

Jackson's Mary and the Knowledge Argument: its Implications for Naturalism

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Abstract

This paper examined the philosophy of mind in the light of the scientific understanding of the brain and how it has helped to shed more light on the philosophical problem of the nature of conscious experience. The paper argued that if there are external qualities in the physical world, we have no reason to believe that they correspond to the ones we find in our perceptual consciousness. Using Jackson's Thought Experiment which is one of the contemporary arguments against naturalism as a case study, the paper showed that there are some facts about colour experience which cannot be known by physical science. The method of critical conceptual analysis was employed while existing relevant literatures on naturalism and philosophy of mind provided the background to the paper. The paper concluded that the naturalist theory of sensory perception which involves neurological computation of sensory stimuli in itself is inadequate in accounting for the nature of our sensory experience.

Keywords: knowledge, perception, thought-experiment, argument, naturalism

1. Introduction

The Cartesian challenge to naturalism emphasizes the special first-person character of experience and the immediacy of our relation to our own ideas. Descartes contends that thinking is always thinking from a first-person perspective, a characteristic that is not shared by matter (Descartes 1960: 26, 78). There is a fundamental discontinuity between the world of nature and our minds. This is because there is a first-person experiential immediacy to thought that is not present in matter. The main problem posed by Descartes' challenge to naturalism is how to explain the subjective feel of conscious states. It is, indeed, hard to see how any sort of physical or neurological description could provide an explanation of the 'subject feel' of a mental state (i.e. how to build subjective feels out of physical mechanisms). Contemporary scholars have pushed this Cartesian line of argument further through what we can refer to as thought experiments.

2. Naturalism and the Philosophy of Mind

Naturalism depends on scientific understanding of perception. It is the view that we can use results from psychology, physics, biology etc. to describe the actual processes by which human beings gain knowledge of the world around them. To this end, for a belief to be knowledge or justified, naturalism requires that there must be law-like or natural connection between the truth of what is believed and the person's belief⁴. In other words, when the task of discovering reliable belief-forming mechanism is empirical, it is called naturalism.

Quine contends that traditional epistemology has failed because of the quest for Cartesian certainty (Quine 1885: 15-19). Descartes and Chisholm, for instance, believe that we can discover the general principles of epistemology from the armchair i.e. that traditional epistemology shows that we do not need to engage in any sociological or psychological research in order to understand epistemology (Descartes 1969: 26). The contention of traditional epistemologists is that as long as we can think, reflect, intuit and mediate, we are in a position to answer epistemological questions which are a priori knowable truths.

The alternative Quine provides is to study the relation between our sense impressions and our theories about the world. Quine insists that we must reject a concern with justification or quest for certainty. Rather, we are to study scientifically what happens in our brains i.e. the natural phenomenon in a human subject. This is a rejection of normative epistemology.

Our concern in this paper is that of critically analyzing the ways in which epistemic facts are related to descriptive facts. As defenders of naturalized philosophy of mind, we shall identify which descriptive properties are such that any belief with those properties is justified.

The philosophy of mind is concerned with the theories about the nature of the human mind. It has to do with the nature of conscious experience which remains a controversial issue among philosophers, psychologists and neuroscientists. Basically, philosophy of mind is concerned with the nature of consciousness. According to Jerome Shaffer:

...the philosophy of mind is concerned with all mental phenomena
Where mental phenomena is to be understood as all phenomena that
Exclusively involve beings capable of consciousness. ...mental
phenomena such as ways of being conscious (hearing, remembering,
imaging, considering, expecting), (Smart 1959: 4).

The above definition from Shaffer shows that philosophy of mind has the primary responsibility of analysing the concepts of consciousness and specific mental phenomena.

In his own considered opinion, George Graham maintains that:

Philosophy of mind is the area of philosophy which
strives for Comprehensive and systematic understanding
of that which thinks and experiences namely the mind.
It tries to understand what mind is, what it does and how
to uncover it. (Graham 1993: 2).

The emergence of the philosophy of mind cannot be precisely dated. According to *Oxford Companion to Philosophy* (Honderick 1995: 570-571), it is best to think of the emergence of the philosophy of mind during the nineteenth century and first half of the 20th Century.

The problem of mind-body (dualism) emerges as a fundamental issue within Descartes' epistemological project. In the contemporary period, Gilbert Ryle makes a spirited attack on the Cartesian picture of mind as a "ghost in the machine". (Ryle 1980: 9-10). Ryle further attacks the doctrine of "privileged access", the view that the mind is transparent to its owner, i.e., that we each have unmediated and incorrigible access to our own mental states and concludes that talk of mental states; beliefs and desires are just talk of disposition of the organism to believe in certain ways (Honderick 1995: 572).

Our present problem is how to gain some insight into the neural events that have a necessary relationship to our conscious experience. The subjective appearance of consciousness is an impediment to the physical scientific understanding of consciousness. It concerns that which must be experienced from the inside such as looks, tastes, pain etc. This will take us into the consideration of different theories of conscious experiences in the succeeding section.

3. Rival Theories of Mind

Diverse and conflicting theories of conscious experience abound in the philosophy of mind. There is the reductionist theory which holds that conscious experience can be explained by the standard methods of neuroscience and psychology. There is also the non-reductionist theory holding that we will never understand conscious experience in the reductionist way (Chalmers 1995:63). These two rival theories have been classified by George Graham as the optimistic and the pessimistic scientific positions respectively. The optimistic science position is the belief that physical science leaves nothing out in explaining everything there is to know about conscious experience. In other words, to know each and every physical scientific fact about conscious experience is to know, among other things, what experience is like (Lewis 1990: 499 – 519). The materialists offer a defense of the optimistic science position. However, we shall simply refer to both the optimistic science position and the pessimistic science position as the naturalist and the anti-naturalist positions respectively in the remaining part of our discussions.

4. Arguments for Naturalism

That naturalists hold that being conscious is the same as being in a particular sort of physical state of the brain, e.g., the feeling of pains, sweat tastes, red looks which are nothing more than particular sorts of neural conditions. Proponents of this identity theory include J.J.C. Smart, U.T. Place and D. Armstrong (Armstrong 1968: 57). The central thesis is that each type of mental state is identical to some neural state. In his own case, Horst Steven maintains that there are three major arguments for naturalism (Horst 1996: 93 – 96). They are as stated below:

The first is the argument from cognitive science which is based on the realization that the sciences of cognition are now yielding explanations of particular features of the mind, thereby confirming the thesis that mental states are determined by brain states (Horst 1996: 96). J.J.C. Smart, for instance, argues that conscious experiences are simply brain processes (Smart 1980: 20-27). The argument can be stated as follows:

The sensory system consists of several receptor organs for touch, vision, hearing etc., that signal to the central nervous system by the firing of impulses or messages to the brain in the manner of the place and intensity of the stimulus. In other words, signals from receptor organs that result in the conscious experiences of vision, touch, hearing etc are transmitted to the higher levels of the central nervous system (Popper & Eccles: 1977: 250).

The above passage shows that the rise of cognitive science focused attention on processes in the brain. Given the objective mechanism of the cognitive system, a perceptual awareness is

explained by establishing the way photons strike the retina, how electrical signals are passed up the optic nerve and between different areas of the brain, and eventually our response to stimuli in a way (Chalmer 1995:62).

The second is the indirect argument from the completeness of physics which is one of the most intellectually respectable rationales for naturalism. It is based on the belief that the lowest-level laws of physics are causally complete i.e. that the microphysical facts determine all of the facts simpliciter, at least in the actual world, even if detailed explanations of the mental should prove unavailable (Horst 1996: 96).

Naturalism also derives its support from what can be regarded as a normative claim i.e. the claim that based on the success of the natural sciences over the years; the sciences of nature present an overwhelming picture of the world. This has placed a burden upon the special sciences such as psychology. The challenge posed by naturalism is that all the things we think we believe about the human mind either commonsensical or philosophically must be capable of being integrated into this larger well-substantiated methodological picture of naturalism. Consequently, any views in the special sciences that prove incompatible with the general picture cannot be popular or recognized as meaningful. Normatively, the collective evidence of modern science paints a picture of the world that provides some normative constraint for psychology and all the sciences of cognition. Horst Steven describes this phenomenon in the following passage:

The emerging unified picture of the world, provided by modern science, after all, is the best picture of the world we have. If our psychology does not fit in with the rest of the picture, there must be some problems with psychology as a science. If our mentalistic categories are not consonant with this picture of the world, there must be something amiss with our mentalistic ontology (Horst 1996: 132).

So far, our discussions have centred on the philosophy of mind in the light of the scientific understanding of the brain and how it is hoped to shed more light on the philosophical problem of the nature of conscious experience. This naturalist effort has attracted so much criticism from opponents of naturalism. The succeeding section discusses the anti-naturalists or the pessimistic science position.

5. Arguments against Naturalism

The opponents of naturalism claim that science not only lacks conceptually adequate explanations of conscious experience but also that the science of nature does not possess the explanatory resources necessary for such a project. We shall discuss three sorts of Cartesian challenges to naturalism and then go ahead to examine the contemporary "Thought Experiment" by Jackson. The central claim by the opponents of naturalism is that there are features of the mental or our state of consciousness that cannot be explained in the language of the physical science.

Descartes is not a naturalist or a reductionist with respect to the mind. One of his arguments against naturalism is about explanation: the views that we cannot explain certain features of the human mind mechanistically because we cannot build machines that duplicate our competence at language and general purpose reasoning. Descartes opines that we do not have a mechanistic explanation of language or reasoning until we can build or, at least, describe a mechanism that exhibits them or simulates them (Descartes 1985: 257). Thus, if we want to carry out a naturalization of the mind, we must be able to account for language and reasoning in physical terms that can be implanted in something we can build. The crux of Descartes' argument is that there must be something other than matter that accounts for minds, if we cannot explain language, reasoning or the will by way of mechanistic explanation. This is a serious challenge to naturalism, more so, that recent development in cybernetics (artificial intelligence) has also failed to equate the roles of machine to that of a human being.

Descartes argues that body and mind are two different kinds of substances on the ground that they have different essential properties, and neither can share in the essential properties of the other (Descartes 1960: 85 – 86). It does not make sense, for instance, to speak of the mind as having a particular geometric shape or as occupying a particular region or space or as colliding with other objects. Descartes asserts that the essential property of mind is ‘‘thought’’ while that of body is ‘‘extension’’. Thus body and mind are two irreducibly distinct kinds of substance. The implication of Descartes dualism is that naturalist or materialist theories in the form of identity theories of mind body relationship have failed to give adequate explanation of mental phenomenon or our conscious experience.

6. Jackson’ Mary and the Knowledge Argument

The anti-naturalist or the pessimistic science position holds that even if we know the physics, chemistry and biology of consciousness we will still not know what consciousness is like. This is because consciousness is subjective or first-personal (Graham 1993: 9). For instance; it is argued by Graham that there is no amount of impersonal physical scientific information about migraine that will be sufficient to communicate what headache is like (Graham 1993: 9). The Australian philosopher, Frank Jackson defends the pessimistic science position (anti-naturalism) concerning the character of conscious experience with a thought experiment or a direct vivid story which focuses on the visual experience of colour (black and white), (Jackson 1986:291- 295). The thought experiment is meant to show that physical sciences cannot capture everything there is to know about colour experience which cannot be known by physical science. The thought experiment is as stated below.

‘‘Suppose that Mary, a neuroscientist in the 23rd Century, is the world’s leading expert on the brain processes responsible for colour vision. But Mary has lived her life in a black and white room and has never seen any other colours. She knows everything there is to know about physical processes in the brain – its biology, structure and function. This understanding enables her to grasp everything there is to know about the easy problem: how the brain discriminates stimuli, integrates information and produces verbal reports. From her knowledge of colour vision, she knows the way colour names correspond with wave lengths on the light spectrum. But there is still something crucial about colour vision that Mary does not know: What is like to experience a colour such as red. It follows that there are facts about conscious experience that cannot be deduced from physical facts about the functioning of the brain’’ (Jackson 1996: 291-295).

The above argument shows that since Mary could not have known what it was like to see red without actually experiencing it, it follows that it is impossible to explain the specific character of red colour from her previous knowledge of neuroscience of vision. Therefore, Mary’s new experience of red colour slipped the net of Neuroscience and of the physical science generally.

We will recall that the brain scientists or the naturalists propose a theory of sensory perception which includes neurological computation of sensory stimuli. The term ‘‘computation’’ means that the in-coming stimuli are exclusively broken down to their quantitative properties and that what is perceived is somehow the end product of neurological calculations applied to those quantitative properties (Metzinger 2000: 3-6).

The implication of this position is that our perceptual consciousness cannot possibly be based on any non-quantitative qualities in the physical world. If there are external qualities in the physical world, we have no reason to believe that they correspond to the ones we find in our perceptual consciousness.

Jackson’s thought experiment, therefore, has raised a fundamental problem which neuroscience must answer. The problem is that if we accept that in sensory perception there is always computational processing going on of stimuli, we also have to accept that if there are really external non-quantitative qualities in the outside world; one never has direct access to them in normal perception. This may also be the reason why Locke has offered a defence of the theory of representative or indirect realism. But the Lockean point of view is also problematic in the sense

that the main reason for which people believe in external qualities in the physical world is basically their sensory perception of them.

Our present problem is how to gain some insight into the neural events that have a necessary relationship to our conscious experience. Mountcastle's contribution to the discussion of the problem of the nature of conscious experience is stated as follows:

'Each of us believes himself to live directly within the world that surrounds him, to sense its objects and events precisely, to live in real and current time. I assert that these are perceptual illusions; for each of us confronts the world from a brain linked to what is "out there" by a few million fragile sensory nerve fibres. These are our only information channels, our lifelines to reality. These sensory nerve fibres are not high-fidelity recorders, for they accentuate certain stimulus features; neglect others... never completely trustworthy. Sensation is an abstraction, not a replication of the world' (Mountcastle 1975: 109-131).

7. Conclusion

We have so far been examining the arguments against naturalism and particularly the consideration of conscious experiences as brain processes. The pivot claim is that there are features of our conscious experience that cannot be explained in the third-person objective vocabulary of the physical science. Science not only lacks conceptually adequate explanations of conscious experience but that the sciences of nature do not possess the explanatory resources necessary for such project. Even considering the above passage quoted from Mountcastle, it follows that the problem of conscious experience goes beyond the explanation of structure and functions. What is lacking is how the rational connections between thoughts can be linked to a scientifically respectable causal account of mental process. In other words, there is need for a law specifying how conscious experience depends on underlying physical process i.e. how physical processes are associated with conscious experience. This is the point at which philosophical arguments and thought experiments have a role to play in supplying the missing gap. We can reasonably conclude that the nature of conscious experience is indeed mirrored by the structure of information in awareness and vice versa. The process of perception is more complex than the mere collection of physical facts from the environment.

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