

THE PHILOSOPHY OF CONSCIOUSNESS

Pritam Majumdar¹

Abstract:

In understanding the relationship between brain and mind, many spiritual, religious and metaphysical theories were evolved. Some became influential and others were discarded. Today, Neurophysiology and Cognitive science bundled together many disciplines and try to grapple with the complex phenomenon of mind or consciousness and its relationship with brain. Pritam Majumdar, a budding neuroscientist examines these conflicting theories and tries to arrive at some clear notions on consciousness.

Key Words: externalism, perception, occasionalism, behaviorism, functionalism, reductionism.

What and where is the mind located?

If the mind is a physical phenomenon of some kind, it has to be located somewhere. According to some, there are two possible options: either the mind is internal to the body (internalism) or the mind is external to it (externalism). More generally, either the mind depends only on events and properties taking place inside the subject's body or it depends also on factors external to it. Externalism differentiates into several versions. The main ones are semantic externalism,

¹ Pritam Manjumdar is an aspiring scientist who researches on the brain-mind relationship and an associate at the North-spring Neurosciences-A Center for Excellence in Bangalore.

cognitive externalism, and phenomenal externalism. Each of these versions of externalism can further be divided whether they refer only to the content or to the vehicles of mind. Cognitive externalism is a very broad collection of views that suggests the role of the environment, of tools, of development, and of the body in fleshing out cognition. Embodied cognition, the extended mind, and en-activism are good examples. Mind is more psychological notion in cognitive or Neuroscientific meaning; it refers to processes of thinking, processes which are running in brain and so on; Consciousness is more phenomenological notion; it supposes specific mental reality which presumably differs from physical reality. A related problem is how someone's propositional attitudes (e.g. beliefs and desires) cause that individual's neurons to fire and his muscles to contract. These comprise some of the puzzles that have confronted epistemologists and philosophers of mind from at least the time of René Descartes.

Philosophy of perception- is concerned with the nature of perceptual experience and the status of perceptual objects, in particular how perceptual experience relates to appearances and beliefs about the world. The main contemporary views within philosophy of perception include naive realism, enactivism and representational views.

Within the field of neurobiology, there are many sub-disciplines that are concerned with the relations between mental and physical states and processes: **Sensory neurophysiology** investigates the relation between the processes of perception and stimulation. **Cognitive neuroscience** studies the correlations between mental processes and neural processes. **Neuropsychology describes** the dependence of mental faculties on specific anatomical regions of the brain.

A simple example is multiplication. But it is clear that computers do not use a mind to multiply. Could they, someday, come to have what we call a mind? This question has been propelled into the forefront of much philosophical debate because of investigations in the field of artificial intelligence (AI).

In taking the identity theory (in its various forms) as a species of physicalism, I should say that this is an ontological, not a translational physicalism. It would be absurd to try to translate sentences containing the word 'brain' or the word 'sensation' into sentences about electrons, protons and so on.

Generally speaking there two possible answers to these questions:

1. On the one hand, we can assert that the mind is something material; therefore Mind is just a part of body.

2. On the other hand, it's possible to state that Mind is not a material or physical one; therefore, it's somehow connected with a body, but not reduced to it.

It's pretty obvious and evident that Mind is related to the brain and physical processes in the brain. For instance, some brain traumas might cause changes in mental states. Moreover, when we effect on the brain (particular parts of brain) some specific mental states can be caused as hallucinations or uncommon sensual states. In these cases, a brain can be considered as a material part of a material body. Consequently the mind is a material entity.

It's impossible to observe our thought as a physical phenomenon and, that there is not an access to our mental life, which is constituted of private non-observed experience. For example, when we conceive a yellow lemon or a pink elephant it doesn't mean that someone can find them in my brain. The lemon and the elephant as my mental images are nonphysical objects. Therefore mind is not a material entity.

Causal Interactionism-Descartes thought that causal interaction between the mind and the body occurred in the pineal gland. He speculated that **animal spirits** - fluids made up of extremely fine particles flowing around the pineal gland – cause it to move in various ways, and these motions of the gland in turn are because of the conscious states of the mind

Pre-established Harmony» Between Mind and Body- Leibnitz, like many of his contemporaries, thought that no coherent sense could be made of Descartes, idea that an immaterial mind, which is not even in physical space, could causally interact with a material body like the pineal gland, managing to move this not-so-insignificant lump of tissue hither and thither.

Occasionalism- According to Malebranche, another great continental rationalist, whenever a mental event appears to cause a physical event or a physical event appears to cause a mental event, it is only an illusion.

In Western Philosophy, the earliest discussions of dualist ideas are in the writings of Plato who maintained that humans' "intelligence" (a faculty of the mind or soul) could not be identified with, or explained in terms of, their physical body

1. There substances of two fundamentally different kinds in the world, mind and bodies. The essential nature of a body is to be extended in space; the essence of a mind is to think and engage in other mental activities.

2. A human person is a composite being ("union", as Descartes called it) of a mind and a body;

3. Minds are diverse from bodies;

4. Minds and bodies causally influence each other. Some mental phenomena are causes of physical phenomena and vice versa.

The most frequently used argument in favor of dualism appeals to the commonsense intuition that conscious experience is distinct from inanimate matter. If asked what the mind is, the average person would usually respond by identifying it with their self, their personality, their soul, or some other such entity.

Another important argument in favor of dualism is that the mental and the physical seem to have quite different, and perhaps irreconcilable, properties. Mental events have a subjective quality, whereas physical events do not.

So, for example, one can reasonably ask what a burnt finger feels like, or what a blue sky looks like, or what nice music sounds like to a person. If consciousness (the mind) can exist independently of physical reality (the brain), one must explain how physical memories are created concerning consciousness. Each mind is such that there is a unique subject who has direct and privileged access to contents; No material body has a specially privileged knower-knowledge of material things is in principle public and inter-subjective; Therefore, minds are not identical with material bodies.

David Chalmers recently developed a thought experiment inspired by the movie *The Matrix* in which substance dualism could be true:

Consider a computer simulation in which the bodies of the creatures are controlled by their minds and the minds remain strictly

external to the simulation. The creatures can do all the science they want in the world, but they will never be able to figure out where their minds are, for they do not exist in their observable universe. This is a case of substance dualism with respect to computer simulation. This naturally differs from a computer simulation in which the minds are part of the simulation. In such a case, substance monism would be true.

Behaviorism- arose early in the twentieth century as a doctrine on the nature and methodology of psychology, in reaction to what some psychologists took to be the subjective and unscientific character of introspectionist psychology. W. James: "Psychology is the Science of Mental Life of its phenomena and of their conditions. The phenomena are such things as we call feelings, desires, cognitions, reasoning, decisions, and the like". J. Watson: "Psychology is a purely objective experimental branch of nature science. It's the goal is the prediction and control of behavior".

Four possible types of Behavior:

- 1) Physiological reactions and responses: for example, perspiration, salivation, increase in the pulse rate, and increase in blood pressure.
- 2) Bodily movements: for example, raising and waving a hand, opening a door, throwing a baseball, a cat scratching at the door, a rat turning left in a T-maze.
- 3) Actions involving bodily motions: for example, typing an invitation, greeting a friend, checking a book out of the library, going shopping, writing a check, and signing a contract.
- 4) Actions not involving overt bodily motions: for example, reasoning, guessing, calculating, judging, and deciding.

Our knowledge is not based on evidence or inference; somehow we directly know. In contrast we have no such privileged access to our brain states. Mental states are directly accessible, brain states – are not. So how can mental states be brain states?

We have two types of identities: **Contingent Identity** – one term is *rigid designator* (name) and another is non-rigid *designator*

(description). **Necessary Identity** – both of terms are rigid designators – names or natural terms.

“Pain is C-fibers stimulation” consists on rigid designators (they are natural terms).

Therefore this identity must be necessary, which means that it is impossible to conceive one without other – pain without brain reactions.

But we can easily conceive pain without brain stimulation and vice versa. So mind-body identity is false. **How we can be sure that all pain-capable organisms have C-fibres.**

Functionalism- What makes something a tea-kettle or a vending machine is its ability to perform a certain *function*, not any specific physicochemical structure or mechanism. Many concepts seem to be functional concepts (for example, catalyst, gene, heart) appear to have an essentially functional component. Mentality can arise only in complex biological systems, like the human brain. It seems that the same neurobiological causal processes will go on matter what the neural states involved represent about the world or whether they represent anything at all. Neural processes seem no more responsive no meaning and representational content than are computational processes. Local physical – biological conditions in the brain, not the distal states of affairs represented by them, are what drive neural processes.

1. Bridge-Law reduction (E. Nagel) – the reduction of a higher-level theory to a more fundamental theory. For example, the reduction of optics to electromagnetic theory or genetics to molecular biology.

2. Identity Reduction;

3. Functional Reduction.

Mind is not Consciousness:

There is something more (over and above) physical events in the brain; It could be very plausible that human mind has natural limitations to succeed in mind-body problem (R. Penrose, C. McGinn, S. Pinker, N. Chomsky). Some philosophers have closely associated subjectivity of Consciousness with the notion of a first – person point

of view, or perspective. There is no impersonal “what is like to be”; it is always what is like *for a given subject* (for you, for me, for humans, for bats – strictly speaking only *for me*) to see yellow, to taste pineapple, to eat a chocolate bar in flight. We have problems and mysteries. Mind-body problem is not a problem, it’s a mystery. The operations of the human mind that can be carried out, are incapable in principle of taking us to a proper appreciation of what consciousness is and how it works.

Mind-body problem doesn’t have any appropriate solution for human beings.

What do we need to be conscious? The anatomy and physiology of the brain:

Coupled with some kind of basic set of processes through which we gather and generate information and use the gathered information in dealing with whatever is the next thing that comes along. Covering neurons, synapses, neurotransmitters; Localizations of function; neural assemblies and neural systems. The reigning question seems to be: Does consciousness stand alone, separate in some way with respect to the brain, or is it an intrinsic aspect of the brain’s functioning?

If consciousness is intrinsic then the question is, whether there are some sort of place within the brain that we can isolate as being the seat of consciousness? Or do we have to look more for an arrangement distributed over a larger scale?

In looking at the connectivity in the visual system Dennett dispenses with the idea of the **homunculus** or a little man inside the brain which does the consciousness work. As Dennett says, it is an empirical fact that there is not a **homunculus** in the brain, and even if there were we would still have to go through the same investigation of the **homunculus’** consciousness, and so on *ad infinitum*.

It seems pretty unlikely that there would be a particular organ of the brain which takes the incoming, by-now-integrated (necessarily so, if this model were to work), data flow from one’s body and the world and converts it (puts it up on the screen of the minds’ eye) into the qualia laden subjective world that report. They interweave their connectivity throughout the brain, supplying divergent and convergent information pathways wherever necessary.

Rodolfo Llinas: "The brain is not a sausage...it is more like a well-tuned musical instrument"."consciousness has emerged as an inevitable consequence of one particular evolutionary strategy which has so far proved remarkably successful, that of the development of increasingly flexible and modifiable behavioral performance, achieved by increasing the size of the brain and the *complexity of the possible interactions of its components* (my italics)." [Rose, 1973]

As I have said consciousness is a dynamic system and requires a theory of dynamic activity, in interaction with its environment. We cannot be a closed system without at least losing our humanity. One might suppose if an infant were to be abandoned at birth to complete isolation then (apart from the problem of its nutritional survival) it would possibly have nothing which we would recognize as consciousness.

In a very complex system with a multitude of feedback loops relating to different neural pathways, operating with a variety of delays inherent such that the whole system will be in all kinds of states of inhibition of some signals and excitation of others, will inevitably have some pathways which are oscillating and reverberating such that the whole system may be said to be "live".

I contend that as an infant develops any impact on the body, limbs or muscles stimulates the afferent nerves. This stimulation initiates myelination of the nerve axon, and also asserts in the brain the existence of the fiber and its mapping into whichever cortical area it is involved with. Adjacent fibers carrying stimuli (signals) from adjacent areas on the sensing surface are similarly myelinated and mapped into the cortex. At the same time efferent nerves are carrying signals which initiate movements, the nerves are myelinated by their use and the muscles are stimulated to develop in their ability to respond.

In the brain nerve processes from the sensory areas feed data to other areas of the brain including direct and higher level motor control areas. The first thing we notice when we talk about consciousness is that we, as humans, come in two conditions, either awake or not (viz. asleep, knocked out, in a coma, or dead), either conscious or unconscious.

From this Descartes produced the famous *Cogito ergo sum*. "I think therefore I am". Having established that there was a thinking thing which he knew as himself, he then had to discover where this thing lay! One thing Descartes did usefully establish was the recognition that- "...faithful copies of the objects. Nothing can come from external objects to our mind by the medium of the senses, he said, *except certain corporeal movements; but neither these movements themselves nor the figures arising from them, are conceived by us such as they are in the organs of sense.*" [Descartes: Dioptrics in Riese, W. 1958 p133]

The immediate condition of a state of consciousness is an activity of some sort in the cerebral hemispheres... One has only to consider how quickly consciousness may be abolished by a blow on the head... by a full dose of alcohol... to see how at the mercy of bodily happenings our spirit is... Destruction of certain definite portions of the cerebral hemispheres involves losses of memory and of acquired motor faculty of quite determinate sort...

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