**Contemporary Issues in Philosophy of Mind and Cognition**
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**Lecture No. # 17**
**Representation -1**

In this lectures, I am going to discuss about representations. This representation is especially relations to order concepts of mind that how (( )) is explaining the concept of mind in different role. I have already explained about representations in the different models of cognitive mind, lectures. In this lectures, I am going to cover Fodor concept of differential theory of mind, and secondly, the hypothesis of language (( )) semantic engines. Thirdly - a computational theory of mind. Fourthly - a proportional attitudes, and fifthly - CRTM or Computational Representational Theory of Mind, and sixthly - Intentional Realism.

First of all, we start with representations, and representations are about as you know the things other than a themselves and are intentional in the sense of being about this or that. Because the mental representations have a content which is related to thought, belief intentional actions and all they are also intentional and in the sense of being a purposive, because it stands for something else.

Now, we may ask questions - what is it that distinguish items that serve as representations from other objects or events? Secondly, and what distinguishes the various kinds of symbols from one another? As for the first question is concerned, there has been general agreement that the basic notion of representations involved things like standing for or being about referring to and on denoting and something else. Some theories have maintained that it is only the use of symbols that exhibit or indicate the process of mind and mental states. Here, I would like to see that the mental representation like a belief and thoughts constitutes the broad domain of cognitive science.

They explain how cognizant take place in the human mind. Cognitive science includes linguistic and cognitive physiology and this cognitive science has brought about a cognetic revolution in the study of mind, and here, we can undertake a two important developments in cognitive science - one is the representational theory of mind for this to accept the representational theory of mind is to accept that, mental representations are very much like inter representational state of a digital computer. The other is the addition of a computational model of mind or computational theory of mind. In term, two questions have to be answered in this connection - what kinds of representational systems are employed in cognitions and what is machine intelligence or artificial intelligence?

Fodor had answered this question in each compositionality theory of mind in short CRTM, but if we see in the Computational Representational Theory of Mind makes a strong assumptions about mental processes. That is a mental processor a computational processes. Therefore, those mental processes are defined over symbols. On computational process Fodor's view is on computational process are symbolic and the formal. They are symbolic because they are defined over representations and they are formal because they are applied to representations in virtue of the syntax of the representations.

The theory purports to offer a solution to the problem raised by the compositionality of profession attitudes like beliefs, thoughts etcetera. Secondly, it proposes that indicate of the strong ring of the international realistic a (( )) regarding the mental phenomena. Again, it may be notated that the CRTM are computational representational theory of mind is consequently based on two fundamental assumption - the first one is a Fodor's language of hypostasis or l o t and the second one is the view that physiological explanations, that is, both intentional and numerological.

First, we have to see the representational theory of mind says that any propositional attitudes such as beliefs, desires, doubts etcetera is literally a computational relations between an organism and some formula in the internal code of that organisms. Here, Fodor takes that to believe that such kind of things exist to have a mental symbols; that means that shorts and shorts taken in your head in certain ways.

It is to have such a token in your believe bugs he said, and he said even if that whenever we are believing or some kind of mental activities, those activities are existing in our belief bugs. It is in virtue of this system for representing and processing information's that mental stress are related a cause to one another. More over according to Fodor, proportional attitudes has relations between organism and internal representations a precisely the view that the physiologist have independently arrived at. By providing a relational treatment of the proportional attitude, it is possible to state how they are content full.

For the relational treatment, propositional attitudes are diadic relations and are the internal mental representations. The belief assumptions statements are true only if the organism which stands in believed relation to the presentational contents. Firstly, it is naturally believable that proportional attitudes are relations. For example, when John beliefs in something, it is seems that John stands in relation to something, that is, the object of the belief, here John belief and the object belief, which is like stand to one to another, and secondly, (( )) is applies to the broad proportional attitude.

For example, if john beliefs it is a raining, then we can un-doubtly say that, there is something that john beliefs which shows that the belief is a relation between John and something that he beliefs. Fodor is realistic about intentionality and proportional attitudes. The main point of each theory of intentionality is that, intentionality is primary and its originally a real picture in the brain.

Language is intentional only in the secondary sense, not in the primary sense. Therefore, intentional is the primary; language is the secondary, and this language intentional only in so far as some of the sentences which are according our natural languages, and they described the real feature of the mind of the oneself or others. It is the fact that which helps us in generating our natural language and also spatial vocabulary in language that involves employment of (( )) operating over a proportional content.

For example, if we said that John decided to stay at the best of rather than making raw to a local police station, because he believed that certain things had a certain desires came up with a certain evaluative decisions. Then we are describing a series of real processes in John's brain, which involve computational operations over proportional contents.

Here, John really has represented that to himself the possible behavior scenario that we should stay at the boast of and that we should run from to the local police stations. He has also represented himself a wave of more general beliefs and desires which he has co-related of with these to behavioral scenario and which make these behavioral scenario relevant and possible and sensible solution to his problems, that is, he has also evaluated this behavior scenario in such a way that he can be said truly and literally to decide on one of them for good reasons.

From the above example, we find that a John's mind must be able to make use of some medium in terms of which he can represent the behavioral scenario, that is, belief desire and, and, etcetera, and John's brain must have a language of thought, whereas the proportional context or beliefs and decisions take place. The content of beliefs and decisions of and other proportional attitudes are first represented, then operated on processed in, in the individual waves which go to from the different proportional attitudes.

Same proportional contents, for example, that there will be a rain could be the information content of two different attitudes. One can believe that there will be rain and hope that there will be rain or believing it, but not hope for it. According to Fodor, in the theory of proportional attitudes is required to meet some conditions. There are basically two such conditions – first, theory of a proportional attitudes must explain the parallelism between brows proportional attitudes and brows have same. Secondly, it must explain the opacity of proportional attitudes.

By parallelism between (( )) saying and (( )) proportional attitude. It can be shown that, John beliefs that it is raining and its corresponding in (( )) saying namely: John says that it is raining exorability isomer of saying in syntax semantics and logical form of structure. The opacity proportional attitude is a complex phenomena understood in terms of the following three characteristics - firstly, statements continue involves proportionality attitudes are not truth function of their components.

For example, from the truth of the declarative sentence, that is, to say that George Worrell wrote animal farm. We cannot compute to the truth of the statement that john beliefs that a George Worrell wrote animal farm. Secondly, though the declarations

warrant existence is analyzation a statement occurring as the object of a waves of the proportional attitudes does not warrant such existential generalizations.

For example, from the truth of the statement George Worrell wrote animal farm. We can inform there is a George Orwell who wrote animal farm, but from this, we cannot inform that there is a George Orwell. John beliefs that George Orwell wrote animal farm. Thirdly, the opposite proportional attitude is that in the case of proportional attitudes, the principle of substitutions fails.

The principle of substitutions says that given true statement of identity, one of it terms can be substituted for the other in any true statement, where one of the terms of, of, the statement of course and the resulting statement is true. This is all about representational theory of mind, and Fodor has been arguing that this a representational of mind is represented in a completely semantic can be realized even if in the syntax, and that will be very clearly if we see the second point that hypothesis language have thought and the semantic engines.

Here, the semantic engines they have been arguing that mind is a kind of semantic engines. The Representation theory of mind arises with the recognition that thoughts have contents carried by mental representations. The representational theory of mind arises with the recognition that thoughts have contains carried out by mental representations. For example, John beliefs that snow is right here. John's a mental representations or thought has the mental content, that is, snow is white. As you know that the there are different kinds of representations such as pictures, maps and many other pictures performs which is referring to something.

Even if a road signals whenever we are traveling somewhere else and that signal stand for something whether car is there, whether down is there, whether the road up is there and this kind of signals are existing and those things are stand for something, which are referring to something. In this case, we are talking about only mental representations. Sentence religious distinguishes itself as a version of representationalism by projecting that mental representations are themselves linguistic a expressions with in a language of thought, and more over, if we, on the other hand, if we see a some sentence (( )) point out that the language of thought is just the thinkers a spoken language which is internalize and the other identify the language of thought with the mentalist.

That is an unarticulated and internal language in which the computation occur. Therefore, the internalized a language is which is unarticulated, and mental is are unarticulated internalize language which is not a existing in the return form which is existing in our brain only according to Fodor. It may be true or false. A belief are relations to mental representations and then belief must have change relation to representations that have truth values among their semantic properties, and if sentencelism says that mental representations have truth values. It could really count the for the true relation of the mental representations.

And here, belief plays a central part in reasoning acts. As we can say that reasoning is a process that attempts to secure new beliefs by exploiting beliefs and reasoning all these reasoning would preserves that truth belief by being the manipulation of truth value in sentence cell representation according to the rules. Therefore, the sentencalist hypostasis is that reasoning consisting in formal inferences. It is a processes turned primarily to the structure of mental sentences. Then reasons are thinks very much like classical programmed computer. Why it is like classical program of computer, because which is are existing in formal inferences, which are mental sentences according to Hodder.

And again, Fodor also says that he has been arguing that this thinking is one kind of mechanically, it is a kind of thinking is a systematic and productivity. How this thinking process is systematic and a productive? Now, you have to see that, for example, John's beliefs that whether William is taller than Russell and this implies that a John is capable of considering that Russell is shorter than William. More clearly either fact that John can have some thought in takes that he can have certain other semantically related thoughts, and the question is how is this semanticity possible, because the semanticity is very difficult to explain in a systematic wave.

Believes that any kind of semantic system is there in the human brain, is a one kind of semanticity, and semantic is there already in the human brain. Whenever we are explaining something and we understand that and we produced the secondary activities, this will be very clear to proceed this example. Suppose that Johns thought that William is taller than Russell involves the registration of Williams is taller than Russell, and here, the presentence is getting the second sentence, which is productive as well as a systematic waves. This kind of sentence is Fodor says that this mental sentences is itself a complex representations containing simpler representations.

As complex mental representations says that mental sentences results from processes ultimately depend on mental (( )) and expressions. Therefore, if John can produce William is taller than Russell, he must accept to Williams Russell and is taller than, and if he has these mental representations, then he is capable of producing Russell is shorter than William. Thus sentence projects that mental representations are linguistically complex representations whose semantic properties and determined by the semantic property of their consequents, and here, productivity and systematic run together.

If you postulate mechanism advocate to account for the one, then we get the other automatically, and here, as if the William system is working in the automatic way in the mechanical way. The question is it that, what sort of mechanism are there or what sort mechanism are existing in this case? The sentences of a nature language have the combinatorial semantics. On this view, learning's (( )) language is a learning a perfectal generalist procedure for determine the meaning of its lexical elements. Linguistic capacities cannot it help, but the systematic on this account because it gives the very same combinatorial mechanism that determine the meaning of all the rest.

Language express thought and thought is systematic as language is according to their product. Therefore, to have the thought, that is, William is taller than Russell is (( )) to have access to the third that Russell is shorter than William. Of course, anybody who using a position to have one of this thought is (( )) is a position to have the other. Therefore, the language of thought or explains the systematisity of thought, which is an essential requirement of the structure of language of thought. If we you see in the mind, there are two boxes according to Jerry Fodor - one is belief box and the second one is desire box. The language of thought hypothesize is a speculation on the form that storage takes place.

Our believes and desires are encoded as sentences. According to Fodor, our sentences that we think have not the English sentences or any sentences in natural languages. It may be any language; it may be either Oriya language or Marathi language or Hindi language or Sanskrit language. It may by any other languages which occur in our sentences, any kind of nature language sentences, and our thinking of course, in a special languages according to jerry Fodor and that language called as mentalist, and mentalist organize into words and sentences, and according to him, mentalist words are concepts and mentalist sentences are thoughts.

The sentences of mentalist are stored in a neural medium because a pattern of neural activities could develop sentential representations. Here, Fodor's languages thought you to the multiply (( )) arguments, because according to the Fodor, cognition has nothing directed to do it; it is specific in neurological environment, but rather consents processes operating on the common language of thought. Therefore, this language of thought is lightly multiple realisability model. Even if in the case of multiple realisability model in model of cognition or mind, as we have seen that, mind can be represented in different ways and different system can be realized in one systems and in mind is function in the multiple; the way even if computational system is functioning.

Therefore, this language of that has kind of this commonality multiple raised in model of mind, but according to Fodor, he says that cognition is in neural but cognition is computational in mentalist, and the way even if he multiple reality model is that the even if the neural is there and the computational processes are there, and we can imagine a a device that could manipulate sentences either triggers to their meaning. Such kind of devices according to Hoagland is a semantic engines and, and, this device would perfectly meaning the performance of Latin speaker, but would do without remain as a native speaker would do on the meaning of the same manipulated sentences

And here, Hoagland trying to argue that mind is a kind of a machine and even if machine is functioning syntactical way but semantic is there, because this semantisity is that the way mind. For them human mind is like a semantics engines and that semantisity is possibilities are there according to Hoagland. Those sentences may express in the propositions, but the device cares only about their shapes, that is, syntax. In this way, Hoagland says that if you take care of syntax, semantic will take care of itself. Now, the question is – is such a device possible? According to Hoagland not only semantic engines possible, but they are existing and ordinary computing machine is a semantic engine according to them.

We designed and program computer so that they manipulate symbols in accordance with purely syntactical rules. The symbols are meaningful to us, but the machines that to deploy them can nothing about this. They operate on interpreted symbols, but in a way the honor semantic constants, and the question is now, how can syntax, they have been arguing that in a does a close relationship between syntax and semantics, and the

question is how can syntax (( )) the semantics. According to them, the pharmalogic is the best example for this syntax semantic relationship.

So, for example, if p, then q; p therefore q, and this rules tells us that, if we have a particular confirmation of symbols, we are permuted to write new symbols. Here, what is significant about the (( )) is that, it is permulated and deployed without regard to semantics, but the rules makes sense that it is to say, they conform to the semantics of inference. Let us see the concrete examples, and concrete example is like this. If it is raining, then I shall need an umbrella; then p is stands for it is raining and q is stands for I shall need an umbrella; p it is raining. Therefore, I shall need an umbrella.

Thus, according to them, from this complete examples, from this models (( )) rules, they said that pharmalogic mirrors this kind of semantic knowledge in rules, and application of which we require no semantic knowledge. The question is what has a these to do minds with this motor pence example. To explain the human mind by supposing that, mind manipulates mental representations you need sentences in the language of thought, and if mind manipulates sentences, then this question would seems to require sentences under stander some component of that mind inputs in the symbols.

And another (( )) of the mind is to understand sentences in the language of thought and language of turn, and against this background, it is easy to apply the motion of semantic engines. As we have already mentioned that semantic engines is a device that performs in a way that reflects semantic relation holding among those symbols, but that also exclusively by syntactical (( )). We get the semantic, `it is because of the semantic principles. In the same way, we can also suppose that mind contains mechanism which understanding the meanings of these representations, and therefore, if the mind is a semantic engines, engine is realized by the brain.

If the mental operations include the manipulate of symbols, that is, sentences in the languages of thought, then the embodiments of those symbols in the brain need a not reasonable symbols. We can write with pen and paper. They might involve (( )) electrical or chemical states. If there is a language of thought, sentences are invisible from the point of view of observer examine the micro structure of a brain.

Therefore, it is very difficult to examine the representational theory of mind from this micro structure point, because you use internal which is existing in the invisible way and it is very, it is invisible to the observer to knowing about the brain and that which is existing in micro structure of a brain. Now, we have to see the computation of theory of mind. It states that human mental processes are computational processes. The theory of the computation has a very (( )).

The basic that kind of various theory of the computation become more popular. If you see whether the publication of Alan Turing's famous article on computational and intelligence, and Turing thesis is states that minds have intelligence provided to be a strong support of the computational theory of mind. That Turing machine is set to be a program in abstract symbolism. Although we have seen in the different commutating model of mind, there I have briefly explained what is this computational through mind. We will be explaining very large relation to how this computation theory of mind play (( )) role in philosophy of a mind especially in contemporary issues in problem mind and recognitions, because it is the one of most important and scientific explanation of the computational thesis of mind.