PHL340 Handout 10: Attention and Consciousness

§1 Attention
Our focus remains the significance of perceptual experience. Today and next class we’re going to examine what we might learn about the significance of consciousness from debates over a particular mode of perception: perceptual attention.

Perceptual attention seems to have a distinctive phenomenology (Cf. pp. 248-249 of Smithies).

When you attend to something – a location, an object, a property – it seems to divide the perceived scene into an attended ‘foreground’, and an unattended ‘background’.

Suppose I’m looking around my room, without focusing on anything in particular. Everything in the perceived scene – my books, my table, my chair – seem equally perceptually present to me. But if I suddenly attend to a particular object, say the goose-shaped lamp on my table, that object acquires a vividness or immediacy that the rest of the room lacks. The object ‘stands out’ from the rest of the scene.

Note: while philosophers and psychologists sometimes try to identify other types of attention, the type exemplified above – what is usually called selective attention – constitutes the paradigm case.

While attention seems to have a proprietary phenomenology, a great deal of empirical work within psychology, cognitive science, neuroscience, and other cognate disciplines defines perceptual attention in functional terms (e.g. attention is whatever mechanism selects a subset of information for further processing). Often interest in attention, at the empirical end of things, comes from curiosity about the role it plays in the brain’s ability to effectively acquire and process informational input.

For example, a longstanding empirical claim about the function of attentional mechanisms is that these mechanisms are necessary in order to prevent cognition from being overloaded by incoming information. Our perceptual systems deliver way more information than our cognitive systems could handle without overload (so at various places our perceptual and cognitive systems face informational bottlenecks). Many therefore take attention to perform a bottleneck-solving function: attention selects a subset of the incoming information, upgrading it to a level where it can receive a greater share of our limited processing resources, while preventing the unselected information from using too many processing resources.

Note: there are other empirical hypotheses about the role of attentional mechanisms. Wayne Wu, for instance, thinks the primary function of attention is its role in selecting information for the performance of action. Understood in terms of its connection the action, attention might be less concerned with avoiding informational overload than resolving competition between competing inputs to action.
Whether we adopt a phenomenological or purely functional criterion for attention, there may be non-perceptual varieties of attention. For instance, we might attend to our thoughts, selecting some of them to be phenomenologically ‘foregrounded’ and relegating others to our mental ‘background’. Similarly, we could functionally define ‘cognitive’ attention in terms of the selection of certain cognitive states (e.g. memories, thoughts, desires, plans, etc.).

In practice, many philosophers and psychologists are lazy about the distinction between perceptual and non-perceptual attention – some even doubt its cogency – so be careful when reading to not assume that when someone makes a claim about ‘attention’ she means to make (or has grounds for making) a claim about non-perceptual attention.

Our primary focus today will be to get a glimpse of some of the claims made about the significance of attention, and how these claims connect to the debate over the significance of consciousness.

§2 Philosophical Significance of Attention

The potential philosophical significance of perceptual attention is vast. From the perspective of this course, however, three potential roles for perceptual attention are particularly important:

Attention and Consciousness: philosophers and psychologists wonder whether attention is necessary and/or sufficient for consciousness.

We’re going to look at how Declan Smithies answers this question. Much of this debate has been conducted on empirical grounds, with much to-ing and fro-ing. You haven’t been given enough of an empirical grounding to assess those empirical arguments. Smithies offers a nice attempt to resolve the debate on primarily conceptual grounds.

Attention and Justification: epistemologists and epistemologically-oriented philosophers of mind have claimed that perceptual attention is necessary for a certain kind of perceptual justification.

Smithies, for example, thinks that perceptual attention to an object permits a subject to form immediately justified beliefs about the object. He combines this with a claim about the relationship between immediate propositional justification and consciousness – namely that access to the former requires conscious awareness – to argue that perceptual attention is a mode of consciousness.

Question: how does this interact with Pryor’s dogmatism? Could Pryor take Smithies’s claim about attention and justification on board?

Attention and Demonstrative Thought: philosophers of mind since Bertrand Russell have claimed that a subject must perceptually attend to an object in order to have a perceptual demonstrative thought about the object (i.e. a thought formed in response to perception that one would express with sentences like ‘that is red’ or ‘that is tall’).
We’re going to see Smithies, Campbell, and Dickie argue about this claim, and its implications for the significance of consciousness.

Of course, not everyone agrees that attention plays this role in securing perceptual demonstrative thought about objects. Chris Mole (2011), for instance, explicit argues against Campbell’s neo-Russellian view that conscious attention to an object explains our capacity for perceptual demonstrative thought about the object.

§3 Attention as Rational Access Consciousness?
Declan Smithies argues that attention sufficient but not necessary for consciousness. We’re going to look at how he argues for this surprising and controversial thesis.

His argument, in its most general form, runs as follows:

1. Attention is a distinctive mode of consciousness.
2. If attention is a distinct mode of consciousness, it is sufficient for consciousness.
3. If attention is a distinctive mode of consciousness, it is not necessary for consciousness.
4. So attention is sufficient but not necessary for consciousness. [From 1-3]

2 and 3 are relatively uncontroversial.

If x is a distinctive mode of y, it must be possible for instances of y to exist without x (otherwise x would be a pervasive mode of y). And if x is a mode of y—distinctive or otherwise—there cannot exist an x that isn’t also y.

A fairly quotidian example that illustrates these two general principles is popularity. Being popular is a distinctive social status, and so a distinctive mode or modification of social status. One cannot be popular without possessing a social status (hence popularity is sufficient for social status). Yet being popular is also a social status that owes its distinctiveness in part to the existence of those who are unpopular (hence popularity isn’t necessary for possession of social status). Indeed, if everyone were popular, nobody would really be popular.

Given the relative lack of controversy surrounding 2 and 3, Smithies spends the majority of his paper defending 1. His big conceptual move is to distinguish the following two notions of informational accessibility:

Causal Accessibility: information is causally accessible if and only if the information contributes to the causal control of a subject’s thoughts and actions.

Note: Smithies thinks this kind of accessibility would be possible for a ‘philosophical zombie’, a creature whose inner life has no phenomenal character – there is nothing it is like to be the creature.
**Rational Accessibility**: information is *rationally accessible* if and only if the information contributes to the rational control of thought and action.

What does it mean to contribute to the rational control of thought and action? Smithies thinks that we should understand this claim in terms of propositional justification (for the definition of propositional justification, see the handout on dogmatism). Here is how Smithies puts the point: ‘The crucial claim is that although unconscious information is sometimes accessible for spontaneous use in the control of action, it is not rationally accessible in the sense that it is accessible to the subject as a reason that justifies the subject in forming a belief or performing an action.’ (p. 262).

The notion of causal accessibility derives from the work of Ned Block on the distinction between phenomenal and access consciousness (also known as ‘P-Consciousness’ and ‘A-Consciousness’).

Block’s stated aim was to clarify the function of consciousness. If consciousness were to have a unified function, it would be able to play an important theoretical role within the empirical study of the mind. Block’s big claim, however, was that our ordinary concept of consciousness conflates a pair of conceptually distinct notions of consciousness.

The first – phenomenal consciousness – roughly corresponds to what we track when we use locutions such as ‘what it’s like’. So a given mental state is phenomenally conscious if and only if it has a phenomenal character.

Block is quite non-committal about the nature of phenomenal consciousness. But he does controversially assume that phenomenal conscious states need not be representational states (cf. p. 230).

While he admits that representational differences can result in phenomenological differences, he does not think that this connection between representational content and phenomenology always obtains. This entails that Block isn’t a representationalist (we haven’t discussed his positive view in this course; it is a version of often gets called a ‘mental paint’ view).

The second notion of consciousness – access consciousness – Block defines functionally in terms of the availability of a state’s representational content for use in reasoning and action (cf. p. 231).

For example, if I see a red mug, I can usually use the information delivered by vision to guide how I act with respect to the object (e.g. how I move my hand to pick it up). The information also contributes to the sorts of beliefs I’m liable to form on the basis of what I see.

At its most general level, whether a mental state is access conscious wholly depends upon the functional role of its representational content, whereas
whether the same state is phenomenally conscious wholly depends upon whether it possesses a phenomenal character.

Given that access consciousness requires that a state play a certain functional role in virtue of its content, and given that the functional role of a state will depend upon which system it belongs to, it is possible that no state will be essentially or necessarily access conscious. A mental state may play an ‘access conscious’ functional role within one person at one time, and play a different functional role in a different person (or in the same person at a different time).

In contrast, Block assumes that if we individuate states by their phenomenal character (so two mental states are tokens of the same type iff they share a phenomenal character), rather than by their representational content, a state that is phenomenally conscious will be necessarily phenomenally conscious.

Question: must one share Block’s anti-representationalist assumptions in order to draw the distinction between access consciousness and phenomenal consciousness?

Answer: No. One way to understand the distinction is in terms of whether, for any given state, it (a) has a phenomenal character and (b) its representational content plays a certain role within a subject’s mental economy. In distinguishing P-consciousness and A-consciousness, Block is saying that possessing (a) is sufficient for P-consciousness, and possessing (b) is sufficient for A-consciousness. Representationalists like Tye think that possessing (b) is necessary for a state to possess (a) – recall what he says about a state being ‘poised for use’. Yet tying (a) to (b) in this fashion is compatible with allowing a state to have (b) without (a).

Block uses his distinction between phenomenal and access consciousness to argue against the claim that the function of consciousness is to make information available for the control of action (cf. pp. 231-232).

In contrast, Smithies wants to connect consciousness to accessibility: he thinks that a primary function of consciousness is to confer upon information the kind of normative significance necessary to rationally control thought and action.

Note: Block discusses access consciousness in terms of the rational control of thought and action, but Smithies points out that Block’s notion of rational control is purely causal, and so his notion of access consciousness only provides a version of causal accessibility.

With all of the background on the table, let’s take a look at Smithies’s argument for the claim that attention is a distinctive mode of consciousness. The argument combines a claim about the functional role of attention with claims that connect this functional role to consciousness.
1. The functional role of attention is to provide rational access to information [cf. p. 262]
2. Information is rationally accessible to a subject only if she is conscious of the information [cf. p. 263]
   a. Note: the notion of ‘conscious’ at work here is Block’s notion of phenomenal consciousness. So this premiss connects accessibility and phenomenal consciousness in a way that Block wants to resist.
3. So attention must be a mode of consciousness [From 1 and 2]
4. A subject can be conscious of information even if that information is not rationally accessible to her.
5. But attention is a pervasive mode of consciousness only if every way of being conscious of information could provide rational access to information [From 1 and Def. of Pervasive Mode of Consciousness]
6. Hence attention must be a distinctive mode of consciousness [From 3 and 5]

Smithies argues for 2 elsewhere, but you can see what it has in common with Campbell’s claim that a purely procedural disposition does not suffice for grasp of an object as mind-independent.

Both Smithies and Campbell think that consciousness has an important normative role: for Campbell, perceptual experience justifies our treatment of objects as mind-independent; for Smithies, conscious awareness of information enables that information to play a rational role within reasoning and action (i.e. it allows information to serve as propositional justification for a subject’s beliefs).

Block’s arguments for the dissociation of phenomenal and access consciousness provide grounds to accept 4, since if a state can be phenomenally conscious without being access conscious, then it can be phenomenally conscious without providing rational accessibility to its representational content.

Note: given its place in Smithies’s argument, another way to support 4 would be by appeal to the phenomenology of attention. Attention imposes an attended / unattended, or foreground / background, structure on experience.