Scientific and Philosophical Studies on CONSCIOUSNESS

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The idea that science explains or ought to explain every phenomenon finds Cartesian dualism of mind and body to be an unsatisfactory thesis. Consequently we have a variety of materialist theories regarding mind and consciousness. As Howard Robinson notes: "If science cannot encompass the subjective then subjectivity becomes a door through which mystical, irrational and religious notions can enter and reassert themselves against the modern metaphysic of scientific realism." (Robinson 1982 : 2). Thus in recent times, we come across many philosophers who are committed to the scientific world picture, trying to locate mind within a world that is essentially physical. The central problems these philosophers have to tackle consist of consciousness and mental causation.

The pioneers of ‘Physicalism’ like Place and Smart opine that there are no inner mental processes such as thought and images. Inspired by the advance in physical theories about natural phenomena, they hold that though behaviourist account of sensation is wrong, a true physicalist account of the same is...
possible. Their approach to the mental has been known as ‘Central-state materialism’ or ‘Mind-body identity theory. According to Place, sensations are nothing but the process in the brain just as lightning is the motion of electrical charges. Though statements about lightning do not mean the same as statements about electrical charges, it is a contingent matter of fact that lightning is the motion of electrical charges. Similarly, Place thinks that it is a contingent matter of fact that sensations are brain processes. In his view, it is the phenomenological fallacy that commits many philosophers to think otherwise. The phenomenological fallacy consists in thinking that, for example, having a green after-image is over and above the normal experiences we have when we look at a green patch of light. There is no thing as an ‘after-image’ beyond the experience of imaging something. These experiences are identical with brain processes. Smart provides a topic-neutral analysis of the same. According to him, when a person says “I see a yellowish-orange after-image,” what he says is that there is something going on which is like what is going on when he has his eyes open and is awake and he sees an orange. Thus the “something” that is going on is being described only in terms of a stimulus that normally brings it about. Smith then identifies this something with a brain process.

Place-Smart view of physicalism had a set back with ‘multiple realisation’ argument first advanced by Hilary Putnam (Putnam 1975) that set the stage for ‘Functionalism’. The central thesis of functionalism is that mental kinds are functional kinds. To the extent how one construes the relation between functionalism and physicalism, there can be two types of functionalism, namely ‘functional state identity theory’ and ‘functional specification theory’. If it is argued that functionalism does not support physicalism and that physicalism is not a true account of mind, we have functional state identity theory. On the other hand, if it is argued that functionalism supports physicalism, which is a true account of mind, we have functional specification theory. Armstrong and Lewis, who champion ‘Type physicalism’ think that functionalism does support physicalism. According to them, the mental state ‘pain’ is a functionally specified physical state. Functional specification theory argues that a mental state is that which is connected with a certain causal role. Causal roles are specified by definite descriptions and mental states are considered
as the referents of these definite descriptions. For Armstrong and Lewis these descriptions are brain states. "...if the concepts of the various sorts of mental state are concepts of that which is, in various sorts of way, apt for causing certain effects and apt for being the effect of certain causes, then it would be a quite unpuzzling thing if mental states should turn out to be physical states of the brain." (Armstrong 1981 : 21) The particular causal role differs for different sorts of mental states. The causes of mental states are objects or events in the person's environment. Nevertheless, the identification of mental states with brain states poses problems for the physicalist as far as secondary qualities are concerned. Armstrong proposes a purely objectivist account of the secondary qualities. For example, perceived or felt heat of objects is identified with the motion of the molecules of the hot object. Thus colours, sounds, tastes, smells and the like are taken to qualify physical objects or surfaces and identified with properties that are discovered by scientific investigations to be correlated with the so called secondary qualities. The rationale behind such theoretical identification is that ontologically complex properties may be grasped epistemologically as simple and unanalysable.

Armstrong's account of secondary qualities preclude the perception of any real properties. Since science has no place for secondary qualities, Armstrong suggests that when we perceive a secondary quality we are not aware of a real quality at all. "We know nothing about what redness is in its own nature.... We only know contingent truths about redness — such truths as that it is a property detected by the eye and possessed... by such things as the surface of ripe tomatoes and Jonathan apples." (Armstrong 1968 : 275). Thus, according to him, science has to tell us what real, primary qualities an object possesses when we call it red. As Robinson points out, Armstrong is treating secondary qualities in a manner of "resemblance." Armstrong accepts that perceiving a thing only in terms of its resemblance relation gives us no idea about the intrinsic nature of the quality. This seems to be quite acceptable to Armstrong as in the final analysis, there are no secondary qualities for him. But this will inevitably lead him to deny the perception of any real qualities at all. "... If all our perception is simply the recognition of resemblances, then we will know nothing about the intrinsic nature of any perceivable qualities... By his own standards, it would seem that Armstrong cannot allow that we ever perceive any real properties at all: our
grasp of the nature of every empirical quality is as empty as our
direct grasp of the real understanding nature of secondary
qualities." (Robinson 1982: 50) Armstrong himself admits that
the nature of secondary qualities is problematic for physicalists.
(Armstrong 1983)

According to Hilary Putnam and Jerry Fodor, functionalism does
not support physicalism, rather it refutes type physicalism. They
describe the relation between mental properties and physical
properties in terms of 'realisation' or 'implementation.' Putnam
conceives functionalism to be an alternative to the view that
mental states are physico-chemical states of the brain. Though he
concedes that there obtains an identity, he says the central state
identity theorists were wrong in assuming the other term of
identity in the neurological properties of the brain. According to
him, the brain has properties which are in a sense not physical.
That is, brain has "properties which are definable in terms that
do not mention the brain's physics or chemistry." (Putnam 1981:
78) Analogous to a computer programme that can be realised by
a system quite different from what its metaphysical or ontological
composition, mental properties can be realised variously.
"Psychological properties exhibit the same characteristic, the
same psychological property (e.g. being angry) can be property
of members of thousands of different species which may have
quite different physics and chemistry...." (Putnam 1981: 79)
Thus functionalists like Putnam hold that psychological properties
are identical with functional properties. For Putnam, psychological
functional states are logical states. He argues out his position by
conceiving the mental in terms of a machine analogue. It
characterises a mental state in terms of its relation to inputs,
outputs and other states. The set of conditionals or the programme
specifies the relational structure for each mental state. The relations
between the entries on the machine table are logical and not
causal. A programme can be realised in a variety of ways and the
realisation of the programme is a realisation of a system of
psychological states. Thus, for functionalists, it is absurd to ask
what psychological states are — as absurd as to ask what the
states described by a machine programme are. (Levin 1979) Fodor
accepts much of the functionalist perspective of Putnam and
develops a cognitivist approach to the mental. He allows the
existence of mental causes and the interaction of mental states
with one another without subscribing to the substance dualism of
Descartes on the one hand and without accepting the physicalist identification of the mental with the brain states on the other. We call a valve-lifting device a camshaft when it is fitted in an automobile. The same functional role is played by a muscle in the human heart. Thus being a valve-lifter is a functional state a thing satisfies not because of what it is, but because of what it does.

According to Fodor, cognitive activities are realised in mental representations or symbol manipulations. He rejects the notion of mind as a 'mirror of nature,' that is, rejects "resemblance" as a property of mental representation. For him, the symbols of mind are abstract entities. He admits that it is inadequate to characterise the language of thought as just a formal medium of symbol manipulation. Nevertheless, he is pessimistic about our ability to understand the way in which the content is dealt, with by our computational systems. Though semantics is inaccessible to the cognitivist, he says that "to deny that mental operations have access to semantic properties of mental representation is not to deny that mental operations have access to semantic properties." (Fodor 1981: 244) Thus, as investigators we are to be contended with describing the kinds of syntactic operations that are carried out and have to remain ignorant of the ways in which these operations refer to the external world. He thinks that these are inaccessible to scientific investigations. According to Fodor, all that we can hope for is only a computational psychology, a psychology of formal mental operations and not a naturalistic psychology that aims at explaining the way we learn about the particular things of the world. He calls his syntactic approach to cognition as "Methodological solipsism" – the claim that how the world is makes no difference to one's mental states. Though mental states play a causal role in behaviour, this role is more dependent on how it actually is.

Hubert L. Dreyfus characterises Husserl as an advocate of computational model of cognition in the manner of Fodor. However a critical look at Husserlian phenomenology would show, as Ronald McIntyre had shown, that Husserl and Fodor differ significantly though they agree in certain respects. For Husserl, the intentionality of consciousness gives mental states a sort of independence from the reality of what is represented. A mental state may represent an object that actually does not exist and when it does exist, the representation need not coincide with
the properties it actually has. This version of methodological solipsism leads Husserl to transcendental phenomenology. For Husserl, "... A philosophical understanding of the foundations of beliefs about natural reality must ultimately derive from a study of mental representation, and so that study itself cannot be dependent on the truth of those beliefs". (McIntyre 1988: 59)

Thus Husserl, like Fodor, holds that we have no access to reality except through our mental representations. Moreover Husserlian phenomenology can be considered as a precursor to functionalism. The ontologically neutral approach of the functionalists is explicitly articulated in Husserl's works. Like functionalism, the goal of phenomenology is to provide abstract analyses of what is involved in various mental activities. Phenomenological descriptions are not naturalistic accounts of the embodied ego, rather they are philosophical accounts of transcendental features of mind. As noted before, Fodor's mental representations are mental symbols having syntactic and semantic structures like natural languages. More importantly, Fodor holds that natural language is the "expression of thought" as the syntactic and semantic properties of natural language are derived from more fundamental systems of mental representations. Husserl's mental representations are not mental symbols in this sense. 'Noematic Sinne' are not linguistic entities that have meaning, but are meanings themselves. As McIntyre puts it. "On Fodor's version... we think in mental words that get translated into a public language when we speak or write, while on Husserl's version we think in "meanings" that get expressed in a public language." (McIntyre 1988: 65)

In order to explicate the semantic aspects of mental representation, Fodor offers a causal theory of linguistic reference. That is, for Fodor the relation between language and the world is causal. In the same manner, he holds that referential properties of mental representations are causal relations. Thus Fodor analyses particular mental event types into functional states defined by causal relations among beliefs, desires etc. and reference relations to extra-mental things defined by causal relation between internal states and the external world. His "methodological solipsism" separates these two analyses.

Husserl conceives intentionality or representational relation of mental states as inherent in the mental state itself, independent of its casual relations to extra-mental things. In Husserlian
phenomenology “... the reference relations between experiences and their objects do not reduce to causal relations, since intentional relations involve the object’s satisfying the contents of experience.... Husserl conceived contents as intrinsically conceptual entities or meanings (sinne), and as object’s satisfying a meaning is not a causal relation.” (Smith 1995:369) So, Husserl would desist from Fodor’s characterisation of representational nature of the mental in causal relations.

Husserl holds that the same events are described in phenomenology and various physical or psychological theories in different ways. In assuming an ontology of essences and moments, Husserl distinguishes different moments of the mental events themselves, assigning different sciences to the study of different aspects of the events. Thus phenomenology studies intentionality as the property of pure consciousness, psychology studies it as property of mental events in nature, that is as acts of embodied consciousness whereas neurophysiological sciences view it as a property of brain processes. So Husserl would not agree with Cartesian dualistic metaphysics.

There can be three basic positions on the mind-body problem: substance dualism, property dualism, and property monism. (Levin 1979). According to substance dualism, there are both mental and physical entities. It implies there are non-physical or psychical properties. One may deny substance dualism by holding property dualism or property monism. Property dualism claims that there are only physical entities, but some physical entities have both physical and non-physical, psychological properties. Property monism asserts that there are only physical entities, and all properties of physical entities are physical. Physicalist theories of mind as we have seen belong to property monism. Husserl would argue against such a thesis as according to him qualitative mental states can be conceived independently of the physical states. Hence physicalism that identifies mental states with neural states cannot be true. Functionalism and double-aspect theories are brands of property dualism. When a functionalist like Fodor says that mental events and brain events are type distinct and only token identical, it means that the same events realise both mental and physical types. Nevertheless, when Fodor goes on to characterise the representational nature of the mental in causal relations, Husserl parts company with him. According to Husserl,
causal categories are strictly speaking a relation in nature and thus cannot account for acts of consciousness or mental states.

Donald Davidson’s "Anomalous monism" is a version of double-aspect theory. As against the traditional theory, the modern version of double-aspect theory does not say that all substances are physical, while some of its properties may be non-physical. Their claim is rather that all "events" are physical, though some events have irreducible psychical aspect. According to Davidson, causal explanations must be strictly nomological, but explanations with reference to mental states cannot be so because the mental is anomalous. (Davidson 1986). However the occurrence of any mental event is a physical event for him and every event which has a causal explanation has complete physical explanation. Thus Davidson holds that mental events are identical with physical events. He hastens to add that there are no bridge laws that connect the mental with the physical. "Anomalous monism resembles materialism in its claim that all events are physical, but reject the thesis, usually considered essential to materialism, that mental phenomena can be given purely physical explanations. (Davidson 1986: 214). From the perspective of Husserl, events in themselves are neither mental nor physical. "...physical theory captures certain essential features of those events, features belonging with the essence Nature. And phenomenological theory captures other essential features of those same events, notably intentionality, belonging with the essence Consciousness". (Smith 1995:363) Husserl envisages an ontology of tripartite 'Essence' or 'Region,' namely Nature, Life-world, and Consciousness. These essences are not reducible to any one essence as there are no bridge laws available. The Plurality of essences are unbridgable by laws of essence. Does it mean then our understanding of the 'mental' or 'consciousness' is ever going to remain at the subjective level? Would there be a science of the 'mental'? A reading of Husserl in the light of Nagel's view may lead us to answer this question in the affirmative.

Thomas Nagel argues against the various reductionist theories that aim to analyse the mental in terms of the physical. As he says, "If physicalism is to be defended, the phenomenological features must themselves be given a physical account. But when we examine their subjective character it seems that such a result is impossible. The reason is that every subjective phenomenon is
essentially connected with a single point of view, and it seems inevitable that an objective physical theory will abandon that point of view." (Nagel 1974 : 437) The point of view in question has nothing to do with privacy of experience, it is not one accessible only to a single individual. Rather it is objective in the sense that intersubjectivity allows one to know the quality of another's experience. Still they are subjective as the objective ascription of experience is possible only by adopting the other's point of view. Nagel makes it very clear when he says, "My point, however, is not that we cannot know what it is like to be a bat. I am not raising the epistemological problem. My point is rather that even to form a conception of what it is like to be a bat... one must take up the bat's point of view." (Nagel 1974 : 442) If the facts about experiencing are accessible only from the subjective viewpoint then characterising such experiences in a physicalist idiom seems to be an elusive task. Nevertheless, Nagel thinks it is not something impossible. The challenge before us is to form new concepts and devise a new method that permits an objective phenomenology. "What we need is not a reductionist or eliminative revision but an expansionist one... a conception that will permit subjective points of view to have an objective physical character in themselves." (Nagel 1998 : 343) Nagel echoes Husserl when he says that such a new concept will be captured as evidenced by the history of science. Science develops new concepts about the same things, retaining most of the features of the old concepts and relating these to new concept thereby making it possible to explore further connections. As Nagel says, we never had logical, geometrical, and arithmetical concepts till we developed those.

According to Husserl, science is a product of human praxis like any other cultural fact. It is a continuous process that arises within human space through human activity. "...[science] is not only a mobile forward process from one set of acquisitions to another but a continuous synthesis in which all acquisitions maintain their validity, all make up a totality such that, at every present stage, the total acquisition is, so to speak, the total premise for the acquisitions of new level." (Husserl 1970 : 355-356) Science takes shape by way of abstractions and concept formations or idealisations from the pre-scientific life-world. The crisis of modern science, according to Husserl, is that it has severed its relation to the life-world. The crisis of western
sciences does not concern their technical validity. What is in question is the meaning of the sciences in a philosophical sense and, no less important, their human significance...Science, it seems, has nothing to say as to things that matter most for human existence.” (Gurwitsch 1956 : 383) Nevertheless, the Crisis supplementary text obliterates the gulf between the life-world and the scientific world. There Husserl writes that our concept of life-world gets expanded and merges with the scientific world. “...the very contrast that Husserl belaboured, namely, that between the life-world and the scientific world, between concrete and objective accomplishments become sedimented, presupposed and habitual, the life-world itself integrates scientific truths and becomes expanded. (Steinbock 1994 : 565) This particular rendition of Husserl is strikingly similar to the proposal that Nagel makes: a conception of subjective points of view having objective physical characteristics. Nagel reiterates that "...even though no transparent and direct explanatory connection is possible between the physiological and phenomenological, but only an empirically established extensional correlation. We may hope and ought to try as part of a scientific theory of mind to form a third conception that does directly entail both the mental and the physical, and through which their actual necessary connection with one another can therefore become transparent to us". (Nagel 1998 : 351-352) Thus Nagel’s proposal that the “mental states have a tripartite essence,” namely, phenomenological, functional, and physiological corresponds to Husserlian position that mental events have different moments that are being studied in different sciences. Yet, a comprehensive understanding of the ‘mental’ calls for a new science; for Husserl it was the “rigorous science of phenomenology,” for Nagel it is a science yet to be born.

References


