

Contemporary Issues In philosophy of mind And Cognition

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Lecture No. # 24

Biological Naturalism

Today, we are going to discuss John Searle's philosophy of mind. John Searle advocates biological Naturalism. According to Searle, mind is a biological phenomenon and it is caused by the neuron physiological processes of the brain. Now, look at the hypothesis that Searle is talking about. The hypothesis says, mental phenomena are caused by brain processes and realized in the brain processes. The Searle hypothesis I have mentioned with reference to Cartesian dualism when we discussed about Cartesian dualism and Searle criticism to Cartesian dualism.

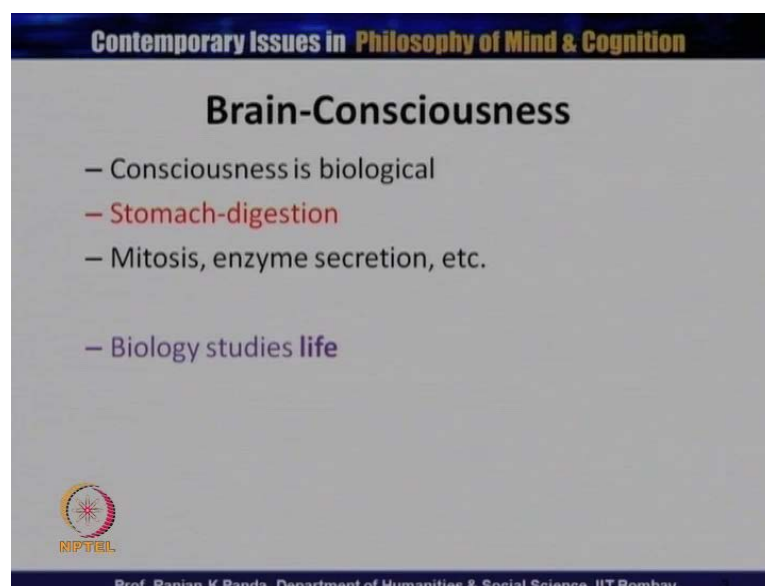
Now, does Searle commit some kind of dualism when he makes this distinction that brain is the cause of consciousness? The brain is the cause of mind; the mental phenomena are being caused by certain brain processes. Thus, Searle makes this assumption that mind is (()) phenomenon; mind is not a reality as such; thus Searle thesis suggests this.

Now, from the hypothesis we will also have a some kind of an implication and that is Searle's notion of Emergentism. Thus, Searle advocates Emergentism when he says that, **mental** is caused by brain processes or consciousness is caused by brain processes. Now, if such a theory can be discussed I think we would have a separate discussion on Searle theory of emergentism. But, today I will basically focus on what is this biological naturalism; what are the theoretical backgrounds on which biological naturalism is argued by Searle and what are the main concepts which Searle finds are now important for our discussion on theory of mind. Because, as we have seen in the history of naturalism, there are various theories have been advocated particularly right from the mind when identity theory to functionalist; more recently, the kind of theory which was advocated by Dennett and Fodor. Now, Fodor and Dennett are the champions of the

computational theory of mind now if we take their naturalistic hypothesis into consideration then probably will find that the Searle in naturalism is little different.

So, the question is, how does Searle naturalism, particularly the biological naturalism is different from other forms of naturalism? That is one question I think we need to analyze in this talk. Now, let us go to this hypothesis and try to understand why Searle is interested in biological naturalism; why Searle calls it biological - the consciousness is biological.

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Now biological naturalism suggests that as we have a stomach-digestion relationship, stomach is a very particular organism which is significant so, for to explain the digestive system or the processes of digestion. So, similarly brain is a particular system which is very important and that would have you know, explain how consciousness works. So, without brain if we talk about consciousness that sounds quite illogical, that for Searle because. So far as the neural science is concerned, neuro science has proved that brain is an important organism and it is very vital and it is very significant for all of us to understand how this organism is functioning and causing consciousness.

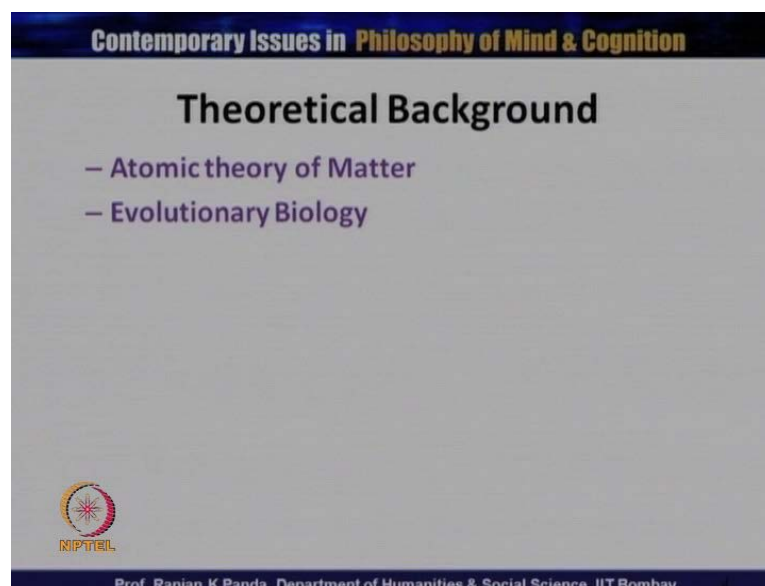
So, therefore, Searle give this analogy to us that the digestive system is responsible for causing or processing food. Similarly, the brain is responsible for causing mental phenomena. So, that kind of things you know that Searle is talking about; I mean, Searle also says that biology is specific to the study of life as physics talks about matter; physics

tries to explain the nature of matter; similar way, biology tries to explain the nature of life.

So, Searle makes a very clear distinction between physical sciences; particularly, the physics and biology according to him biology must deal with life and physics does deal with matter. So, that kind of an importance Searle gives to biology as a science of life and how he differs? He differs in this way when we talk about other forms of naturalism or other naturalist who talk about the causal explanation of the consciousness, there is certainly causal closer within which the other naturalism functions.

So, Searle tries to differ a bit and look at life in a very specific way. Searle does not say that the human body is not constituted of certain material particles. He does talk about the notion of matter, but whenever he talks about consciousness and the emergence of consciousness or the evolution of consciousness, he talks about life and biology is the science to deal with life.

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So, there are two important Theoretical presuppositions in biological naturalism argued by Searle. One is the atomic theory of matter and another is the Evolutionary biology. When we talk about the Atomic theory, he emphasizes that every material body is constituted of certain Atomic particles and so also, the human bodies are constituted of certain micro elements of the matter may be carbon or atom molecules, etcetera. So, all

these micro elements are causally constituted. So, that is one thing which a Searle keeps in his background.

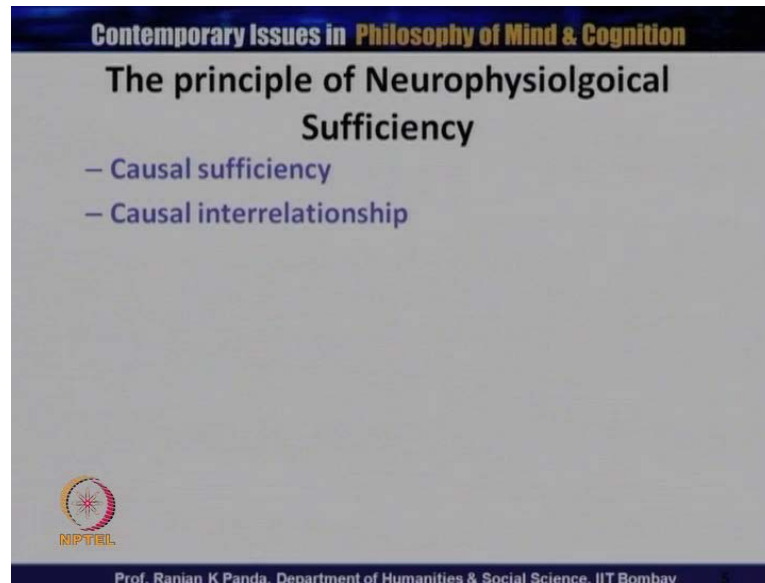
The other one is about the Evolutionary biology. Searle thinks that everything has evolved historically. So, human consciousness has evolved historically following the theory of evolution.

So, these are the two important points when one reads Searle's biological naturalism. That his naturalism is something does not exclusively emphasize on the pure materialistic understanding of the matter or the life. So, he tries to look at the life as an evolving phenomenon and how this evolving phenomenon has got very significant properties and those properties are irreducible to the biological or what you called the brain processes. So, why does Searle say that and what kind of thesis and what kind of explanation explanatory frame works Searle advocates to explain us that consciousness though caused by brain processes are irreducible to brain processes?

So, life as such is something very significant. Life as such is a very evolutionary phenomenon; is something very significant because every evolutionary phenomenon for Searle has got some distinct properties and these distinct properties are irreducible properties so far as the lower level of properties are concerned.

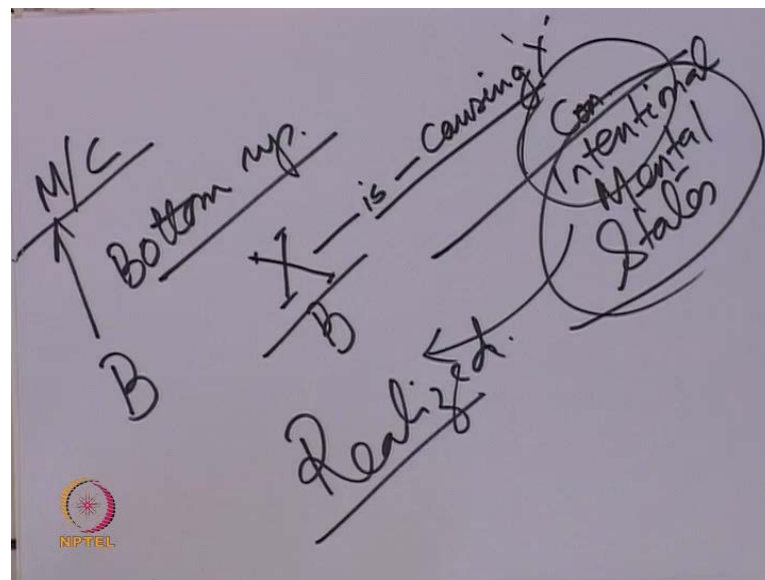
So, now, we would look at Searle thesis very closely. What kinds of explanatory frame works are provided to justify his hypothesis? That is, consciousness is being caused by brain processes and realized in brain processes; now it is evident. So, for the naturalistic stand point is concerned, that every philosophers of mind is in the naturalistic frame work argues that consciousness is caused by brain processes and we have seen extensively when we dealt with the mind. When identity theory particularly with reference to the (()) hypothesis, one locates this hypothesis one may find that it is too simple, but it is not that simple. We need to also relate the first part with the second part that is the Realization conditions. It is not that the brain is only causing mental states or causing consciousness, but it also has a condition to hold on to these emerged mental states. So, that kind of hypothesis is very unique when we compare it with other philosophers of mind, those who talk about the naturalistic theory of mind.

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Now, the two aspects of this causal relationship is something very important to understand. One is the causal sufficiency another is the causal interrelationship and Searle calls it the principle of Neurological sufficiency.

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Now this principle of Neurological sufficiency suggests that X if we say let us say X is the brain and the X is causing y, the brain causes consciousness; this says the brain is neurologically sufficient to cause consciousness. But at the same time, we also need to talk about what happens when consciousness is caused. What happens to those

intentional states or mental states? What happens to them when they are caused? Because, for Searle I mean, when somebody reads is intentionality and I have seen philosophy of mind published by Cambridge university press in 1983. Towards the end of the book Searle proposes this hypothesis but, it is very clearly explained when one reads the book; the rediscovery of mind which is published by Massachusetts Institute of Technology in 1992.

This work suggests that brain causes intentional states in intentionality. Searle argues that intentional mental states are caused by brain processes. Now, in the latest work that is the, in the rediscovery of mind and at the same time, in mind brain and Science, will find that Searle is talking about that - how brain consciousness is caused by brain processes. So, what he inspired is that, whenever we talk about consciousness we also see that his intentional states are conscious mental states. So, he uses intentional states as conscious mental states. There will be no intentional mental states which are unconscious mental states; in principle they are conscious.

So, now, the brain has the mechanism to produce consciousness and it has also the mechanism in the sense that, it is causally sufficient to hold on those produced mental states. So that the mental states are realized; these mental states gets realized within the function of the brain. So, when you say the brain is causing mind or brain is causing consciousness then, there is a kind of a bottom-up causal relationship we find and this kind of causal relationship is also argued by the emergentists as I mentioned when Searle says brain causing mind. Searle itself committing to Emergentism; that will be understood if we little explicate the hypothesis.

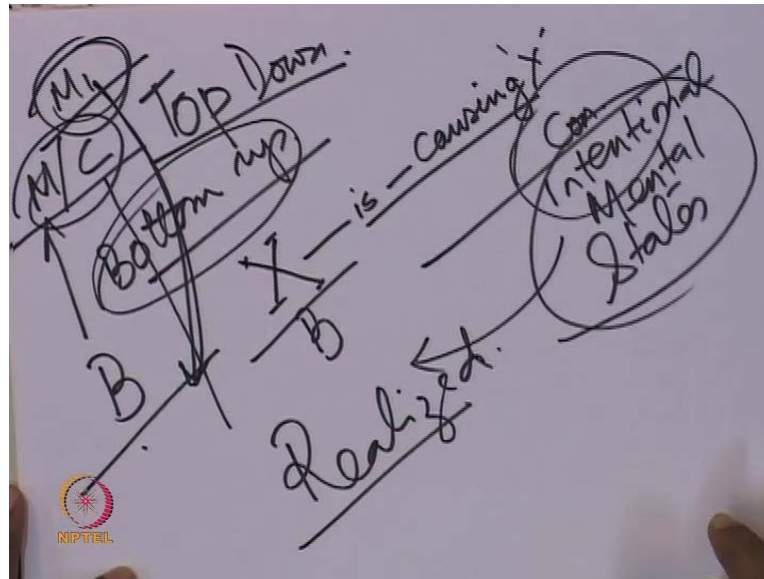
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The slide features a dark blue header with the text "Contemporary Issues in Philosophy of Mind & Cognition" in white. Below the header, the title "Explication of the Hypothesis" is centered in a large, bold, black font. Underneath the title, a quote by Searle is presented in a teal color: "Brain not only produce but also sustains the conscious life. The regenerating process in the brain reveals the realization of the mental states in the brain processes." (1992: 3). In the bottom left corner, there is a circular logo for NIPTEL (National Institute of Philosophy, Theoretical and Experimental Logic) with the acronym "NIPTEL" written below it. At the very bottom of the slide, in a small white font, it reads "Prof. Binay K. Panda, Department of Humanities & Social Science, IIT Bombay".

Now, let us look at one of the statements of Searle from the rediscovery of mind - brain not only produced but also sustains the conscious life. The regenerating process in the brain reveals the Realization of mental states in the brain processes. So, you have a kind of a level where brain is causing consciousness and you have also a kind of a level where sustains those mental phenomena and we have also a level when we talk about brain realizes this mental phenomena.

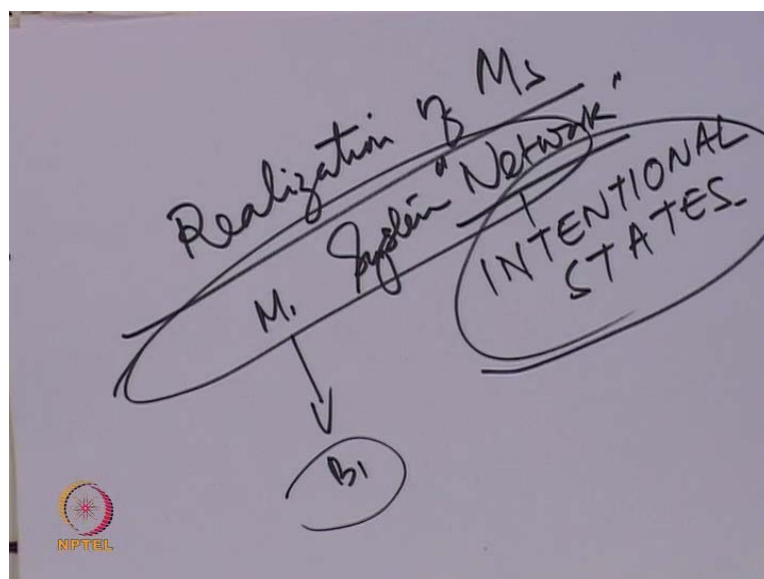
So, there are at least two levels in which we know one can look at the principle of neural sufficiency working. So, one level you have the living brain and the living brain; brain with life is causing mental states or consciousness and that would show some kind of a bottom-up causal relationship.

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There is also a top down causal relationship; it is called top down top down in the sense that whenever a particular mental states. Let us say M 1, he is getting Realized then it also know causally related the brain; so, this kind of a Realization. So, for example, I am feeling thirsty; now if I (()) glass of water then; obviously, my desire is getting Realized in the sense that my desire is been satisfied with know a glass of water. So, that satisfaction condition or the satisfaction which emerges from this process is showing a kind of a causal relationship; that relationship coming from the mental states to the brain state.

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Now when Searle talks about a Realization of mental states the Realization of mental states Searle also refers to this fact that there is no one to one Realization rather mental states constitute some kind of a system or a network what you call network for there is a network of mental states or what we say the network of intentional the network of intentional states.

So, there are various kind of INTENTIONAL STATES and its those INTENTIONAL STATES which precisely responsible for the satisfaction of the particular mental states where as my desire is satisfied my desire is linked with other mental states it is not that only one mental State know as getting satisfied and it is it works in a one to one way it is not that there are network of mental states and each one is connected with the other that is what is know becoming very significant in the frame work of Searle how a mental State is realized. So, that he has to kept in mind I will I will come back to the notion of intentional state the network of intentional states little later when we talk about intentionality.


But let us assume that Searle is talking about two causal modalities one is a kind of a bottom-up causation and another is Top down causations this is for our understanding Searle talk about bottom-up and Top down this is typically a kind of an emergentist concept of concepts used by kimono and many others I am using for arbitrary understanding to clarify that this hypothesis has got two levels of causality operating together they may be operating simultaneously we do not know that, but theoretically if we try to explain their causal functions.

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Contemporary Issues in **Philosophy of Mind & Cognition**

Implication

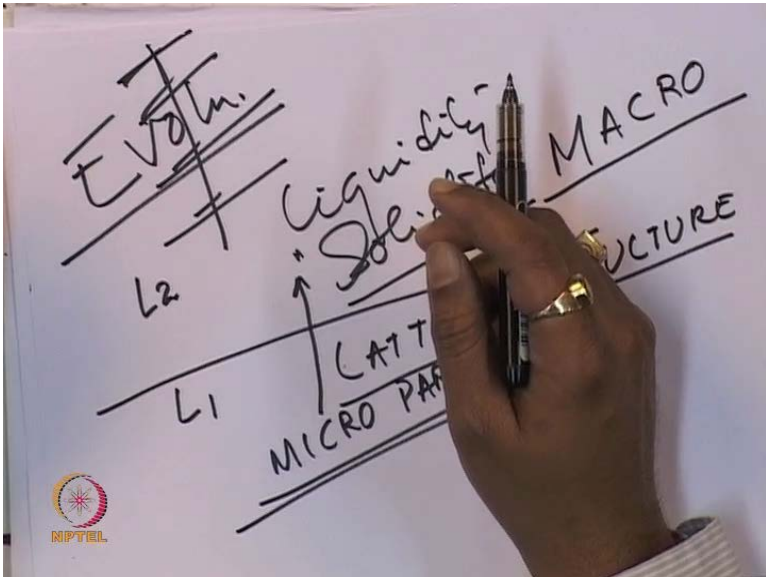
– “On these definitions, consciousness is a causally emergent property of the systems. It is an emergent feature of the certain systems of the neurons in the same way solidity and liquidity are emergent features of the system of molecules.” (1992: 5)



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We need to locate it in very systematic way this Implication is very inevitable now look at the Implication now which I would like to draw to your attention on these definition consciousness is causally emergent property of the systems it is an emergent feature of the certain systems of the neurons in the same way solidity and liquidity are emergent features of the system of molecules according to Searle you have two levels of explanation and consciousness being an emerged phenomenon you find that this is a kind of a level.

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Evoln.

L2

Liquidity

Solidity


MACRO

L1

CAT

MICRO PART

STRUCTURE



So, level one and you have another level for level two. Now, this level is what is called a kind of a lattice structure; this is a lattice structure where you have MICRO PARTICAL you have micro particles only. Now, this micro constituents certainly cause something that is, it could be in the case of any liquid material; liquidity or what is called solidity. Now, this table particular table on which we are writing is as per as solid material object. The solidity is a product of the micro constituents that are together their causally bound together and in order to produce this effect called solidity to find that whenever I keep my hand that the table does not fall.

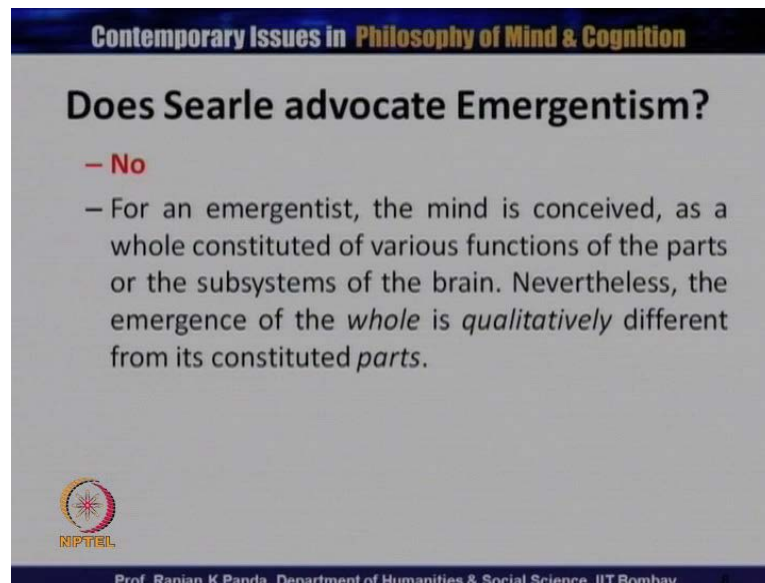
So, that the table is so solid that it will be able to rest my arm; hold my arm. So that kind of an idea of a solidity Searle is talking about. So, solidity has what is called as a micro level phenomenon; is different from the micro level phenomenon or what is there at the micro or level or what is there at the lattice structure of the brain.

So, every phenomenon has got this idea and according to Searle or according to any emergentists they will also hold on to this kind of analysis. So, there is a physical structure and this physical structure is responsible for causing mental network or a network of mental states and network of mental states will causally influence the physical state. So, that kind of analysis is very much present in the emergentists; but this is I think, one of the implications which immediately draws our attention.

When one reads Searle biological naturalism because, this naturalism is advocated on the background of Darwin's evolutionary theory of biology and as I said when we talk about evolution we cannot (()) the hierarchies. Hierarchies that we find the natural things - you have animals, plants, insects, human beings, many beings with life; if life has evolved then, you certainly have to maintain this hierarchy very strongly and Searle does maintain that hierarchy the Searle does say that human consciousness is something very specific to human life, is different from animal life.

So, that is very clear in Searle but, what is important here is this that when we talk about evolutionary theory of mind, we need to also locate an implications. One of the implications is that, it adheres to an emergentist thesis or it is supportive of this emergentist thesis.

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Does Searle advocate Emergentism?

– No

– For an emergentist, the mind is conceived, as a whole constituted of various functions of the parts or the subsystems of the brain. Nevertheless, the emergence of the *whole* is *qualitatively* different from its constituted *parts*.

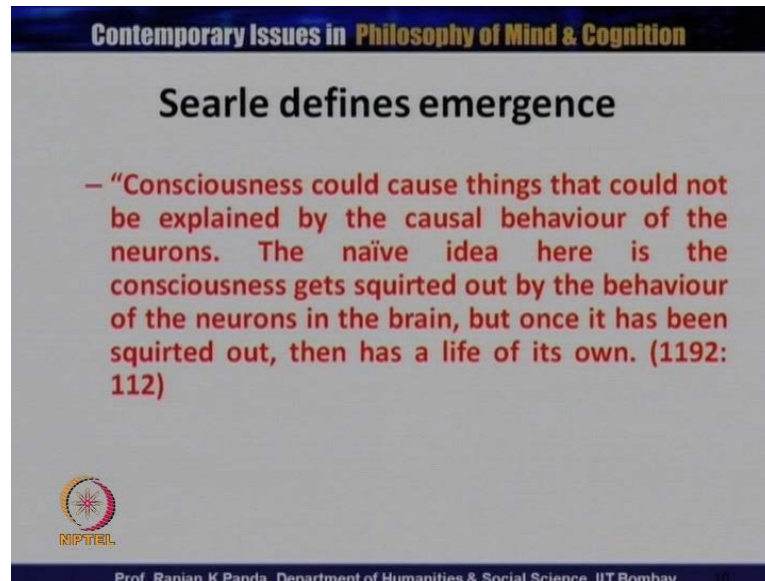
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So, that kind of thing one has to look at; thus Searle advocates Emergentism. The answer here is, No. Searle thesis does not advocate Emergentism. For an emergentist, what precisely is the case is that, the mind is conceived, as a whole constituted of various functions of the parts or the sub systems of the brain. Nevertheless, the emergence of the whole is qualitatively different from the constituted parts.

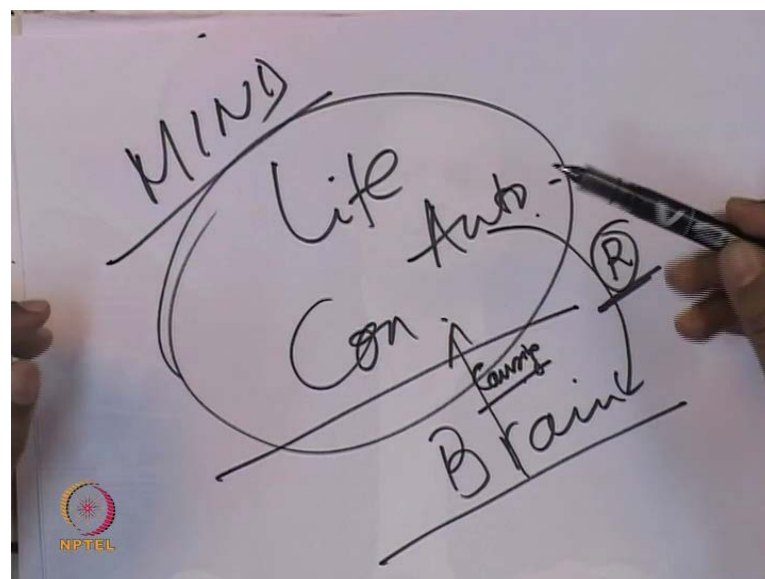
That is very significant because, when we say there qualitatively different that is at the level of the lattice structure you have some kind of particles, micro particles and this micro particles are causally related with one another and their function is qualitatively different from the function of the mental states which are also related with one another may be they are causally related with one another, but what kind of causality Searle is interested in? We need to talk about that in order to explain that Searle thesis is different from other naturalists' thesis. But, Searle at least holds on to this thesis that mind is a part of the biological reality mind is part of the nature; it is not different from nature.

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Searle defines emergence in this way that, consciousness could cause things that could not be explained with the causal behavior of the neurons. The naïve idea here is the consciousness gets squirted out by the behavior of the neurons in the brain, but once it has been squirted out then has a life of its own. Now, this is very something very interesting, once consciousness is caused.

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Let us say, once you have consciousness then you find that it has life of its own meaning thereby it is, it can do all its function. It is something very autonomous; it defines its own

functions. So, that kind of life because, life is a very important concept of when one reads Searle biological naturalism.

Now, he says once it is squirted out it has its own life meaning there by it is independent of the brain processes. So, brain processes has no control as if brain process has no control, but if one relates to the hypothesis then one of course, finds that brain is causing consciousness and there is also a kind of a causal influence happening when they are being realized. They are being realized these two relationship process is going on all the time so, but what is important is that new Realization happens without the intervention of mind and mind for self is constituted of the network of mental states.


So, the whole network of mental states constitutes mind. So, what is mind? mind is constituted of the entire intentional states; that is mind. So, if we look at Searle this definition, then we would like to conclude that it does not commit to the kind of Emergentism which we would probably think in the case of emergentist like Kims; for example, Kims is a critic of Searle biological naturalism.

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Kim's notion of Emergence

– “If property M emerges from properties N^1, \dots, N^n , then M supervenes on N^1, \dots, N^n . That is to say, systems that are alike in respect of basal conditions, N^1, \dots, N^n must be alike in respect of their emergent properties.” (2006: 550)

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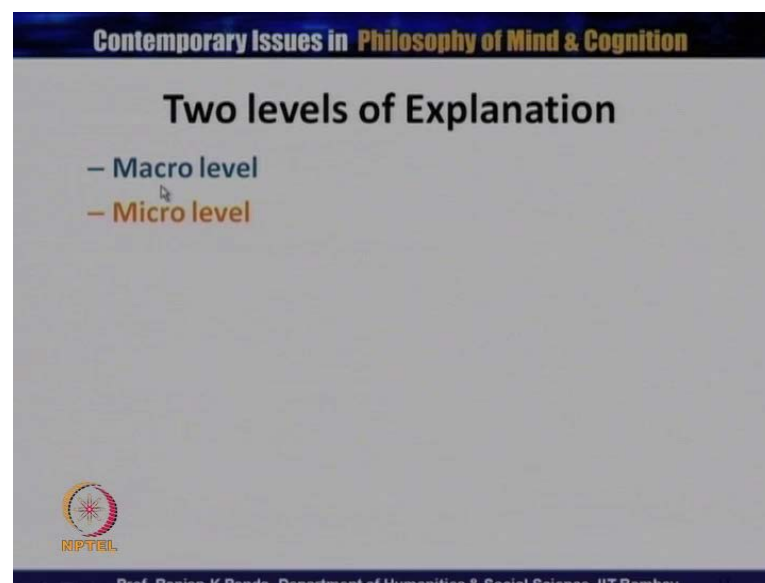
Now, Kim argues that if property M that is mind emergents from the properties and one to two enhance then and hence supervenes on N^1 that is the brain. So, mind supervenes on the brain. So, that is to say, systems that are alike in the respect of basal conditions must be alike in the respect of the emergent properties. So, the emergentist like Kim argues that the mind is very much caused by the brain by talking about this causal

relationship he finds that mind supervenes mind is a supervening kind of a property or consciousness is a kind of a supervening property. All these supervening properties are not causally sufficient to determine the relations with the physical they are not causally sufficient. So, the physical or force causes mind.

But, mind only supervenes; I will think, will have a ((crucial)) discussion on Kim and Searle and other emergentists, but let us limit our discussion here with Kim's this definition because, this definition is with analogous to the kind of thesis which Searle is advocating. So far the Searle thesis is concerned, Searle is not advocating Emergentism because, Searle does not hold this thesis that mind supervenes on the physical or mind supervenes on the brain; rather mind has certain unique properties. Mind has certain specific properties and these properties are irreducible properties. So, the irreducibility thesis which Searle holds is something very significant. Now, what are those properties which Searle considers are significant? One of these properties is intentionality for Searle consciousness is intentional.

So, intentional state is intrinsically intentional intentionality - is a property of consciousness. So, Kim also talks about irreducibility. So, what is the difference between Kim and Searle? So, we will locate this notion of emergence in a separate class.

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What Searle argues when he talks about the Two levels of Explanations? One as I said, the macro level of explanations and another as I said, it is kind of a micro leveler

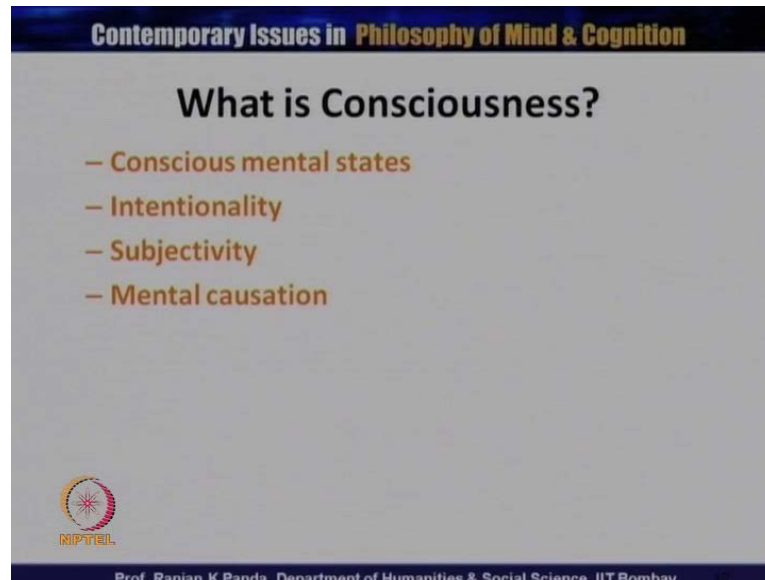
explanations. The micro level refers to the lattice structure of a particular thing. How the thing is constituted and the micro level, we have a different kind of explanations where how things behave with reality say for example, what is a tree you have? Tree has its micro elements and tree has a beam in the nature interacts with nature.

So, that is that interaction is an organism interacts intentionally with nature. According to Searle, trees, animals, insects, all when they interact the interact intentionality they all possess intentionality because, consciousness is intentional. In principle it is intentional and all these when they interact with the universe as a living body, it shows that intentionality is explicitly present in their behaviors. So, Searle holds on to this thesis that intentionality is intrinsic to the living beings - the consciousness of the living beings and for all living beings are conscious beings. If we have this theory then when the living body interacts with nature, that interaction will talk about a kind of a micro level explanation of the behavior. Behavior of the particular body when human interacts with the world or when humans are interacting with other human beings or other physical non living beings and then humans are interacting with other human beings at other physical non living beings and then, this interaction is micro level interaction and we need to give a micro level explanation to this interaction. But, human beings as a living body is constituted of certain micro particles and those micro particles are significant. So far as my living is concerned, or the notion of living is concerned, the biological capacities of the body power of the body so that, that will be you know, that explanation will be a about you know, the micro level explanation. So, there are two levels of explanations and so far as science is concerned, science only deals with the micro level explanations when the scientific community claims.

That consciousness is caused by brain processes and human mind can be explained scientifically. They only refer to the micro level explanation. So, their emphasis is very clear. But, we are not just human beings constituted of certain material particles we are much more than that. So, we are not just a **know** a lump of physical material body but, we also behave. But, we behave in our social world; we have some values we interact with others our actions are rational. So, all this if you take in to account the social understanding of the being is something very different; something very unique and Searle emphasizes, this aspect that we are more than the material stuff we as a human being are social beings and within a social form of life we interact with the other beings

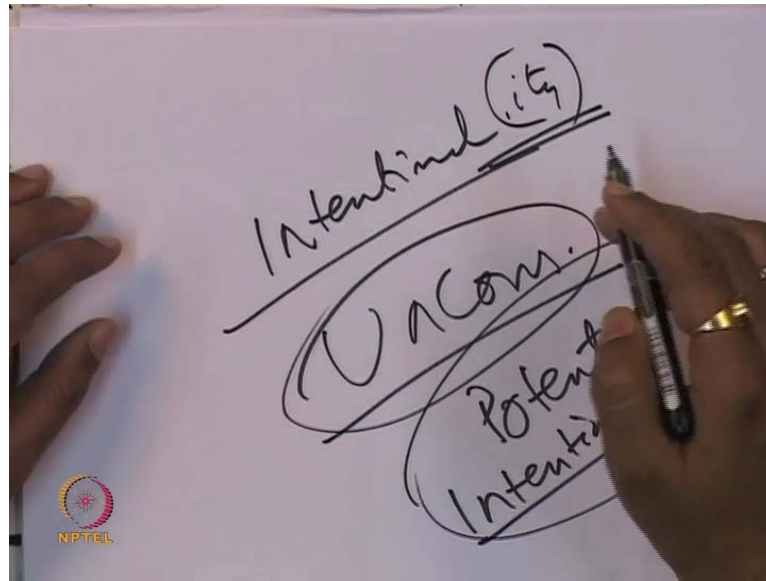
in a much different way that is qualitatively different from the kind of things which we find happening at the micro levels. So, this is you know Searle' emphasis on the notion of leveling.

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Now, what is consciousness? What does Searle mean by consciousness? As I mentioned earlier, whenever he talks about the emergence of consciousness or consciousness is caused by brain emphasis, he refers to the conscious mental states. Now, all these mental states are in principle conscious, but some of them as he says, some of them are intentional; not all are intentional; only a few are intentional **only few are intentional**.

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So, intentionality becomes one of the properties of consciousness source of Subjectivity and mental causation when Searle says there are few mental states which are conscious meaning thereby, if I say I am conscious of what I am saying, I am conscious that I am talking to you. So, I am conscious of this fact that I am lecturing.


Now, if that is the case then I am only conscious of the few things that has been discussed in say, in the theory of biological naturalism; but, I am not conscious of many other things. So, that which I am not conscious of at present are though potentially conscious, but they are not intentional, **right**. Now, they are unconscious mental states. So, Searle do not does talk about unconscious mental states. So, there are unconscious mental states; there are mental states which are unconscious; but, those unconscious mental states are potentially conscious. So, they are there potentially intentional. They do posses intentionality there potentially intentional, but very fact that I am not conscious of them **right** now makes this case very clear that there are some Unconscious mental states and the some conscious mental states.

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Anti-Cartesian notion of Consciousness

- Non-circular
- NO to: conscience, self-consciousness, and cognition
- Hierarchy of consciousness
- Dream/ consciousness with lower intensity

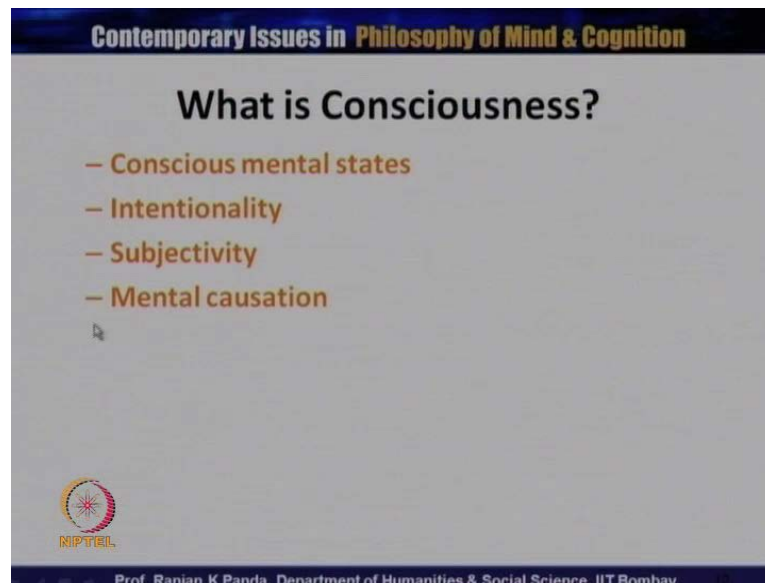

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So, there is a hierarchy of mental states Searle would talk about hierarchy of mental states say, for example, dream is one kind of conscious state where which is distinctly different from when I am awake; for example, when I am walking or I am talking to you will be. So, the consciousness with lower intensity which is, somebody is in coma. If somebody talks about children who are say, or infants say for example, infants are not full pleasurable conscious as we are animals, insects. Now, all these have a lesser power so far the conscious capacity is concerned; but, the Searle notion of consciousness is certainly not circular as we find in the case of Descartes.

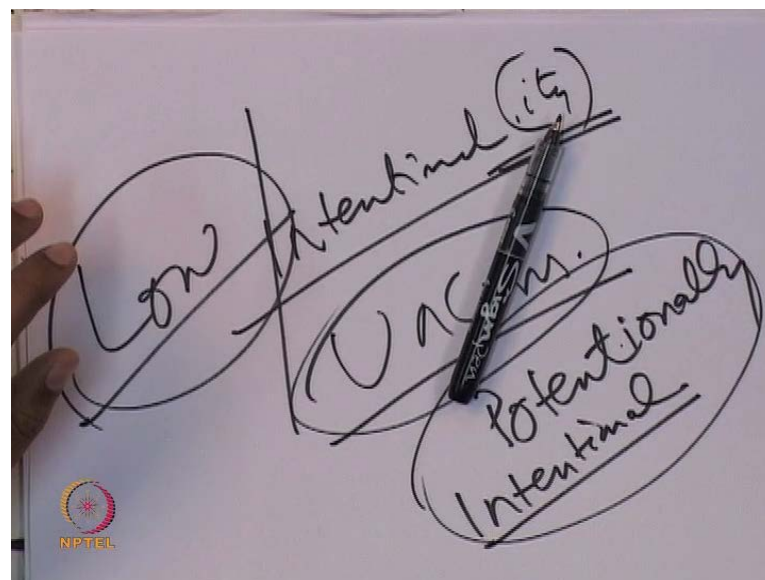
Now, Searle tries to give a scientific account of consciousness. Hence, he wants to make a non circular explanation of consciousness that is very clear in Searle. The non circular means that this hypothesis is based on certain scientific assumptions and these assumptions are pre suppositions are very logical to explain how consciousness is caused by certain neural function of the brain; so, that is very clear in Searle.

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So, otherwise if Searle says that properties like intentionality, Subjectivity, etcetera are irreducible properties, their unique properties and these properties cannot be explained.

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With reference to the lower level cases now, if they cannot be explained to the lower structure of the brain processes then, if the case that Searle is committing some kind of a Cartesian dualism. One has to look at this thesis in this way and how far Searle is not dualist or Searle is dualist. If Searle is not a Cartesian dualist then what kind of dualist dualism is he? So, those things I think we need to look at when we talk about Searle

thesis of irreducibility. But, when I say that Searle is giving the kind of a non circular account of consciousness, we need to understand that Searle is trying to avoid this kind of terminologies concepts which is reused in Cartesian theory of mind. The terms like conscience, self-consciousness, etcetera, are problematic for Searle. Searle will not use this to talk about consciousness because, that is gives an enough impression of circularity. If I say I am conscious of myself, is in principle conscious and I am conscious of that.

So, this analysis is a kind of a circular analysis because I which is the self. Self is in principle consciousness and that self is conscious of the self. So, this analysis is something you know, problematic and Searle tries to avoid this. And, Searle says we are again and again committing to ontological dualism because, we have used this kind of a vocabulary in our theoretical frame work and I have mentioned it when I was talking about Searle criticism against Descartes dualism.


So, we need to little carefully locate how does Searle explain this thesis of irreducibility and why intentionality is an irreducible property and what is intentionality. Then, intentionality for Searle is a intrinsic property. It is intrinsic because it is logically associated with a consciousness all our conscious states are intentional there about something.

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What is Intentionality?

- Feature of consciousness/ property of consciousness
- Directedness/aboutness/of-ness
- Belief, Desire, intention, etc.

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I have said their present directedness/aboutness and mental states like desire, belief, intentions are in principle intentional because, intentionality is involved in the every structure of the mental states.

Now, intentionality as a concept was used by (()) and later on it was theorized by Husserl - also argues that intentionality is a logical property of consciousness. All our conscious states are consciousness; in principle is intentional that is Husserl you know, phenomenology which suggests that intentionality is something very unique to human mind (()) distinction, but intentional and non intentional makes it very clear that intentionality is a mental property or intentionality is a mental feature. It is that feature which makes the mind different from the body. So, that distinction is created by intentionality and Husserl later on of course, theorized it.

Now, Searle notion of intentionality is not a phenomenological account of intentionality. It is what I will call a naturalistic notion of intentionality; particularly, analytic theorization of intentionality. How does Searle theorize intentionality in analytic framework in analytical framework of mind? So, that we need to locate when we will discuss what is intentionality and how intentionality is placed in nature. So, what is subjectivity? How subjectivity and intentionality are related; what is mental causation? So, all these three important concepts have to be discussed in order to understand what is consciousness all about?

We will have lectures on these topics and let me conclude here saying that Searle biological naturalism gives an alternative theory of mind which is non Cartesian theory of mind. Though biological naturalism talks about irreducibility thesis, that there are certain mental properties like intentionality, subjectivity, asexuality, etcetera, are the (()) say is not reducible to the brain process.

So, that is you know, gives an impression that Searle is committing to dualism. Searle hypothesis also gives an impression that as if he is committing to emergentism. We have tried to locate these two questions today that Searle is not an emergentist. So, with this I would conclude today's lecture and we will have a discussion on what is intentionality in the next class; thank you.