Machine Consciousness, Mind & Consciousness

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Abstract. The problem of consciousness is one of the most important problems in science as well as in philosophy. There are different philosophers and different scientists who define it and explain it differently. As far as our knowledge of consciousness is concerned, 'consciousness' does not admit of a definition in terms of genus and differentia or necessary and sufficient condition. In this paper I shall explore the very idea of machine consciousness. The machine consciousness has offered causal explanation to the 'how' and 'what' of consciousness, but they failed to explain the 'why' of consciousness. Their explanation is based on the ground that consciousness is causally dependent on the material universe and that of all, consciousness phenomena can be explained by mapping the physical universe. Again, this mechanical/epistemological theory of consciousness is essentially committed to scientific world view, which cannot avoid metaphysical implication of consciousness.

I INTRODUCTION

The key words here are 'machine' and 'consciousnesses.' Now, it is entirely possible that the meaning of these words may change; consequently the statements involving them may no longer stand in the same logical relation to other statements as they do now. This may occur for a variety of reasons. However, moving beyond the reasons for the time being, it can be asked whether it is possible for a machine to be self-intelligent? The usual answer is 'No'. Wittgenstein makes the following remark while answering this question in his '*Philosophical Investigations*': 'Only of a living human being and what resembles (behaves like) a living human being can one say it has sensations; it sees; is blind; hears; is deaf; is conscious or unconscious'[1]. Again, he remarks, 'We do indeed say of an inanimate thing that is in pain: when playing with dolls for example. But this use of the concept of pain is a secondary one. Imagine a case in which people ascribed pain only to inanimate things; pitied only dolls' [1]. Thus, only of what behaves like a living thing can we say that it is conscious. This claim connects consciousness with life, but not with what constitutes life; rather, with what manifests or expresses it. A non-living thing might therefore in principle qualify for the ascription of consciousness, so long as it behaved like a living conscious thing. We are so prone to count the robots of science-fiction films as conscious beings, because though they are not alive, they act as if they are. We cannot make a conscious stone, because the stone does not behave in ways we can recognize as expressive of its supposed consciousness. However, it may be claimed by some AI scientists that machine can examine their own mechanism. Artificial intelligence programs, for example, suggest that their programs have in-built mechanisms to examine their own mechanism. The field of artificial intelligence (AI) is devoted in large measure to the goal of reproducing mentality in computational machines. So far, the programs have been limited, but supporters argue that they have every reason to believe that eventually computers will truly have mind. It is easy to say machines have consciousness because it is logically possible to design and build computer-based machines that are intelligent and can read meaning in symbols. This is to say that intelligence is not necessarily embodied in living organisms, but may occur in a computer system based on silicon. One of the important 'strong' claims is that any physical system that is capable of carrying out the necessary processes can be meaningfully intelligent. Hence, it is very easy to say that a machine has intelligence because it performs important tasks like living beings. It is 'hard' to believe that a machine is conscious because there is no conscious effort in machines, that is, there is no subjective experience of a machine.

Now we face the question: is it possible that unintelligent machines could give rise to an intelligent conscious experience? Consciousness is defined as having the perception of thought, feeling and awareness. It is the basic presupposition of all that we do in our waking life. It is something we know directly. From this point of view, the machines are not conscious the way human beings are. David Chalmers claims that there is, 'the subjective quality of experience'[2]. Consciousness has subjective quality because the subjective experience is a mental state. It is 'I', who feels. The 'I' poses the central problem relating to consciousness. The 'I' is not a part of the body, but it is more than body. This is to say that the 'I' is distinct from the body. This qualitative feature 'I' is treated as the subjectivity of consciousness. That is why consciousness is defined in terms of qualitative feel of experience or qualia.

Furthermore, as we have already seen, consciousness stands for an internal aspect; since there is something it feels to be like a cognitive agent. This internal aspect is conscious experience. The fact that we cannot draw a line between the non-conscious and the conscious is similar to the fact that we cannot draw a line in the spectrum where blue ends and green begins. That we cannot draw a dividing line does not mean that there is no difference between the two extremes. It is the central issue in philosophy, to draw the dividing line between the conscious and the unconscious. Therefore, philosophy of mind is concerned with all mental phenomena, where mental phenomena are to be understood as all phenomena that involve consciousness. Intentionality is a unique characteristic of the mental phenomena. This is because our consciousness is always consciousness of something. As Searle puts it, 'Intentionality is that feature of certain mental states and events that consists in their (in special sense of these words) being directed at, being about, being of, or representing certain other entities and states of affairs' [3]. Searle shows that all our conscious experiences are not intentional, in the sense that there may be conscious

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experiences, which are not about anything in particular. Searle writes, 'Beliefs, fears, hopes and desires are Intentional; but there are forms of nervousness, elation and undirected anxiety that are not Intention' [4]. Thus, intentionality is not the same as consciousness because one's feeling of a sudden happiness or elation may not have any cause, and so that a person may not be able to cite the intentional referent of his or her happiness or elation. For example, if I have a fear or desire, it must be a desire or fear of something. Searle thus argued that conscious states in general are intentional in character. The intentionality of mental states relates the intentional states with states of affairs in the world. According to Searle, 'Intentional states represent objects and state of affairs in the sense of 'represent' that speech acts represent objects and states of affairs' [4]. He points out that just as there is a distinction between the propositional content and the illocutionary force in a speech act, in the same way, in the case of intentionality, there is a distinction between the representational content and the psychological mode.

As we have already discussed, AI scientists reduce intentionality to mechanical processes. According to the instrumentalists, we can attribute intentionality to a mechanical system, since the machine can have an intentional stance. As Dennett point outs, 'the definition of intentional systems I have given does not say that intentional systems really have beliefs and desires, but that one can explain and predict their behaviour by ascribing beliefs and desires to them' [5]. Against this, however, Searle has argued that intentionality cannot be reduced to the causal processes in the brain, since it is a part of consciousness. Intentional mental phenomena are part of our natural biological life history. As Searle puts it, 'Intentional phenomena, like other biological phenomena, are real intrinsic features of certain biological organisms, in the same way that mitosis, meiosis and the secretion of bile are real intrinsic features of certain biological organism' [3]. For Searle, human beings have certain intrinsic intentional states, which are caused by processes in the nervous systems of these organisms, and they are realized in the structure of these nervous systems. He advocates what is called biological naturalism, according to which mind is real in the natural world. This entails a form of property-dualism in the Cartesian tradition, which accepts mind as an emergent property of the natural order.

However, Searle's naturalistic model of intentionality has much to explain, namely how intentionality can have a place in nature if we understand by nature a system of unconscious physical process. Intentionality is a feature of consciousness and therefore is not attributable to the physical process. In this case, it will be as good as any other process, mental or physical. Searle has to answer how intentional states like hope and desire can be physical process. This is where the non-naturalists have a point. They make the claim that intentionality is a unique feature of consciousness which refuses to be assimilated into the natural order the way Searle describes this assimilation. If intentionality is real, then it must be distinguished from the natural order and must be explainable independently of the natural order. The above critique on intentionality shows that the naturalistic model of mind has its limitation, because it wants to put all the entities in the world in one basket, both mental and non-mental. This paradoxical monism does injustice to the mental reality, because it robs it of its unique character.

Like Searle, Chalmers has also argued that no reductive explanation of consciousness is possible, because consciousness logically does not supervene on the physical facts. According to him, consciousness is 'naturally supervenient' but not 'logical supervenient' on the physical facts. His argument is that consciousness is different from all other properties, including biological properties such as life. For example, in the case of a zombie, though there are physical features of a human organism, yet it lacks consciousness. According to Chalmers, 'the logical possibility of zombie seems equally obvious to me. A zombie is just something physical identical to me but which has no conscious experience–all is dark inside' [2]. The physical identity between a zombie and a human being does not entail the zombie being conscious. Thus, we have to accept that there is an explanatory gap between physical processes and mental processes, which we will explore in the next section. According to strong AI, machines like computers have intelligence, though they have no consciousness. But the question is: Do computers have intelligence? In a derivative sense, yes, but, that does not make them have conscious intentional experience. This raises the possibility that intelligence, cognition and information processing do not require consciousness. Because, there are only input-output functions, and they do not require consciousness, in reaction to this Flanagan argues, 'I reject conscious inessentialism, consciousness is essentially involved in being intelligent and purposeful in the way(s) in which we are. Computational functionalism, in part because it normally involves commitment to conscious inessentialism, is the wrong sort of functionalism for the philosopher of psychology to be committed to' [6]. For Flanagan, if machines are not conscious, it does not mean that human beings are not conscious. It is consciousness, which marks the distinctions between minds and machines. Again, it is consciousness, which accounts for the first person or subjective experience. Machines lack consciousness, as they are designed to function mechanically.

It is important to discuss the relation between consciousness and free will in this connection. It is not easy to prove that the one is impossible without the other. But it is certain that we cannot prove that the robot is conscious and that it has a free will. We have complete causal explanation of all its behaviour, and this explanation does not at any stage depend on its consciousness; and so its behaviour cannot be a proof of the possession of consciousness. Consciousness is not a property that can be detected in a machine by any physical examination, because it cannot be identified with any physical characteristic. But a conscious robot is 'just' an assemblage of more elementary artefacts, silicon chips, etc. Therefore, it has no element of consciousness and free will in it. Machine-consciousness is thus an impossibility, which needs no elaborate demonstration.

First, machines or robots are purely material things, and consciousness requires immaterial mind-stuff. And mental states and events are a product of the operation of the brain, but the program is not in that way a product of the computer. Second, a machine is inorganic, and consciousness can exist only in an organic brain. It is not that consciousness is necessary to explain certain behaviour in machines. Although one may feel that consciousness can go along with actions of the machines, it does not follow from it, that, in fact, consciousness accompanies them. Machines that seem to use the word 'conscious' correctly, do so simply because; they are programmed in a certain way. Machines remain lifeless and inert devices, even if they are manipulated intelligently by the human designers. The robot is simply a machine, which is essentially distinct from the human

in its behavioural aspects. Hence, humans, and not robots, are conscious. It is true that a robot can do many things, which human beings do. Another important fact regarding machines is that machines or robots can do more work than human beings. Even then a robot has no consciousness, no free will and no mind. It is really absurd to ask of a stone or a stopwatch whether it is conscious because it is absurd to talk of it as being dead, asleep, drugged or unconscious. However, there are cases where it is very difficult to decide the question of consciousness, e.g. bacteria, jellyfish, etc which are unlike stones, stopwatches and computers. In these cases, it is difficult to say whether, these organisms have minds like ours. As we know, some qualities that belong to human minds do not belong to any other organism. In contrast to this, however, idea of a conscious machine is a contradiction in terms because the word 'conscious' stands for something natural and the word 'machine' stands for something artificial. It is absurd to say that machines are conscious. Thus, ideas of machine consciousness are at least a derivative concept, and at worst a self-contradictory notion.

II Artificial intelligence fails in explaining the concept of consciousness. As we have already seen, the way AI explained the concept of consciousness is very mechanical and artificial. It explains consciousness in terms of the computational functions of the brain, and so it fails to account for the creative features of consciousness. Consciousness, along with its semantic properties, remains autonomous so far as the ontology of the mental is concerned. Cognitivists' explanation of the inner eliminates the very notion of consciousness and its semantic features. It fails to see the significance of the notion of human consciousness and its semantic features.

Besides, AI removes the explanatory gap between mind and body, because according to it, there is no distinction between mind and between the mental activities and the mechanical functions of brain. The 'hard' problem of consciousness, as Chalmers has shown, is the problem of experience, especially, to first-person character, which cannot be explained within a scientific framework. Cognitive science can explain a system's functions in terms of its internal mechanism. But it is not possible to explain what it is to have subjective experiences, because it is not a problem about the performance of functions. As Nagel argues, 'Conscious experience is a widespread phenomenon fundamentally, an organism has conscious mental states if and only if there is something that it is like to be that organism—something it is like for the organism' [7]. In recent times, all sorts of mental phenomena have yielded to scientific explanation, but consciousness has stubbornly resisted this explanation. Many philosophers and scientists have tried to explain it, but the explanations always seem to fall short of the target. Now the question is: why is it so difficult to explain? According to Chalmers, cognitive science has not explained, why there is conscious experience at all. When we think and perceive, there is a whir of information processing, but there are also subjective individual aspects of consciousness, which go beyond information processing. Chalmers writes, 'When it comes to conscious experience, this sort of explanation fails. What makes the hard problem hard and almost unique is that it goes beyond problems about the performance of functions. To see this, not that even when we have explained the performance of all the cognitive and behavioural functions, in the vicinity of experience—perceptual discrimination, categorization, internal access, verbal report—there may still remain a further question: why is the performance of these functions accompanied by experience' [8]? According to him, even if all the functions of a system are well articulated, there is a further question as to why there is any experience at all accompanying their function. Cognitive science fails to explain why there is any experience at all, even though it explains all the brain functions.

Chalmers argues that the hard problem of consciousness consists in the 'why' questions regarding consciousness. But the question is: why is the 'hard' problem so hard? And why are the easy problems so easy? The easy problems are easy because it concerns the explanation of cognitive abilities and functions. To explain a cognitive function, we need a mechanism that can perform the function. The cognitive sciences offer this type of explanation, and so are well suited to the easy problem of consciousness. On the other hand, the 'hard' problem is 'hard', because it is not a problem about the performance of functions. The problem persists even when the performance of all the relevant functions are explained. Chalmers says, 'I suggest that a theory of consciousness should take experience as fundamental. We know that a theory of consciousness requires the addition of something fundamental to our ontology, as everything in physical theory is compatible with the absence of consciousness. We might add some entirely new non-physical feature, from which experience can be derived, but it is 'hard' to see what such a feature would be like. More likely, we will take experience itself as a fundamental feature of the world, alongside mass, charge and space-time. If we take experience as fundamental, then we can go about the business of constructing a theory of experience' [8].

As David Chalmers has formulated, the 'hard problem of consciousness' has many implications in ontology and also regarding the larger metaphysical picture of the universe. But Chalmers keeps his theory of consciousness within the naturalistic framework because for him, one day the scientific law can explain consciousness. As Pradhan says, "If the hard problem could be solved by science by discovering many new facts about the human brain, then it will collapse into an easy problem [9]." However, there is no metaphysics in Chalmers' hard problem of consciousness because its nature is only relative. That is to say that it is hard relative to the current knowledge of the cognitive sciences which are engaged in de-coding the structure of consciousness. Thus the easy-hard distinction is basically an epistemological distinction and not an ontological one. Again, it is very difficult to avoid the metaphysical implications underlying the very idea of a hard problem of consciousness. This is because the global nature of the hard problem follows from the fact that it is a fundamental problem which is deeply entrenched in human understanding because we have not so far known how consciousness has emerged from the physical consciousness. Chalmers admits that this is because of the fundamental principles of conscious experiences.

While disagreeing with Chalmers' view of consciousness, I would like to point out that the conscious mind is less discussed by Chalmers because of his overt concern with the emergence of consciousness rather than the conscious mind. As I have mentioned earlier that no metaphysically inclined system could be complete without introducing mind. A purely scientific theory of consciousness need not talk about mind, but if one talks of a fundamental theory like Chalmers' one cannot avoid the

metaphysical problem of mind. In that system, if consciousness is real then the conscious subject will remain real as the bedrock of the conscious experiences. Therefore, consciousness is in no case a product of matter. It is consciousness which gives the idea of a material world. There is no reason why matter is to be postulated as the central feature of the world. The higher order experiences demand an autonomous domain which needs a mind in the metaphysical sense.

Now the question is: What is the nature of the mind which is the subject of consciousness? The nature of the mind is neither material nor psychological experiences attached to it, but it is something more and is genuinely metaphysical. What I meant by 'metaphysics' however is clearly not just any metaphysics but rather the sort of self-centric nature of consciousness that does not prevent the possibility of a third person point of view but cannot be replaced by the latter. This self-centric point of view is the unique feature of human consciousness. Metaphysically speaking, the consciousness is real in the sense that they are part of the conscious subject. The mind, which belongs to conscious subject is an important category in metaphysics because metaphysics takes into account the general nature of reality which includes consciousness, knowledge, belief, etc. These phenomena cannot be explained unless we presuppose a conscious self to which they are attributable. There is a conscious subject which is conscious and which possesses knowledge and beliefs about the world. And that subject is the metaphysical ground of the mental phenomena and that is mind. The locus logically cannot be a part of the phenomena of which it is the locus. Therefore, the nature of mental phenomena like consciousness and intentionality is such that they demand a subject to which they are attributable and without which they are remain meaningless. The hard problem of consciousness goes beyond the problems about how functions are performed. If AI tries to give a definite definition of consciousness then it leaves out the explanatory gap, that is to say, it discusses the distinction between mind and body. If this is so, then it leaves out subjective experience, and opts for a third-person perspective of consciousness.

III Consciousness makes the mind-body problem really intractable. The reductionists deny that, there is a mind-body problem at all. For them, there is no explanatory gap between mind and body, because there is no distinction between mind and body. Mind can be explained in terms of body, and there is nothing called the mind, since the mind itself is a part of the body. Therefore, for them, the mind is reductively explainable in terms of body. On the other hand, many philosophers hold that mental states are not reducible to any physical state(s). That is, the mental states are not reductively explainable. That is to say that that no reductive explanation of consciousness can succeed, because there is subjective quality of experience. Therefore, he argues that this quality of consciousness makes it different from all other properties, including emergent biological properties such as life. The essence of body is spatial extension, the essence of mind is thought. Thought is taken to be the defining attribute of mind, which is an incorporeal substance, a substance that is non-spatial in nature. Chalmers writes, 'By the term 'thought', I understand everything, which we are aware of as happening within us, in so far as we have awareness of it' [8]. What follows from Descartes' view is that consciousness is essentially a first-person; subjective phenomena and conscious states cannot be reduced or eliminated into third-person. Therefore, it is consciousness, which makes the explanatory gap between the first-person and third-person perspective. According to the Cartesian conception, we have access to the contents of our own minds in a way denied to us in respect to matter. There is something special about our own knowledge of our own minds that naturally goes with the Cartesian view.

However, the mental life with its qualia cannot be nomologically determined by the physical conditions of the universe. The following are the reasons for the thesis that the mental life is independent of the physical body, though they co-exist: '(a) The qualia of the mental states cannot be reproduced in an artificial machine like a robot or a machines table; they are unique to the person concerned. (b) The qualia are the essence of consciousness and so must be intrinsic to the conscious subjects' [10]. Thus, Pradhan concludes that the intelligibility gap between the qualia and the physical world remains, as the qualia are understood widely as belonging to conscious subjects. As we have seen in this that subjectivity cannot be explained reductively. Again, as Nagel argues, 'It is not analyzable in terms of any explanatory system of functional states, or intentional states, since they could be ascribed to robots or automata that behaved like people though, they experienced nothing' [7]. There is a subjective feeling attached to our conscious experience, because subjective feelings are the outcome of our conscious experience. That is, consciousness itself cannot be established simply on the basis of what we observe about the brain and its physical effects. We cannot explain which property of the brain accounts for consciousness. Distinct cognitive properties, namely perception and introspection, necessarily mediate our relationships with the brain and with consciousness. We cannot understand how the subjective aspects of experience depend upon the brain that is really the problem. Consciousness, according to Searle, is essentially subjective. This is not a mechanical state, as many philosophers believe. Some of these biological systems are conscious and that consciousness is essentially subjective. The term 'pain' is subjective as it is not accessible to any observer, because it is a first-person experience. For example, I have a pain in my leg. In this case, the statement is completely subjective. The pain itself has a subjective mode of existence. As Searle puts it, 'Conscious states exist only when they are experienced by some human or animal subject. In that sense, they are essentially subjective. I used to treat subjectivity and qualitativeness as distinct features, but it now seems to me that properly understood, qualitativeness implies subjectivity, because in order for there to be a qualitative feel to some event, there must be some subject that experiences the event. No subjectivity, no experience' [3].

That is to say that the qualitative experience can exist only as experienced by some subjects. Because conscious states are subjective in this sense, it is legitimate to hold that there is first-person ontology, as opposed to the third person ontology of mountains and molecules, which can exist even when there are no living creatures. Therefore, subjective conscious states have first-person ontology because they exist only when they are experienced by a subject as self. It is 'I' who has experience and in this sense, it has the subjective existence. This gap between the self and the body not only establishes explanatory gap, but also gives the ontology of first-person. Therefore, the 'subjectivity or 'I' is the central problem of the explanatory gap.

Cognitive science tries to explain how conscious experience arises from the electrical process of the brain. But it cannot show how and why conscious states belong to the subject or I. This qualitative feature of mental states brings is the existence of qualia, which are the qualitative experiences of the human mind. For example, the experience of tasting a sweet is very different from that of watching a movie, because both of these have different qualitative characters of experience. This shows that there are different qualitative features of conscious experience. That is why; we cannot derive the pleasure of eating sweets by watching movies and via versa. But, functionalists like Dennett have argued for eliminating qualia from the discourse of mind. The basic reason for them is that mind is a machine; it cannot entertain the so-called qualitative subjective experiences called the qualia.

We have to show that the mentality of human mind cannot be represented in a mechanistic model, and that there are subjective mental states, which need a first-person explanation. According to Dennett, 'qualia are supposed to be properties of a subject that are (1) ineffable, (2) intrinsic, (3) private, (4) directly or immediately appraisable in consciousness' [11]. Qualia are ineffable because one cannot say exactly what way one is currently seeing, tasting, smelling and so forth. Why qualia are ineffable is that they are intrinsic properties, which seems to imply inter alia that they are somehow atomic and unanaligible. Since they are simple, there is nothing to get hold of when trying to describe such property. Since qualia are ineffable and intrinsic, qualia are private because all interpersonal comparisons of these of (omit 'of') appearing (only 'appearing)are systematically impossible. Lastly, since they are properties of experiences, qualia are directly accessible to the consciousness because qualia are properties of one's experiences with which one is immediately apprehensible in consciousness. Thus, qualia constitute the phenomenal structure of the mind in that they enrich our understanding of the mind and also provide clues to the ontology of the mental. What the mental ultimately is, as distinguished from the physical, is to be known from what the qualia reveal about mind. Therefore, the qualia play a very important role in the understanding of mind. The important question is: Is Dennett right in calling qualia the private and ineffable experiences of a queer sort? Obviously, not. As Pradhan argued, 'the notion of privacy as we know from Wittgenstein's private language argument does not apply to the qualia in the sense that the qualia are intersubjectively intelligible and that they are available for inter-personal communication. The qualia of colour-perception are such that any two persons belonging to the same linguistic community can easily communicate their colour-experiences, and can understand each other well. This shows that the qualia, in spite of being subjective, are not private at all. As to their effability or otherwise, it goes without saying that they are expressible in an interpersonal language; that is the reason why they are accessible to all speakers if they are suitably placed' [10]. Thus, Dennett's main argument that the qualia are inaccessible to all except to the subject of the qualia does not hold good. Again, Dennett's argument that qualia are atomistic and non-relational is equally weak for the reason that the subjective experiences need not be atomistic at all, because they can be taken as constituting the stream of consciousness in that they constitute a single unbroken series of the conscious experiences. In this sense the qualia are holistic rather than atomistic. The fact of the matter is that the qualia never exist in isolation, and that they are always in a constellation. For example, the colour experience of a red rose is not only that of the colour red, but also of the rose plant of certain shape and size. Here, the two experiences do not stand apart, but constitute one whole.

Dennett is skeptical about the reality of the qualia, because he believes qualia to be the private experiences, and there is nothing in the mind that can correspond to these qualitative features of the mental states. According to him, the qualitative features are the appearances of the brain states, which in reality are the functional states of the brain. Dennett argues against qualia, because for him, the brain functions as a machine. The brain performs multiple functions; that is to say that all varieties of thought or all mental activities are accomplished in the brain by parallel, multi-track processes of interpretation and elaboration of sensory inputs. That is why this model of mind is called the multi-drafts-model [12]. The nature of the mind under this model is unfolded in the cognitive processes, which the mind undertakes. For Dennett, the mind turns out to be a computing machine programmed to cope with the cognitive representation of the world. For machine functionalists like him, the structure of the mind is the structure of the machine representations. Therefore, in this respect, there is no place for the subjective qualia among the mechanical states of mind. Now the question is: can the qualia be made a part of the third-person perspective? Dennett's reductionist program is fully committed to the reducibility of the qualia to the brain-state. However, this can be opposed on the ground that the qualia are ascribed to a conscious subject and not to the brain, because the brain is a physical system though with infinite physical capacity. The subject is not reducible to the brain in the sense that brain itself belongs to the subject. Mental states are subjective, not in the epistemological sense of being known exclusively by the subject, but in the ontological sense that they are essentially revealed only to subject. The argument for unquining qualia as formulated by Kirk [13], suggests that mental life with its qualia cannot be nomologically determined by the physical conditions of the universe. The following thesis is put forward by Kirk that the mental life is independent of the physical body, though they co-exist. This is because the qualia of the mental states cannot be reproduced in an artificial machine like a robot or a machine table; they are unique to the person concerned. Therefore, the above statement not only goes against the possibility of mechanistic explanation of qualia but also establishes the philosophical ground for the qualia as belonging to the conscious subjects.

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