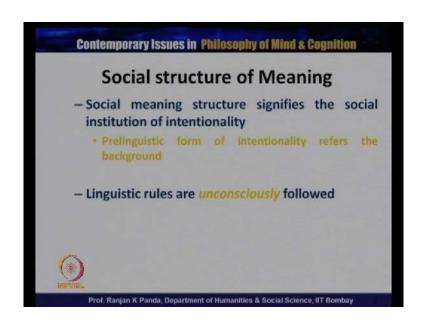
## Contemporary Issues In Philosophy Of Mind And Cognition Prof. Ranjan K. Panda Prof. Rajakishore Nath Department of Humanities and Social Science Indian Institute of Technology, Bombay

## Lecture No. # 32 Language and Mind

I have been discussing about the relationship between mind and language with reference to the notion of linguistic representation. Today, I am interested to talk about the naturalist notion of language and mind, particularly with reference to Chomsky and Fodor. The Chomsky and notion of language and the fedorian notion of mental representation, and remains that linguistic activities are conscious activities, this is very fundamental to other naturalist.

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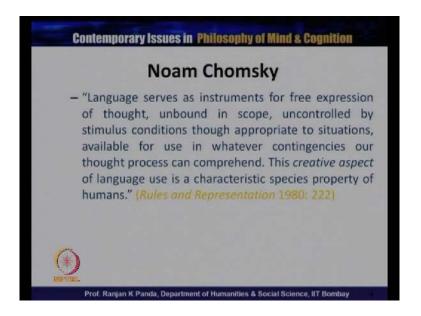


Searle in fact, does not clearly pose this to us, but he has something to tell us like this; that linguistic rules are unconsciously followed.

Now, as I have mentioned earlier; that this Searle's notion of unconscious rule following has to be understood or it can be construed with reference to the Wittgenstein notion of rule following. How does an individual follows certain linguistic rules. That is to say the individual just follows or just performs certain activities. So, there is no question of consciously following the rules. He just does it. So, this idea of a rule following or

following the rule consciously, and how it has been interpreted by the naturalist; we are going to study that in today's lecture.

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Now, when we say that, what is Chomsky's notion of language, and how does Chomsky reject this proposition that linguistic activities are conscious activities. So, let us see what is the notion of language Chomsky holds; language serves as instruments for a free expression of thought unbound in scope, uncontrolled by stimulus conditions, though appropriate to situations available for use in whatever contingencies thought process can comprehend.

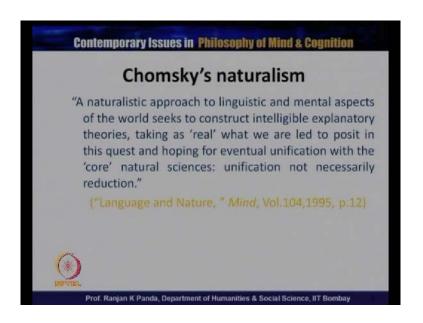
This creative aspect of language use is a characteristic species property of humans. Chomsky finds out that the very notion of language use that individuals, human beings use language is, something very significant. Individual surrounded with this creative element, to express themselves, to express their feelings, thoughts, etcetera. And this according to Chomsky is something to do with the biological capacity of the human beings. Searle also talks about the biological capacities of the human beings. Particularly with reference to the background conditions, the prelinguistic form of intentionality that refers to the background conditions.

Now, how does Searle differ from Chomsky is a point that we need to discuss later. But today, as I mentioned earlier that we need to study what is the essential or what are the

essential points that Chomsky or Fodor would talk about the notion of language, and its relationship with the mentor; the mind. Chomsky's understanding of language is not behaviorist. As he says, that linguistic activities the very act of expression, expressing language or expressing thoughts in language; is something has no boundary as such. We can produce enormous sentences, enormous words, and this ability is not bound by the stimulus response that behaviorist talk about.

So, it is something very special to human beings, it is something which is species specific. So, in that sense there is no behaviorist understanding of language that languages is is a dispositional ability, and whenever the individual encounters a stimulus, then he exhibits or she exhibits you know the linguistic behaviors. So, that kind of thesis is not hold here, by Chomsky. Whether Chomsky says that, this is very use of language, that language that is available to the individual human beings are something very special and it is a biological capacities.

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Now, Chomsky's understanding of language is again naturalistic, as Searle understanding of language is a naturalistic one. According to Searle language has evolved, following the natural history of evolution; language is a institution which is been created by certain prelinguistic form of intentionality. So, intentionality is prior to language. Now, according to Chomsky what is prior to this language. When you say that human beings use language; now, what they are the prior conditions which makes human as a linguistic being. Now, Chomsky's naturalistic position; suggest that as a naturalistic

approach to linguistic and mental aspects of the world seeks to construct intelligible explanatory theories, taking as real what are led to posit in the quest of hoping for eventual unification with core natural sciences.

Unification not necessarily reduction; now, most of the cognitive scientist today when they talk about the relationship between the mind and language, they tries to reduce one concept to the other; languages basically a kind of a mental phenomena, and it can be Causley explained how this mental phenomena creates the semantic content in it. So, the the cognitive states are constitute in the form of a physical objects. In the form of the neural states and the function of the neural states are such that, they not only explain the semantic content involved in the neural state.

But they can also tell us about, how the semantic content becomes part of it. So, this idea of linguistic activities or language carrying a semantic content; an intentional content which we have discussed earlier is reduced to certain neural states to certain physical states. Now, Chomsky does not believe in reductionism. Chomsky is not emphasizing the reduction, rather Chomsky's emphasizing that the physical theory or the naturalistic theory of language talks about unity, talks about the principle of unification between language and mind.

And this principle of unification is something very special about Chomsky's theorization of language. The Chomsky's as I mention here, takes every realistic position about the language. He is not an idealist, he is a realist and he is rejecting the metaphysical notion of mind, the metaphysical notion of language. Rather he tries to project that mind and language are connected, are causally connected. And this casual connection should be contrite in terms of a kind of a unification. There is a harmony in this relationship - in the relationship between language and mind.

So, Chomsky's not emphasizing, reducing the language to certain cognitive neural states; is not doing that. Then the question is how do human beings acquire this linguistic abilities; the answer would be linguistic abilities are biological in nature. So, it is it is part of the the biological system.

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And, so the growth of language is due to the constant interaction between the individual and the linguistic community.

However Chomsky also talk about or in fact, takes an internality position. And that is the innate capacity of the human brain or the capacity of the human mind. So, language is connected to certain aspects of the brain processes, shows that how this brain processes reveal or how this brain processes helps in explaining, the very function of thoughts or mental representations. Chomsky as I, as I said takes an internality position, the internality position shows that there is a innate capacity mind is having. And it is, this capacity unfolds the internal connection between mental representations and the neural behaviors of the brain.

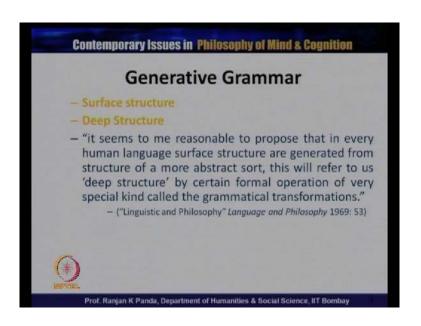
So, linguistic activities or the activities or the of thoughts or the certain function of mental representations are happening in the brain. So, that is some something which is important; we will say that linguistic ability is biological, and brain is certainly a biological phenomenon for Chomsky as well as for Searle. So, Chomsky is is taking an a kind of a internality positions, but however, one may not understand Chomsky notion of innateness or the innate ability of the brain, in terms of Descartes notion of mind.

Chomsky certainly giving a Cartesian interpretation to the notion of mind, but he is not like Descartes who would hold on to a metaphysical notion of a mind. So, for Descartes the sense of self is an innate idea, this idea revealed when I am conscious of my own

being; it is reveal through introspection, it is revile through self-reflection, etcetera etcetera. So, Chomsky is not holding to Descartes' notion of mind, rather Chomsky is only posing a kind of hypothesis to us. That this ability is something very innate, something involve, and it has the biological root. So, linguistic abilities are biological abilities. So, in that sense this is, there in our, you know mind. So, that is a kind of an internality position that Chomsky's holding.

Then, the question is what is there in the mind or what is there in this, in the head which makes language possible. So, Chomsky talks about generative grammar; how language exist in the mind, that is the existence of language in the mind in in syntactical form. And there Chomsky talks about the notion of generative grammar.

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Now, language as we all know operates in two level. One is the surface level and another is at deep level. So, there are two structures available to us, one at at the surface level, we understand a particular form in which language is use; at deeper level we have another form in which language is language operates. It seems to me reasonable to propose that Chomsky writes. In every human language, surface structure are generated from the structure of a more abstract sort. So, Chomsky's visualizing a case is hypothesizing a case, that this surface level language - the language at the surface level is connected to a deeper level and at the that level, he says the deep structure by certain formal operation of every special kind called the grammatical transformations.

So, there are certain symbolic element exist in the deeper level of the human brain. So, at this level, the function of this symbols, let us say helps in transforming mental representations into linguistic representations; helps in transforming or expressing thoughts into you know, in terms of language.

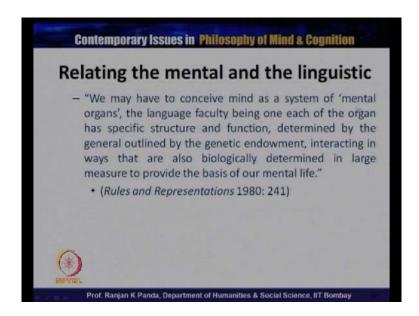
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So, that is where know there is there is a deeper level or deep structure, and the surface structure talks about. At the surface level, we have various rules like, phonological rules, principle of rule ordering etcetera, at the deep level or the the deeper structure of language refers to the paralinguistic symbolic system. Now, this prelinguistic symbolic system is something that is there in human mind, that is there in human brain. And we do not have access to that symbolic structure; how the symbolic structure is all about.

Chomsky or following Chomsky, we can theorize about that deeper level. How the deeper level exist in mind, and how does it operate. How does it operate in the sense that, how does it function when we try to express a mental representation in the form of a linguistic representations. So, how does representations are being expressed. So, in in that sense Chomsky is trying to hypothesize a case or theorize a case of language existing at a very deeper level of mind. That is what is called the deep structure; the structure which is about a prelinguistic symbolic system.

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Now, relating the mental with the linguistic Chomsky further writes that we many have to conceive mind as a system of mental organs. The language faculty being one each of the organ has specific structure and function, determined by the general outlined by the genetic endowment interacting in ways, that are also biologically determine in large measure to provide the basis of our mental life.

So, we need to conceive mind as a kind of a mental organ, the language faculty being one organ as a specific structure and functions. So, Chomsky's trying to conceptualize a case, that the linguistic abilities or the language is located in one part of the brain. And it has certain specific structure to talk about how things are being expressed in language. So, there and this is something very biological, and that is why it is called the genetic endowment. So, things are to be biologically determined.

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Now, when we talk about the unity between the language, and the mind are the unity of the mental organs and the grammatical rules; Chomsky certainly talks about the naturalization of the theory of language and the mind. As I said earlier Chomsky is not holding to the reductionist, rather Chomsky trying to project to us a kind of a naturalist theory of language and showing that this naturalistic relation is harmonious.

And the harmony lies between the way language functions at the social level, at the at the surface level. And the way language is functioning at the deeper structure of the mind; at the prelinguistic you know, language existing in the prelinguistic symbolic form. So, there there is a kind of a harmony between the two. Chomsky is posting an kind of an abstract condition about this unknown mechanism, that how language is connected to the mind or to to the human beings. How long which is connected to the human life. So, Chomsky is posting a kind of a theory where language is related to our biological life.

Now, the question is can we be able to access this relationship. And that was the fundamental question that we had initiated in the beginning. What is the relationship between language and mind, if mind is in principle a kind of a conscious phenomenon, then does the mind know this very fact, that how this prelinguistic elements are functioning, in reality corresponding to our you know expressions, corresponding to very fact of language use. So, that was the basic question which we had raise in the beginning about the language mind relationship.

Is it the case that the human beings are aware of the very fact, that they are following this rules, they following this grammatical rules or is it the case that we unconsciously follow the rules. So, that that is the point which Chomsky you know, coming to talk about here in this particular quotation.

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He says, a language is generated by a system of rules, and that is what he called the prelinguistic, you know symbolic form. That is embedded or that is there in the mind; rules and principles that enter into complex mental computations, to determine the form of meaning of sentences. So, the meaning of the sentence is determined by the prelinguistic symbolic form that is there in mind. These rules and principles - principles and rules existing and deeper structure of the mind it or in large measure unconscious and beyond the reach of the potential consciousness.

So, this is very fact that when I say something, I am aware of this fact. I am intentionally making this expression, but what is it? That we are unconscious about how this propositions or sentences or words are put to you. So, how this word being said, something being said, and how it is in said is you know, and we are not aware of this fact that how it is being said. I am intending to say to you, and that I am aware of, but I am not aware of this very fact how it is being said. And that is what is philosophical about Chomsky's position, that here in large measure of unconscious and beyond the reach of the potential consciousness, the very fact that mind is potentially conscious and that

potential consciousness would not reach to this level of the unconscious symbolic systems that is function at the deeper level of the brain processes.

And that is what is you know very significant, where Chomsky's holding to the notion of mind which is linguistically able, and we are not aware of that how this ability functions. So, that is where Chomsky probably holds on to some kind of the foreordain unconscious mind, and Searle would reject foreordain notion of unconscious. So, this is the, this is the basic difference one would find when he tries to compare Searle and Chomsky, particularly with reference to the notion of unconscious.

Our perfect knowledge of language, we speak gives us, no privileged access to these principles. We cannot hope to determine them by introspection or reflection from within as it were. So, the very Cartesian notion of self-reflection or introspection can only tell us that what I am conscious of, I am conscious of certain thoughts, I am conscious of what I feel, I am conscious of what I would do right now or what I am doing, know all these facts are directly accessible, my consciousness reaches to all these facts. But my consciousness, does not reach to this fact that how things are happening particularly, how would I says things.

I am saying this, and I am not aware of it a something very typical to Searle and Chomsky, because Searle also suggest that these rules are unconsciously followed. But as I mention earlier, that Chomsky to great extend holds on to this idea that at a at a certain level, the mind is unconscious. And the potential consciousness that we find in general in a Cartesian theory of consciousness or a Cartesian theory of mind, does not tell us about how certain activities in the brain, particularly the linguistic activities happen.

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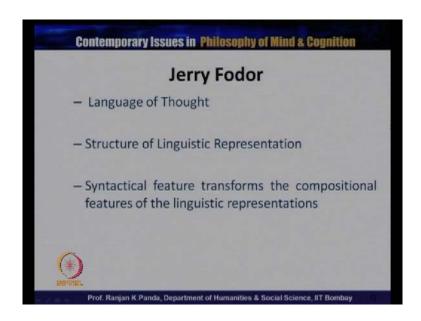
Since, we are not aware of this happenings, I understand that Chomsky is holding to the foreordain notion of unconscious. I am intentionally bringing this point here, because we know this very fact that when Searle says that all mental states, they are not intentional mental states. Some are intentional, because they represent things, they have a reference, but some are not having this representational content.

Meaning there by say for example, sudden relation feeling of joy, fear, anxiety not represent the very fact that there is an object of a reference. Searle also make this point that we are not conscious of all mental states. Now, there are many metal states which are unconscious; there unconscious mental states. Now, this unconscious mental states or he says their potentially conscious; this unconscious mental states are potentially conscious - their potentially intentional; their endowed this power of power of intentionality; hence, they can represent things. Hence they are representational states, they have this directedness.

Now, so, so sirloin notion of unconscious is not foreordain, because sirloin principle asserts on this idea, that mind is intentional. Mental experiences are intentional experiences. So, hence one is able to experience his thoughts, one is able to experience his feelings, but these experiences do not tell us, that they have access to this very fact that how does an individual human being use language or how does one follow the grammatical rules.

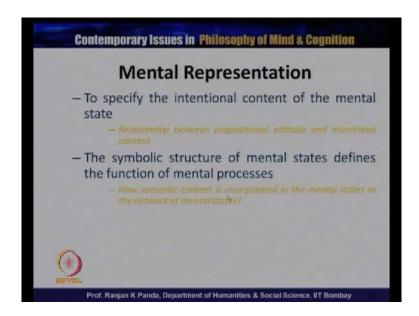
In other words, how does one make a grammatically correct expressions. So, at this point there is a fundamental difference between Chomsky's position and the position of Searle. Now, coming to the Fodor's notion of language, one finds that there is a kind of a similarity between Fodor's understanding of language, and the Chomsky's understanding of the language

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Now, Fodor talks about language of thought, the mind is having some kind of language. And the mental representations are having a structure; and the structure is is due to this very fact that mind has some kind of you know, capacity or the brains have some kind of capacity to build the structure. So, the syntactical feature transforms the compositional feature of the linguistic representations.

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So therefore, we need to understand what Fodor talks about the mental representations. What is this notion of mental representation? And how does he explain this transformation with reference to the language of thought. Now, Fodor wants to clarify two things. One is that intentional content of mental state is to be specified, and that can be specified when we talk about the relationship between the propositional attitude, and the semantic content.

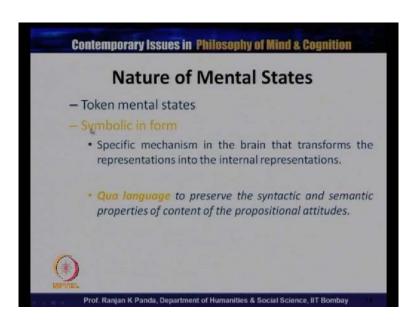
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The propositional attitude talks about suppose, we talk about desire that something I desire, I desire x act of desiring then his propositional attitude. This propositional attitude have a kind of a intentional content, it has an a intentional content. And Fodor's main project is here to determine the intentional content, to specify the intentional content.

The second thing he talks about is, is the symbolic structure of mental states defines the function of mental processes. So, there is mental content and there is a symbolic structure, structure available when we talk about mental states or what we called some kind of cognitive states. Now, this cognitive states are nothing but the neural states. So, when we try to talk about mental representation; we must explain how semantic content is incorporated in the mental states of or the network of mental states. So, these are the two point; specifying the notion of intentional content or determining how the intentional content is part of the propositional attitude, and the symbolic function of the mental states.

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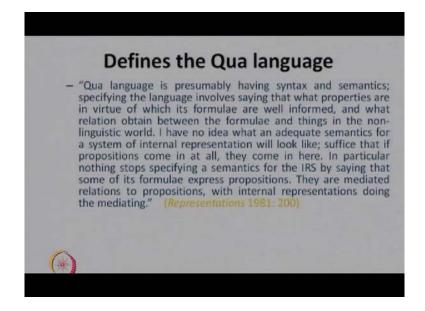
So, mental states there are token mental states. And these mental states are symbolic in form. So, there is a specific mechanism in the brain that transforms the representation into the internal representations. So, the very fact that I am seeing things out there, and there is a mechanism in my mind or in my brain, because for Fodor mind and brain are identical; you all know that Fodor is functionalist who holds on to this proposition that mind and brain are functionally identical.

Now, from this mental representation is happening, I have a mental representation. So, there is a mechanism in the mind which transforms that mental representation to thoughts. Now or to to a kind of a linguistic representations; so, this mechanism which Chomsky was talking about a kind of a prelinguistic symbolic form. In a similar way, Fodor is talking about qua language. What is the language of thought to preserve the syntactic and semantic properties of content of the propositional attitudes. So, propositional attitude like a desire, intention, etcetera or symbolic has a kind of a syntax, and it also has a kind of a semantic content. So, there is syntactic content and there is semantic content to a mental states.

Now, it is through that qua language, Fodor determines the semantic part. The syntax is anywhere available to us, since the semantic is is that element which is had to determine the syntax. And that is the view of Searle and here Fodor is proposing a thesis that how to determine the semantic content.

So, Fodor in in that sense is a, is a reductionist or a naturalist who try to determine the semantic content through syntax. Whereas, Searle they talks about the ability of the background - the background ability, the prelinguistic background ability, intentional ability, and he tries to show that the semantic content is irreducible; whereas, Fodor talking about the reducibility of the semantic content to the syntactic level of the brain functions. So, what is the qua language is about.

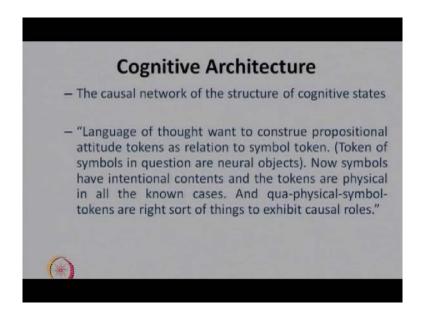
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Now, here is you know the quotation from representations, qua language is presumably having syntax and semantics specifying the language involves saying that what properties are in virtue of which it formulae are well informed. And what relation obtain between the formulae and things in non-linguistic world.

I have no idea, what an adequate semantics for a system or a internal representation will look like. Suffice that if propositions come in at all, they come in here, in particular nothings stops specifying a semantics for the internal representation states IRS by saying that some of its formulae express propositions; they are mediated relation to propositions with internal representations doing the mediating. So, there is some kind of a language which mediating this, and that is what is Fodor emphasizes.

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So, mind as a kind of a structure or this representations, mental representations are possible, because of certain some kind of a cognitive architectures. And this cognitive architectures is build following the casual power of the particular system. The casual network of the structure of cognitive states is what is being emphasized by Fodor; this is language of thought want to construe propositional attitude tokens that is the token mental states as relation to the symbol token; token symbols in questions are neural objects.

Now, symbols have intentional contents, and token are physical in all known cases; and qua physical symbol tokens or right sort of things to exhibit that casual role. So, the the

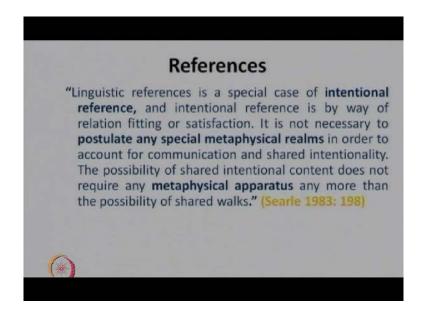
casual capacity which is in indeed in it biological capacity of the brain, creates a kind of a cognitive symbolic structure - a structure which helps in translating or transforming, reproducing, the representations - mental representations in to the linguistic representation. So, that is the basic model which the naturalist project to us; showing that this mechanism does not involve consciousness.

This is a purely kind of a casual process, this is purely a biological casual process rather, and it is through this process, we can explain this very fact that how human beings are able to produce linguistic expressions. How human beings are able to express the mental representations.

So, basically the casual analysis of the brain processes are certain prelinguistic form of language which is there in the mind, and it is there at every unconscious level, and it is theoretically impossible to have access to that level, shows or projects to us that mind is like a machine, a robot or a computer; and computer through a kind of syntactic language tries to receive the inputs, and produce a kind of an output. So, so you have a kind of a language that which what called language of thoughts or the generative grammar that Chomsky talks about its there, in in the mind like, certain programs are there in a computer; and it is through this program encoding and decoding are happening.

So, one receives the input and produces an output, and this way when we defined the mind and language relationship. We find that consciousness is being nullified. The role of experiencing the content, experiencing thought is being nullified, but we are not like machines. So, we are human beings, being who experiences things, being who feels who has the feeling, sensations, thoughts, etcetera. And so, we need to talk about how referencing is possible without falling into the reductionist understanding of language, and mind relationship.

And we also need to avoid the metaphysical notion of referencing which Searle talks about, and that was prevailing in the case of fragile and others; where the sense exists in an independent realm, look at what Searle says.



Searle says the linguistic references is a special case of intentional references - the intentional reference is by way of relation fitting to fitting or satisfaction, it is not necessary to postulate any special metaphysical realms. In order to account for communication and shared intentionality. The possibility of shared intentional content does not require any metaphysical apparatus; any more than the possibility of shared walks. So, here Searle talks about language, linguistic communication, a language use in particular without posing a kind of a metaphysical thesis. And that is what Searle says it is natural, as a natural which appeals to common sense, which appeals to our convections, commonsense is embedded in our convections.

So, the realistic account of Searle's mind and language relationship is not holding to the reductionist or the Chomsky in kind of unifications approach, rather trying to project hypothesis which is non-metaphysical, but very much embedded in our convection that how we use in our language day today life. And that with the help of such a these, we can explain how meaning to be understood, and how the content is being experienced by the individual human beings.

So, it is that experiential factor. It is the factor of condition of satisfaction. That determines the notion of intentional content or the ontology of intentional content which is irreducible to certain casual functions of the brain mechanism. With this, I conclude the lecture on language and mind with reference to food and Chomsky; I will come back to what is Searle position and how does Searle critic them in my next lecture, Thank you.