

## **Structure and Neurobiological Problems of Consciousness**

According to the neurobiologists consciousness of a person is due to behavior of neurons and are realized in the brain. All conscious states are caused by lower level neuronal processes in the brain. All our feelings and thoughts that exist are due to the behavior of neurons and they are responsible for biological features of the brain. Author avoids both the materialism and dualism giving importance to the biological nature of mental states.

In order to study the structure of this neurobiology of consciousness we have to have some idea about the brain and neuron functionality. We need to find the Neuronal Correlate of Consciousness (NCC) that is find out how the brain functions, processes and the locations in brain which are responsible for actions. Next we need to test if the correlation is causal. This step bridges the gap between the so called physical and mental states. The third step is to formulate a theory which satisfies the observations and already known facts.

Author gave two ways for stages described above : (A) the building blocks approach (B) unified approach.

The building blocks approach assumes that the entire conscious field is made up of independent conscious units. Eg. The experience of red.. etc. The scientists in this approach believe that if one could figure out exactly how the brain causes one building block, then it would be possible to crack the whole problem of consciousness. The building block approach is commonly employed in the research of Binocular, Visual Perceptual Stimulus ... etc.

The unified theory begins by taking seriously the feature of qualitative subjective unity. In this approach the initial target of investigation is not some problem like experience of red but rather the whole conscious field of qualitative, unified subjectivity.

There are some issues which are not very well answered in this theory. This theory talks of the first person ontology for consciousness which cannot be reduced to its neurobiological basis. The theory does not explain why the first person ontology is required and how it occurs to a person and whether it is the same to all persons.

Though much of the research in this area is done in the building blocks approach, author feels it is not right. This approach might cause an impression that in an totally unconscious subject, if one could produce the NCC for at least for one building block, the subject would suddenly have a conscious experience. One should think of perception not as creating consciousness but as modifying a pre-existing conscious field. This fails to explain what is the need for conscious field and how it is

obtained in the first place.

The unified approach is not taken as it is difficult to study massive amounts of synchronised neuron firings that might produce consciousness in large portions of the brain . Technology should be further developed to study the brain effectively and to take the unified approach.