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The Human Soul Is Immaterial

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| Article Info | ABSTRACT |
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| Article type: Research Article | Since old times the two dimensionalities of human beings, i.e., their having a material body and an immaterial soul (spirit), has been a controversial problem. In the Abrahamic religions, the human soul is considered to be immaterial and in interaction with the body. Furthermore, it is considered to be a special effusion of God to each individual human being. During the modern times, with the dominance of empiricism, the prevalent view considers human soul a byproduct of matter. In fact, from the naturalistic viewpoint of modern science, there is no place for mind or consciousness as a novel and immaterial subject, but there are some important ideas about this subject, and some eminent scientists of our time believe that the human soul is immaterial and is never explainable by science. Among the latter group, there are some celebrated scientists who believe that human soul is God's special effusion to human beings. In this article, we mention and analyze some of these important ideas. |
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Introduction

From old times the two dimensionalities of human beings have been a controversial problem among scientists and among philosophers.

In the Abrahamic religions, the human soul is considered to be immaterial and in interaction with the body. Furthermore, it is considered to be a special effusion of God to each individual human being.

Here, we are going to mention some common views about the human soul.

In our time, the words mind and consciousness are used, in relation to spirit or soul. In addition to the religious perspective, there are some other ideas about mind and consciousness. Furthermore, although from the naturalistic viewpoint of modern science, there is no place for mind or consciousness as a novel and immaterial subject, but there are some important ideas about this subject from some of the eminent contemporary philosophers and scientists. In this article, we mention and analyze some of these important ideas.

1. The empirical and naturalistic viewpoint of modern science

In modern times, with the growth of empiricism in the scientific circles, human mind (soul or spirit) is considered to be a by-product of the material brain. Theories like evolution fortified this view.

In order to avoid their inability in explaining the human consciousness, the empiricists appeal to the idea of complexity, and consider the human mind as an emergent property of the material brain, and explainable in terms of neuronal interactions.

In recent decades some eminent physicists and biologists have revived the idea of immaterial mind (consciousness or soul) and believe that it is not explainable in terms of material interactions.

2. Muslim philosophers' view about the human soul (mind or consciousness)

Muslim philosophers believe that human beings have, in addition to their body, an immaterial element, called soul, which is God's effusion after its material ground is provided. This is in concordance with the Qur'anic concept of the human soul:

When your Lord said to the angels,' Indeed I am about to create a human being out of clay. So, when I have proportioned him and breathed into him of My spirit, then fall down in prostration before him (38: 71-72).

Mutahhari (an eminent contemporary Muslim Philosopher) describes the position of Muslim philosophers:

When the capacity for the appearance of life is developed in matter, life is endowed to it [by God]. In other words, matter, in its development, becomes alive. It acquires some perfection that it lacked, and bears effects and activities that it was lacking before (Mutahhari, 1975a).

Mutahhari admits that some physicochemical processes are necessary to produce life effects, but he does not consider them to be sufficient: A radio is necessary to receive the signals sent by a transmitter but it is not sufficient. In **Mutahhari**'s words:

The synthesis, addition, subtraction and combination of parts of matter are necessary conditions for the appearance of life, but they are not sufficient (Mutahhari, 1975c).

Muslim philosophers have given several arguments for the immateriality of the human soul. Here we mention some of them (Mutahhari, 2007).

- I. In human being, various developments occur from their birth to their death, but throughout their life they feel the same personality. If a person was only a collection of his activities, he should feel different personalities. In addition, we have a feeling of ourselves without needing a mediator, and the property of our self-awareness does not have any similarity to physical properties like time, position, energy, etc., which are necessary to explain the neuronal activities of the human brain.
- II. Human beings have an understanding of general concepts, which have no dimension or mass. This implies that human soul has no mass or dimension. Thus, it is not material.
- III. While our body organs are worn out with the passage of time, our thinking capacity and understanding increases with our age. Thus, there has to be an immaterial capacity responsible for this fact.
- IV. We have dreams about non-precedent accidents in the future. This indicates the immateriality of human soul, as matter is tied to time.

3. Western philosophers' arguments About the immortality of the human soul

I. It is difficult to understand where the sense of free will comes to us, as our bodies are made of atoms which follow natural laws. In fact, our feeling about ourselves is not like that of a machine. We feel the sense of freedom in ourselves. In the words of **Henry Stapp** (an eminent American mathematical physicist):

Because we know that our thoughts and mental efforts exist, and hence probably have an important function, is it not an irrational tour de force to try to show that they exist, yet they have no causal power (Stapp, 2017).

II. It is true that living organisms are made of chemical matter and involve many proteins and in some ways work according to physical rules, but this does not prove that nothing else is at work. In fact interactions of matter prepare the ground for the emergence of life, i.e. they are necessary conditions for the emergence of life, but they are not sufficient condition for it.
 Rupert Sheldrake (an eminent British biologist) has illustrated the matter beautifully. Suppose that somebody who has not seen a radio, finds one in a desert. When he turns a

switch, he hears a music. He thinks that the music originates from the radio itself. If somebody tells him that the voice comes from a transmitter, he might not believe it. When he removes a part from the radio he does not hear any voice. So, this fortifies his belief that the voice comes from the radio itself. But, he does not know that the voice originates from a transmitter. Thus, although the radio is necessary to get the voice, it is not sufficient. A transmitter has to be present. (Varghese, 1984)

III. The prevalent view restricts the reality to what is discoverable through physicochemical processes. But this is not provable through science *per se*, but is rooted in the naturalistic view, which is popular in the present scientific circles. **Roger Trigg** (an eminent British philosopher) describes the matter beautifully:

Why should not a transformed science one day even be able to accept the existence of 'spiritual' realities? Only a metaphysical decision now that such things cannot exist would suggest that that is impossible. The question is whether we are concerned with the nature of reality, or with the validity of a scientific method tailored to current human capabilities (Trigg, 2003).

- IV. Mental events lack the spatiotemporal properties of material objects.
- V. Thoughts and feelings do *not* have mass, spatial extension, or temporal location, whereas material objects have these properties.
- VI. Some mental events involve abstract ideas like mathematical objects.
- VII. Some mental events, like near death experiences, occur when no brain activity is present. (Holden, 2010)
- VIII. The human mind is self-aware, while material objects lack self-awareness.

Human beings are not only conscious, but they are conscious of their consciousness. (Swinburne, 2019)

4. Contemporary Western Scientists and Consciousness (mind, soul)

We can divide the views of the contemporary Western scientists concerning this subject into the following groups.

I. Many of the contemporary scientists believe that the human mind is simply physical brain activity, in which material particles and neurons in the brain are responsible for human thoughts and beliefs. In their belief, consciousness is material, and is explainable in terms of physics and chemistry. **Francis Crick**, one of the discoverers of DNA molecule, says:

The astonishing Hypothesis is that "you," your joys and your sorrows, your memories and your ambitions, your sense of personal identity and free will, are in fact no more than the behavior of a vast assembly of nerve cells and their associated molecules (Crick; Gregory, 1994).

Edward Wilson (a well-known American biologist) has the same view, but he does not believe that the human consciousness is explainable by the present science:

FINALLY, given that conscious experience is a physical and not a Supernatural phenomenon, might it be possible to create an artificial human mind? I believe the answer to this philosophically troubling question to be yes in principle, but no in practice, at least not as a prospect for many decades or even centuries to come (Wilson, 1998).

Hawking and Mlodinow, in their book, "The Great Design" deny any agent besides physical laws about the human brain. (Mlodinow; Hawking, 2010) Furthermore, they conclude that the human free will is an illusion. (Mlodinow; Hawking, 2010)

II. Some scientists believe that consciousness is physical, but that its explanation is difficult with our present science, but in the long run empirical knowledge will explain it. In an interview in 2005, **Richard Dawkins** (A well-known British evolutionary biologist), in response to the question of whether we can explain consciousness through science, said:

To me, human consciousness is a deep, philosophically mysterious manifestation of brain activity and is in some sense a product of Darwinian evolution. But we don't yet really have any idea how it evolved and where it fits into a Darwinian view of biology. I don't know whether it will yield to a sudden flash of enlightenment, whether it will become one of those rather messy problems that never really get a proper solution, or whether it will eventually turn out that there never was a problem at all and that we were actually making up problems where there really weren't any. From where I sit, it seems to be a deeply difficult problem that has always been a philosophical problem but which I think is ripe for a take-over by evolutionary biology once we think how to do it (Miele, 1995).

Karl Popper (an eminent Austrian-born British philosopher) believed that the origin of life will always remain untestable, and even if scientists create life in the laboratory, they can never be sure that life actually started that way. (Horgan, 1997)

In a book Written with John Eccles, Popper says that spirit is evolutionally emergent from brain, but it has some degree of independence that does not permit to explain it in terms of physics and chemistry. (Wong, 2018)

In the same line, Arthur Peacocke sees the human brain to be the most complex matter. Thus, it is not surprising that brain's activities are not reducible to atoms, motions and the releasing of neurons. Because when a complex system is formed from simple parts and shows an emergent property, the emergent property cannot be explained in terms of the properties of the parts. Thus, we should not be surprised that the activities of the human brain are not explainable in terms of the motions of atoms and the release of neurons (Peacocke, 2004).

III. Some of the eminent scientists of our time don't see the human consciousness to be explainable in terms of the contemporary science, and believe that some developments should take place in the contemporary science to be able to explain consciousness. Wigner, an eminent physicist of our time, believed that the present laws of physics should be replaced by new laws containing new concepts, if we want to explain consciousness. It is not enough to change the interpretation of the present laws (Wheeler; Zurek, 1983).

Roger Penrose (an eminent contemporary mathematical physicist) believes that our present science is not capable of explaining consciousness. New scientific activities are needed:

My position [on consciousness] demands a major revolution in physics.... [T]here is something very fundamental missing from current science. Our understanding at this time is not adequate and we're going to have to move to new regions of science... (Giberson, 2003).

Andre Linde (a prominent Russian-American theoretical physicist) believes, through a detailed analysis, that confinement to the standard materialism is wrong, as the problems of consciousness, life, and death of human beings are not solved:

According to standard materialistic doctrine, consciousness, like spacetime before the invention of general relativity, plays a secondary, subservient role, being considered just a function of matter and a tool for the description of the truly existing material world. Let us remember, though, that our knowledge of the world begins with perceptions, not with matter. I know for sure that my pain exists, my "green" exists, and my "sweet" exists. I do not need any proof of their existence, because these events are a part of me; everything else is a theory. Later we find out that our perceptions obey some laws, which can be most conveniently formulated if we assume that there is some underlying reality beyond our perceptions. This model of the material world obeying laws of physics is so successful that we too readily forget our starting point and come to think that matter is the only reality, and that perceptions are only helpful for its description. This assumption is almost as natural (and maybe as false) as our previous assumption that space is only a mathematical tool for the description of matter. In fact, we are replacing the reality of our feelings with a successful theory of an independently existing material world. And the theory is so successful that we almost never think about its limitations until we are forced to address those deep issues which do not fit into our model of reality...

Is it not possible that consciousness, like spacetime, has its own intrinsic?

Degrees of freedom, and that neglecting these will lead to a description of the universe that is fundamentally incomplete? What if our perceptions are as real (or maybe, in a certain sense, are even more real) than material objects? What if my red, my blue, my pain, are really existing objects, not merely reflections of the really existing material world? Is it possible to introduce a "space of elements of consciousness," and investigate the possibility that consciousness may exist by itself, even in the absence of matter, just like gravitational waves, excitations of space, may exist in the absence of protons and electrons? . ..

It is best not to repeat old mistakes, but instead forthrightly to acknowledge that the problem of consciousness and the related problem of human life and death are not only unsolved, but at a fundamental level are virtually unexamined (Linde, 1998).

- IV. Some very eminent scientists do not believe that consciousness can be reduced to matter; rather, they believe that human consciousness can never be explained by empirical science. Here we mention the views of some of these scientists.
 - Erwin Schrödinger (a prominent Nobel Prize-winning Austrian-Irish physicist) said:

Consciousness cannot be accounted for in physical terms. For consciousness is absolutely fundamental. It cannot be accounted for in terms of anything else (Schroedinger, 1984).

He also said:

We shall not expect the natural sciences to give us direct insight into the nature of the spirit (Götschl, 2012).

In explaining his position, Schrödinger said:

I am very astonished that the scientific picture of the real world around me is very deficient .It gives a lot of factual information, puts all our experience in a magnificently consistent order, but it is ghastly silent about all and sundry that is really near to our heart that really matters to us. It cannot tell us a word about red and blue, bitter and sweet, physical pain and physical delight; it knows nothing of beautiful and ugly, good or bad, God and eternity. Science sometimes pretends to answer questions in these domains, but the answers are very often so silly that we are not inclined to take them seriously (Schrödinger, 2014).

Max Planck (A distinguished German Nobel Laureate in physics), in response to the question. "Can we explain consciousness in terms of matter", said:

No, I regard consciousness as fundamental. I regard matter as derivative from consciousness. We cannot get behind consciousness. Everything that we talk

about, everything that we regard as existing, postulates consciousness (Planck, January 25, 1931).

In our time, **Edward Witten** (A major figure in the string theory) has the same view. He believes that his string theory may one day turn out to be true, but we shall never explain the consciousness:

I think consciousness will remain a mystery. Yes, that's what I tend to believe. I tend to think that the workings of the conscious brain will be elucidated to a large extent. Biologists and perhaps physicists will understand much better how the brain works. But why something that we call consciousness goes with those workings, I think that will remain mysterious. I have a much easier time imagining how we understand the Big Bang than I have imagining how we can understand consciousness (Horgan, August 19, 2016).

George Ellis (a distinguished South African cosmologist) denies that consciousness has been explained:

We have no idea how consciousness arises, despite some extravagant claims that consciousness has been explained or that there is no hard problem of consciousness. Despite much investigation of the neural correlates of consciousness, we do not even know how to ask the right questions about haw qualia arise. There is not even a beginning of an approach. One should beware of neuroscientists or philosophers claiming much more than has been proven or understood (Ellis, 2014b).

Furthermore, he considers the idea of soul a valid one:

The concept of a soul is as valid as any other concept to describe the holistic aspects of the way the mind inhabits the body (Ellis, 2014a).

Besides some distinguished physicists, some eminent biologists and neurologists too, see the problem of consciousness as dilemma. For example, **Michael Ruse**, the most well-known philosopher of biology, says:

Why should a bunch of atoms have thinking ability? Why should I, even as I write now, be able to reflect on what I am doing and why should you, even as you read now, be able to ponder my points, agreeing or disagreeing, with pleasure or pain, deciding to refute me or deciding that I am just not worth the effort? No one, certainly not the Darwinian as such, seems to have any answer to this (Ruse, 2004).

Wilder Penfield (a prominent American-Canadian neurosurgeon), who has performed more than 1000 brain surgeries, reached to dualism, i.e. the existence of the immaterial spirit:

The nature of mind presents the fundamental problem, perhaps the most difficult and most important of all problems For myself, after a professional lifetime spent in trying to discover, during this final examination of the evidence, that the dualist hypothesis (the idea that mind is separate from the brain) seems the more reasonable of explanations...what a trill is, then, to discover that the scientist, too, can legitimately believe in the existence of spirit (Penfield, 1975).

Benjamin Libet (a pioneer in the field of human consciousness), whose experiments in 1980's propagated a materialist interpretation of consciousness, changed his mind, and in an article in 1999 said:

We would not need to view ourselves as machines that act in a manner completely controlled by the known physical laws (Libet, 1999).

And in a book that he wrote in 2005, he said:

As a neuroscientist investigating these issues for more than thirty years, I can say that these subjective phenomena are not predictable by knowledge of neuronal function. This is in contrast to my earlier views as a young scientist, when I believed in the validity of determinist materialism. That was before I began my research on brain processes in conscious experience, at age 40. There is no guarantee that the phenomenon of awareness and its concomitants will be explainable in terms of presently known physics.

In fact, conscious mental phenomena are not reducible to or explicable by knowledge of nerve cell activities. You could look into the brain and see nerve cell interconnections and neural messages popping about in immense profusion. But you would not observe any conscious mental subjective phenomena. Only a report by the individual who is experiencing such phenomena could tell you about them (Libet, 2009b).

And he added that:

Also, it is possible that some mental phenomena have no direct neuronal basis (see Chapter 3) and it is also possible that the conscious will does not always obey the natural laws of the physical world (see Chapter 4) (Libet, 2009a).

Maurice Wilkins (a New Zealand-born British physicist and molecular biologist, and a Nobel laureate in Medicine) believes that the whole life cannot be explained by a mechanical view:

I don't agree with the molecular biologists who think that the whole nature of life can be comprehended in terms of molecular biology alone. I think that is a very simple-minded, mechanistic way of thinking (Singh; Gomatam, 1987a).

George Wald (an American biochemist who won Nobel Prize in Medicine) argued that mind is not understandable by science:

I come to the end of my life as a scientist facing two great problems. Both are rooted in science, and I approach both as would only a scientist. Yet I believe that both are irrevocably – forever – unassimilable as science. And that is hardly strange, since one involves cosmology, the other consciousness.

Mind is not only not locatable, it has no location. It is not a thing in space and time, not measurable; hence - as I said at the beginning of this paper - not assimilable as science (Singh; Gomatam, 1987b).

V. Some eminent contemporary scientists not only consider human consciousness immaterial, but they consider it as a special effusion of God given to the growing fetus in his/her mother's belly: In the words of **John Eccles** (an Australian neurophysiologist and philosopher who won Nobel Prize in Physiology or Medicine):

Since materialist solutions fail to account for our experienced uniqueness, I am constrained to attribute the uniqueness of the Self or Soul to a supernatural spiritual creation. To give the explanation in theological terms: each Soul is a new Divine creation which is implanted into the growing foetus at some time between conception and birth...

This conclusion is of inestimable theological significance. It strongly reinforces our belief in the human Soul and in its miraculous origin in a Divine creation (Eccles, 2005b).

Eccles believed that evolution can explain brain, but only something transcendental can explain consciousness:

Several years ago the great Australian neurobiologist, Sir John Eccles, ended a Harvard lecture on brain organization by admitting that although evolution could account for the brain, it could not, in his view, account for the mind, with its mysterious capacity for consciousness and thought: only something transcendent could account for that (Bergman, 2010).

He also identifies consciousness with the human soul:

We have to recognize that we are spiritual beings with souls existing in a spiritual world (Section 10.7) as well as material beings with bodies and brains existing in a material world (Eccles, 2005a).

Neville Mott (a British physicist who won Nobel Prize in physics), too, believes that consciousness is not explainable by science:

I believe ... that neither physical science nor psychology can ever 'explain' human consciousness. To me, then, human consciousness lies outside science, and it is here that I seek the relationship between God and man (Mott, 1997).

The view that human soul (consciousness) is God's effusion to a human being, has been shared by the majority of Muslim philosophers and scientists. In the words of **Mutahhari** (an eminent contemporary Muslim philosopher):

The Qur'an's logic concerning life is that an effusion [of Allah], at a higher level than the sensible body horizon... This logic is based [on the fact that] sensible matter, by itself, lacks life and that life is an effusion and a light from a higher source (Mutahhari, 1975b).

VI. Some scholars have differentiated between brain and mind, and have simulated their relations to computer and its operator. **Kurt Gödel** (the most original and important logician of the twentieth century) considered human brain to be a computer which is connected to the soul:

The brain is a computing machine connected with a spirit (Wang, 1996).

Finally, **Wolfgang Pauli** (one of the pioneers of quantum physics and a Nobel Laureate in physics) changed his mind in the last decade of his life and considered matter and mind as complementary aspects of a reality:

"To us ... the only acceptable point of view appears to be the one that recognizes both sides of reality-the quantitative and the qualitative ,the physical and the psychical as compatible with each other, and can embrace them simultaneously ... It should be most satisfactory of all if physics and psyche (i. e. matter and mind) could be seen as complementary aspects of the same reality (Singh; Gomatam, 1987c).

Conclusion

We can summarize the views of the contemporary Western scientists into the following five groups:

- I. A large number of scholars believe that consciousness is explainable in terms of the contemporary science, i.e. reducible to matter.
- II. Some scholars believe that consciousness (mind or soul) is material, but it is not explainable in terms of the present science. Of these people some scholars believe that future science can

explain it, but some scholars consider consciousness to be a complex system, and thus it cannot be explained in terms of its parts.

- III. Some scholars do not consider the human consciousness to be material. Of these scholars, some consider consciousness to be a God's effusion, but some believe that the world is so programmed that the immaterial soul shows up at a certain stage.
- IV. Some scholars see the relation of brain and mind like the relation of a computer and its operator.
- V. Some scholars like Pauli considered mind and brain complementary aspects of the human reality.

Thus, in spite of the prevalent idea of considering mind as a subsidiary of brain, some very distinguished Western scholars do not consider human consciousness to be explainable by empirical science, and the view of some of them is very close to that of the three Abrahamic religions. It is also interesting that even those who consider the human consciousness to be material do not see it explainable by the present science. Also, there are some ideas and theoretical and empirical evidences that are consistent with immateriality of the mind (soul or consciousness). (Beauregard; Trent; Schwartz, 2018; Jamali; Golshani, 2019)

In my view, the philosophical arguments of both Muslim philosophers as well as theist Western philosophers for the immateriality of human soul (consciousness or mind) are strong enough and have not been refuted by materialist philosophers and scientists. Furthermore, this view is in concordance with that of the three Abrahamic religions.

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