Human Mind And Quantum Mechanics

(Response To Some Articles In NeuroQuantology Magazine, Sept. 2011)

It was disappointing to see how most of the scientists writing in the NeuroQuantology magazine (Sept 2011) do not understand what human mind is.

Human mind is not some supernatural entity, which religious people would like to believe, but a man-made program. Mind is the sum total of the best of the knowledge mankind has gathered since the dawn of usable consciousness. It is based on human experience and human ideas. Experience many people are able to understand but most of the people have no clue how ideas are formed in human beings. The old thinking was that ideas come from God. No, they are man-made.

Mind is an attempt to understand reality. So, by the very nature of reality, which is not only the reality outside human beings but also the one inside them, in popular reckoning, there will never be a final understanding of reality.

No mathematical equations can be set up for the human mind. All the articles in the magazine which are talking about having human mind as a variable in the theory of everything equations are deeply flawed, as mind is nothing but a body of ideas, and ideas are not quantifiable and cannot be subject to physical analyses.

It is shocking and deeply dismaying that most of the scientists today are not thinkers, as they should be, but operators, who just apply ready-made knowledge to the problem at hand. There are supposedly 35,000 neuroscientists in the world and most of them have no hang of what human mind is like; they consider it more like a natural phenomenon like gravity and nuclear energy, which can be understood by experiments and equations.

Human mind is unlike any machine. No machine can ever be built which functions like and has the potential of a human mind. The primitive human mind was only concerned with survival. As the survival needs of human beings improved over time the mind started exploring other frontiers. The primitive mind saw strangeness and mystery in everything and it took thousands of years of mental evolution for man to be able to separate the reality outside himself from the reality within him. As he gained confidence in his understanding of the external reality he began to use his abilities creatively. In every action he performed and everything he saw there was a question mark. Man's need to know is elemental, as it comes from his instinct to survive.

An unusual aspect of human brain is that it has a capacity much more than that is needed for mere survival. Just for mere physical survival he did not have to go to art, philosophy, and other mental arenas, although they also have some survival features in them, but it is pure mental sphere of man, much larger than any animal's, that engages his attention quite a bit, and that appears so mysterious to people. Simply put it, human brain hardware has much more capacity than is needed for mere survival.

Most of the common scientists would like to show that mind is nothing but an extension of brain. By having everything physical in nature, they think, they would be better able to understand the universe. As indicated in Karl H. Pribram's article, "...could we not do the same for brain functions by ridding it of mind." and "...I espoused and helped develop a science of psychology based on phenomenology as it is formed by brain processes." Most of the scientists have no imagination as how the mind and brain are related.

Mind is nothing but a collection of ideas. Ideas about everything: things, actions, feelings, thoughts, etc. Corresponding to everything there is an idea. The ideas are the highest level perceptions of the reality. Primitive man's ideas were quite different from ours. The evolved man was able to connect different ideas about

some phenomenon and come up with an understanding of it. Later on we called such understanding theories. There are philosophical theories and there are scientific theories. Most of the human beings are not capable of understanding these theories and they do not need them for survival.

Many scientists erroneously think that we are born with a consciousness. No, we are not. We are born with a physical capability of senses and facilities of the brain to observe things and retain the observations in memory. There is also the capability of looking from different perspectives. Logical thinking and refinement of understanding is purely man-made. Consciousness is something that has evolved. That is why the consciousness of primitive and modern man is quite different.

All the efforts of thousands of scientists in the world to find a physical basis of human mind are doomed to fail. No machine can ever be made that is like human mind. Human mind has grown from its need for survival and then from its capacity to imagine. Both religion and science are the greatest inventions of human mind. There is no ultimate reality. The very fact that human brain depends upon sense impressions for its basic data, all mental constructs are constrained by that. We should be content that we are still able to "understand" a lot of things.

The idea that some universal power empowers human mind is quite wrong. There is no God. Universe and human brain are self sustaining phenomena. Science is an attempt to understand the physical reality without the help of God.

One of the tragic milestones in the human history has been the invention of Quantum Mechanics. When in the quantum realm establishing the common physical attributes like position and momentum of elementary particles became impossible, a theory that nature at its most basic level is not only indeterministic but also probabilistic was developed. The tragedy is that most of the scientists, who cannot think, believe that nature is so built. There is no way that aspect of nature can be proven; although due to human limitations we may not be able to measure its certain attributes beyond a level.

The quantum mechanical idea that observation changes the reality has been taken to absurd levels. The EPR (Einstein, Podolosky, Rosen) logic about Quantum Mechanics' shortcoming has not been refuted. When a bug looks at Alpha Century star how much of it is changed by the observation?

One of the absurd projections of QM used by some people is that all the reality we are aware of is the creation of human observation. Well, human beings are only about 4.5 billion years old, what happened to the universe which existed before that. How can you create something out of nothing?

QM is not a complete theory, something more has to come yet. In the history of science there have been long stretches of time when what we consider now as foolish understanding has prevailed.

QM just cannot be applied to human mind as it non-physical. It could be applied to some operations of the brain. The brain basically observes and remembers but it is the ideas of reality that man has gathered over a long stretch of time that interpret the observations. Therefore, the statement, "According to quantum theory, a system evolves casually until it is observed. The act of observation causes a break in the casual chain. Consciousness is a mark of the break in the strict regime of causality," an observation of one of the scientists in the magazine cannot be applied to human mind. The brain is a mechanical organ, the interpretation of whose work is made by mind, a system of ideas, which has evolved over eons.

Niels Bohr did a great disservice to humanity by giving some unscientific

interpretations to QM. His complementary theory was one such theory. Instead of simply saying that the dual nature of some aspects of reality, like its wave and particle nature are irreconcilable, he put forward a theory that these two complement to give the full picture of reality. It is not science but a fairy tale.

When the present curse of QM lifts in future, man's innate rational sense will regain its control, and then we will see what man is: just a small element in the vast cosmos, and his science just an attempt to fathom it.

I curse my fate that I live in a time when materialism and quantum mechanics have significantly wounded some aspects of man's grand imagination.

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