon you realize that right outside your window, there is—and has been for some time—a pneumatic drill digging up the street. You were aware of the noise all along, one might say, but only at noon are you consciously aware of it. That is, you were P-conscious of the noise all along, but at noon you are both P-conscious and A-conscious of it (Block, 285).

Attention – The Conversation and the Drill

- Subject is in a state that is P-conscious
 - state has 'experiential properties'
- P-conscious state is not, for some stretch of time, accessed/accessible

Criticizing the "Target Reasoning"

Penfield's Cases of 'Absent' Seizures

Penfield's Cases of 'Absent' Seizures

- In some cases of epileptic seizure, a subject loses consciousness but retains the ability to perform complex goal-directed behavior
 - driving a car
 - playing a musical instrument

Block's Objection

- Why suppose that P-consciousness is missing in 'Absent' seizure cases?

Block's Objection

- Why suppose that P-consciousness is missing in 'Absent' seizure cases?

For example, Searle, quoting Penfield, describes the epileptic walker as "thread[ing] his way" through the crowd. Doesn't he see the obstacles he avoids?

Suppose he gets home by turning right at a red wall. Isn't there something it is like for him to see the red wall—and isn't it different from what it is like for him to see a green wall? (Block, 188)

Questions

- ① In the Penfield case the epileptic walker is capable of a variety of complex behaviors, including avoiding obstacles. Is there a sense in which he "sees" the obstacles he avoids?
 - A. Yes
 - B. No
 - C. *Not sure*

Questions

- ② Is there something it is like for him to see the obstacles he avoids?
- A. Yes
 - B. No
 - C. *Not sure*

Block's Objection

- ① In Penfield's seizure cases it is the subject's thought processes that are most obviously deficient, including a clear lack of A-consciousness
- ② P-consciousness is a feature of mental *states* not *subjects*
- ③ There is no reason to think that the states which occur in the subjects of Penfield cases lack P-consciousness
- ④ \therefore There is no reason to think that a function of P-consciousness is to make possible flexible and creative complex behavior

Blindsight

- 'Blindsighted' patients lack consciousness (in some sense) of regions of their visual field but have a better than chance ability to discriminate objects in those "blind" parts of the visual field

The Blindsight Case:

Conscious awareness of a water fountain to my right will lead me to drink from it if I am thirsty. But the thirsty blindsighted person will make no move towards the fountain unless pressed to do so. The inference to the best explanation is that conscious awareness of the environment facilitates semantic comprehension and adaptive motor actions in creatures like us (Flanagan, quoted in Block, pp. 192-3)

The Argument from Blindsight Cases:

The Argument from Blindsight Cases:

- ① In blindsighted subjects consciousness is missing
- ② Information that the subject in some sense possesses is not used in reasoning, guiding action, or in reporting about the subject's states, acts, or environment
- ③ \therefore The function of consciousness must be to allow information gathered by the senses to guide or otherwise inform action

Block's Objection

- ① Assume that, in blindsighted subjects, *both* A and P-consciousness are missing
- ② The explanation of the blindsighter's degraded behavior only requires an appeal to A-consciousness and its absence
- ③ A-consciousness and P-consciousness are at least conceptually distinct
- ④ \therefore Nothing can be inferred in the blindsight case concerning the function of P-consciousness

Is P-Consciousness Necessary for A-Consciousness?

- It is possible that P-consciousness is necessary for A-consciousness, and that it is a necessary condition for creative flexible behavior
 - But analysis of abnormal psych cases cannot show this
- P and A-consciousness may be closely linked biologically
 - evidential support for this based on no recorded cases of "super"-blindsight

Is P-Consciousness Necessary for A-Consciousness?

- We need to distinguish the cognitive/information processing aspects of our mental life from the less obviously cognitive, and more explicitly phenomenal aspects