

Can a Functionalist Account for Qualia?

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Introduction

Functionalism identifies mental states as “consisting of a disposition to act in certain ways and to have certain mental states, given certain sensory inputs and certain mental states” (Block 2002, 94). This is distinct from the flawed physicalist theories of behaviourism and type identity theory that preceded it, which identify mental states with either behaviour or brain states. Whilst functionalism might be seen as an improvement on these theories, this essay will argue that it takes a step too far and its liberalism conflicts with our intuitive beliefs about systems that can be said to have qualia.

Qualia

Qualia can be described as ‘what is like to have an experience’. Our folk psychology tells us qualia are those inherently subjective ‘raw feels’ such as pain and the experience of seeing ‘red’. Block believes qualia to be so obviously real and familiar that, invoking Louis Armstrong, ‘If you got to ask...you ain't never gonna get to know’ (Block 2002, 97). However, Dennett argues that the term is used inconsistently, but summarises qualia as “ineffable, intrinsic, private [and] directly or immediately apprehensible in consciousness.” Since it may not be so obvious what they are, Dennett dismisses their existence (Dennett 2002, 229).

Functionalism

Type-identity theory states that anyone with pain will be in **the specific brain state identical with ‘pain’**, that is the firing of c-fibres. Functionalism is not so strict, it allows for multiple realisability. A functionalist argues that a mental state must be realised in a physical state but the physical state need not be specified. Mental states become purely functions that transform sensory inputs into behavioural output. What it is like to feel ‘pain’ or see **‘red’ is rendered irrelevant**. Under functionalism, normal humans, abnormal humans, dogs, Martians, zombies and computers can all be said to have ‘minds’.

Compatibility

If we accept that qualia exist, can functionalism account for them? It is argued that functionalism cannot provide a full account of mental states because qualia do not fulfil any causal, functional roles. There is something about phenomenal consciousness that cannot be analysed in terms of a functional role. There is more to the feeling of pain, for example, than just a causal relation between pricking and withdrawing one’s hand. The most persuasive attempts at refuting functionalism are the ‘absent qualia’ argument put forward by Block (2002, 96-97) and the ‘inverted qualia’ argument, a variant on that originally suggested by Locke (1689).

Absent qualia

In the absent qualia argument Block intends to show that a functional description of a mind is insufficient for capturing all of the mind’s qualities. His thought experiments use two similarly designed systems purporting to functionally replicate human beings and we are asked to imagine whether such systems would possess phenomenal consciousness. Block asks us to imagine a “homunculi-headed robot” in which a vast number of tiny men

reside inside the robot's head who implement a "square" of an adequate machine table that describes a human. In the 'Chinese mind' experiment Block asks us to imagine that the population of China is fitted with radios which are connected up in just the same way as neurons in a human brain, with messages passed between them.

According to functionalism, this arrangement would constitute a mind, but can we envisage that this 'mind' would have consciousness? If the Chinese system replicated my brain state when I feel pain, would the Chinese system feel pain? If it cannot feel pain, nor indeed experience any qualia, then the claim that the nature of qualia is to be found in its functional role is erroneous, and functionalism is false.

Inverted qualia

Locke asked if it were possible that "the Idea that a Violet produced in one Man's Mind by his Eyes were the same that a Marigold produced in another Man's, and vice versa." (1975, 389) Suppose that you and I are functionally identical. Would it still be possible that our colour experiences differ, so that, for instance, the colour I experience when viewing a strawberry is the colour you experience when seeing a cucumber? If this is possible, as suggested by the phenomena of pseudonormal vision (Nida-Rumelin, 2002), then functionalism must be false.

Responses

1. Functionally different

The natural response to these thought experiments is to say that the brain and the Chinese system, or that you and I, are not, in fact, functionally identical. Somewhere in the causal relations there are small yet fundamental differences.

With regard to the 'Chinese mind', a functionalist might argue that the mind could be disrupted by things that do not disrupt the human brain such as running out of batteries or bad weather. Block says these objections are irrelevant since, although these things could happen. If they do not, then both systems are functionally the same. As such, the functionalist must admit that there is a 'Chinese consciousness'. In any case, these disruptions are just that; they are not part of a system's functioning or inputs.

In the case of pain, a functionalist might point to the fact that when one pricks one's hand the pain causes one to rub it and generally tend to the injury. He could argue that there exists no part of the Chinese mind that plays this 'nursing' role and so the two systems are functionally distinct. This seems to be a rather chauvinistic response: to have a mind like ours requires that you have a system like ours. The appeal of functionalism is its multiple realisability, that a mind like ours can exist within a system that is not like ours. The 'functionally distinct' argument undermines a core principle of functionalism.

As regards colour perception, a functionalist might appeal to the complexity about the causal relations of phenomenal qualities. For example, 'red' is a warm colour and 'green' is a cool colour. If I see strawberries the way you see cucumbers, would I describe the colour of strawberries as 'cool'? If we identify the functional role of 'green' with enough precision, we, the functionalist argues, will see that it is the phenomenal property 'green' that plays the functional role and cannot be 'red' (Lacewing, 2008, 42).

2. Appeal to intuition

Dennett argues that our erroneous intuitions about the homunculi-headed robot result from our “imagining too simple a case” (Dennett 1991, 438). If we properly imagine the robot in all its complexity, we would see that the complexity of the system as a whole would give rise to genuine mental states (Dennett 1991, 439). Perhaps it is possible that some kind of consciousness could arise. Lycan (1995, 50-52) argues that our intuition that a robot does not have qualia stems from a misguided focus on each microscopic component of the system rather than on the macroscopic system as a whole.

Herein lies a fundamental issue with the absent qualia argument: it rests on an appeal to our intuition. Our intuition tells us that the simulations lack mentality, or at least qualia. Block admits that an “appeal to intuitions when judging possession of mentality...is especially suspicious...Is a hunk of quivering gray stuff more intuitively appropriate as a seat of qualia than a covey of little men? If not, perhaps there is a prima facie doubt about the qualia of brain-headed systems too?” (1978). Except, of course, we are brain-headed systems and we have experienced qualia for ourselves.

We cannot know with certainty what would happen if one billion (or more accurately 100 billion) people were to participate in a system such as the ‘Chinese mind’. If minds develop within contexts, within specific linguistic and social communities, the nature of a mind will not be wholly determined by what we think a mind is.

The argument boils down to a question of reasonable doubt. Block believes that the burden of proof rests with the functionalist to explain the “bizarre consequence” of the simulation having qualia: “if a doctrine has an absurd conclusion which there is no independent reason to believe, and if there is no way of explaining away the absurdity or showing it to be misleading or irrelevant, and if there is no good reason to believe the doctrine that leads to the absurdity in the first place, then don't accept the doctrine,” (1978). However, as Chalmers would argue, is it not equally mysterious that the squidgy matter in our heads produces consciousness?

Conclusion

The absent and inverted qualia arguments demonstrate that functionalism fails to account for the qualia of phenomenal consciousness. Indeed, some functionalists have admitted defeat and restrict the application of the theory. Some restrict it to non-qualitative mental states. Haugeland suggests that the states that can be functionalised should be isolated from the states that cannot: “if felt qualities are fundamentally different, so be it; explaining them is someone else's business,” (1978, 222). However, that side-steps the ‘hard question’ of qualia. Other functionalists opt to restrict functionalism to those systems like our own. However, to do so, as Block argues, is chauvinistic and curtails multiple realisability.

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