Contemporary Issues in Philosophy of mind and Cognition.
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Lecture No. # 12
Varieties of Materialism.
(Behaviousim)

Today we are going to discuss materialism. Materialistic theory of mind is a theory which talks about mind and brain are two identical entities, materialism advocates that matter is real and matter causes the mind, hence mental is identical with the physical, this is simply the theory of materialism. Today we are going to discuss about varieties of materialism meaning, thereby we will be discussing about behaviorism, we will be discussing about functionalism and identity theory. We have already mentioned about behaviorism in last two classes I think. Particularly in the last class I did not talk about the philosophical behaviorism of the trail, I would like to further this of behaviorism, today, little elaboration is necessary. And as you know Ryle's theory of mind or Ryle's conception of mind is not really the behavioristic notion of mind, Ryle does not talk about mind even identity.

Ryle does not talk about mind body identity, whether Ryle in his philosophical cases he tries to argue that there is nothing mystical about the human mind. So, there is one of the positions I think we should we should take this seriously, in the other one which Ryle says, the mind, as it is been argued by the ducat or other religious theories, makes it a substance. I mean, this theory argue that mind is a substance and Ryle is against this substantive motion of mind. So, behaviorism and mind body identity theory takes up three important questions.

Some of the important questions

- Are mental events distinct from physical events?
- · Does thinking occur to us?
- What will happen if you are able to literally see the mental states?



The first three important questions, I think this are main formulations of course, but I would like to share with you that, this questions are very important to us when we talk about identity theory, when we talk about behaviorist of function theory of mind. The first question says, are mental events distinct from physical events? I mean if mental and physical are real, then what is the connection between the two? I have mentioned earlier that mind and brain are causally related in the case of identity theory of mind. So, the answer will be even if they are distinct, they are closely connected, mind can be explained in terms of certain functions of the brain, so that would now be thesis of functionalist, how the function involved in the brain.

Now, if when if when see the example of identity theorist talk about, know we the concept of mind or wake up this particular question, then they say that this is the state to state identity, if there is a mental state, then mental state is identical with brain state. So, there is a state to state identity or there is a multiple you know brain states and multiple brain state can cause mental state or few mental states. So, that is to be you know seen if we are posing this questions, are they two different entities, if I all there are two different entities then there is a certainly a relationship between this two entities. Then the second questions that is very important for us, does thinking occurs to us.

Now, thinking is a mental activity according to the Ducat and those who supports that, there is something called mind identity is real, for them thinking does not occur, thinking is not caused by any kind of physical processes, either mind is self sufficient to cause action or to cause behavior. So, mind is a mind is a substance itself, so that is very important, so the identity theorist and behaviorist would try to reject this thesis that mind is not self caused. So, then for this question is very significant to us that is mind is not caused by the brain processes or a mind is caused by brain processes, we have to see this, you know it explicates this question and try to see whether a causal, a thesis that mind is caused by brain processes or thinking occurs because of certain complex causal function of the brain, that we need to look at it.

Many functionalist would like to ageist to this crises that thinking is our intelligence or certain mental states are occurring out of certain complex, physical, chemical processes that are happening in the in the brain. So, therefore, the very idea of the occurrence of conciseness or the occurrence of mind or the emergence of mind let me put it this way, the emergence of mind is certainly having a causal route.

So, that is what is very significant to us. Then let us look at the third question, the third questions tells us what will happen if we are able to literally see the mental state? I mean because what we are able to find out from this mentalistic crises is that that we try to prove that there is nothing called mind, because it is un observable phenomenon, then it does not follow in that you know the frame work of the scientific investigations, but maybe it is just a feeling, maybe it is just a kind of you know effect that we are realizing. Say for example, may experience of certain particular them or a state oblique, shock affairs is a kind of an outcome or is a wide product of a certain physical processes.

So, from this point of view if we look at the concept of mind then mind is not an observable phenomena, either it is an un observable phenomena, it is therefore in significant to us to talk about mind. So, what we rather need to investigate here is the kind of physiological processes that are involved and what are the states and how this involve states are connected and how they are functioning or what is the connective function of different parts of brains. And brain states a different parts of sub systems, how they interact with each other and how they produce mind or conciseness, so that is become you know a central thesis for this materialistic theory of mind. Now, let us talk about behaviorism in a particular. You know as I mentioned earlier that behaviorists notion of mind advocated by wattson and many others, they talk about behaviorism, that it is true behavior we are trying to understand the mind.

So, mind is just a kind of a you know is pre suppose that there exist a mind, we do not really seen minds, we do not really observe mind, what is observable and what is measurable, is something you know important for a scientific understanding of mind. So, behaviorism, particularly the experimental behaviorism talks about how human behaviors are recordable, how human behaviors can be measured and how they can contribute for the formulation of a particular law, that you can call it such as psycho physical law or law which will help us explaining or predicting human behaviors. So, behaviorist where really concerned about measuring human behaviors and that is very significant for them. And look at how churchland summarizes the concept of mind advocated by the behaviorist.

(Refer Slide Time: 10:47)

Behaviourism

- Mind is the behaviour of the body. The body therefore constitutes the mind.
- "By behaviour behaviourists' mean the publicly observable, measureable, recordable activitiy of the subjects at issue: bodily movements, noise emitted, temperature changes, chemical released, interaction with the environment, and so forth." (MC, p.88)

So, according to churchland my behavior by behaviorist mean the publicly observable, measureable, recordable activity of the subject at issue. Now, you can call it a human subject, so humans subject is used or produced bodily movements, noise emitted temperature changes, chemical released interaction with the environment and so forth. So, it is the human subject which are you know really issuing and all this features are or properties or you know symptoms can be measureable or recordable. So, for example, what kind of bodily movements one make and one is suffering from fever or one is suffering from headache. What kind of legal processes are involved, which neural is fired, I mean as you all know, whenever we have a pain behavior, behaviorist should say that see fever pain is activated. So, that causes pain, so and how, you know we talk about

noise emotions, the chemical released in the brain, you know all these are very important when we talk about the measurement or recording behaviors of the human subjects.

Now, what is important is therefore to formulate a law and you know to formulate laws that would explain human behavior is not a not a easy task, because human beings behave in different context, in different fail. So, therefore, environment is important, in what environment a human subject, a particular human subjects behaves in a particular way. So, therefore, there is a there is certainly you know reference to the external world, the world that can cause or produce certain kind of behavior or has a kind of a casually influence on the subject to produce certain behavior.

So, this causal mechanism is something very significant for the behavioristic you know understanding of human mind. So, once those causal relations are pointed out probably that will also contribute for the formulation of laws, so it is not that we need to record only in what context somebody cries or what context somebody says that you know he has headache or something like that, that is indeed important, but what is still need to a count is that in what circumstance human beings behaves. So, what is a kind of an external involvement where he is been put, so that if he is putting in a particular context then he probably have like this, he is putting something other context he would probably behave like that.

So, if the contexts change, then the behavior also would lightly to be changed. So, in those directions behaviors are also taking you know ha as a recordable fact, are also taking account.

(Refer Slide Time: 14:18)

What to be understood?

Understanding the actual and potential pattern of behaviour is taken into account to understand the mind.

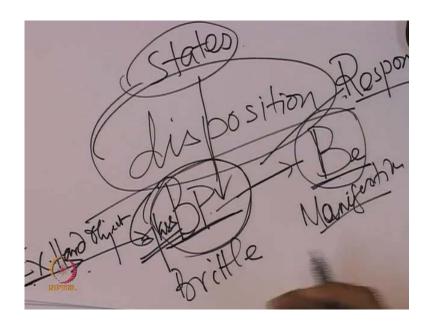
 Emotion, belief, desire, etc. are not "ghostly inner episodes", rather they are about observable behaviours.



So, now, let us talk about what to be understood from this. You know there is a certainly a kind of a causal connection, connection which is external, I mean the cause which is external and then if it is impinging on the subjects, it produces, but what is the structure of the subject? What constitutes the subject? The subjects must have some kind of a potentials, now unless there is subject of same kind potential to produce a particular behavior, then if this potential absence in the particular subject, then probably it will not have that kind of a, you know it will not produce that kind of infect. So, that is what is the potentiality of the subject, that is how the subject is constitutes.

So, what kind of physicality of the being we are talking about, so that is what is important, so understanding the actual and potential pattern of the behavior is taken in to account to understand the mind. So, we are not only trying to understand what is the actual behavior, whether what is the potentiality and how does you know we can develop a kind of a pattern from you know by recognizing those potential conditions and then formulate law. So, that is why it is importance to that, so innocence, belief, desire, etcetera and are not ghostly inner episodes as this the particularly, typically you know Rylean terms, that mind is an identity, but it says these emotions that human beings are expressing or the beliefs that as a mental state which is there or a desire that is another mental state, another kind of mental state are there in there with us are not really ghostly episodes of human mind.

(Refer Slide Time: 16:30)



They are potential there, I mean, I mentioned about this particular term called disposition, now this position is a is something very important, now when we say that P is a kind of a disposed state, dispositional state, so P has the potential to to create some kind of behavior, I mean the behavior is a kind of a manifestation of, manifested in the sense that you have to external cause and that external cause you know is impinging on the kind of the body which is you know potentially you know capable of producing a kind of a behavior. So, the behavior is a kind of a manifestation, it is and had even this example, I remember that I talked that out brittle the glass. So, for example, this particular body is a is a glass ware, let us say this is a glass ware, this is a glass and this particular glass is as we know is brittle. Now, if it is hit by an external hard object, if we have an external hard object hitting this particular object or the the body, the the physical structure of the glass, then the glass brakes down.

So, that is the manifestation I am talking about and that is what Ryle is was concerned with. Ryle says that when we talk about behaviors, we find that it is behaviors are observable and that will give a clue to understand what kind of dispositions we all have. So, believes, desires are dispositional states, they are dispositional states and this dispositional states are potential there, their composed in in a particular state. And whenever they encounter, whenever they come across a kind of an external cause and that external cause can give rise to a kind of a response, there some kind of a response to this.

So, there is a cause and there is there is a mechanism and that mechanism produces you know some kind of an effect. So, it is with this kind of a casual interaction we need to understand that there is nothing called hidden, there is nothing hidden about the human mind, whether human mind is exhibited, you know by you know whether human mind is exhibited to us in the form of behaviors, so that is what is talking about. And I also mentioned that why Ryle or other behaviorist are consult with the non existence of mind, the mind is substance to be recognized as a kind of a pseudo physical identity, it is an epiphenomenon for them.

(Refer Slide Time: 20:14)

Logical Positivism

- Logical analysis of language of science
- General application of logical method without strictly adopting formal procedures Development of logical apparatus
- Influence of empiricism

So, it is big preside because the kind of influence from logical positivism. Now, logical positivism as you know concerned with this question of the meaning, and as I said what is important in the case of meaning for a logical positivity is the logical analysis of the language. So, logical positivists were influenced by the successes of science and they adopted scientific method and verification is a you know is a kind of a method used to explain how meaning is being constituted within you know using a particular theoretical framework. So, if you say that mind is this and mind can cause certain behavior or certain extends, then they would like to look at what are this external, they would like to verify, where we try to find out whether there is an evidence to this particular statement that mind is causing action.

Now, if that is not verifiable then it becomes a kind of a pseudo problem for them. So, the partition dualism according to physiological positivist is responsible for advocating certain pseudo problems in philosophy of mind and therefore, this problem have to be eliminated, this problems are to be discussed as non sensual problems, they are really not you know in the problems, whether they are pseudo problems.

So, this kind of a development which was happening in the twentieth century, in the particular in the mid of twentieth century, was something very significant when some of the behaviorist are also you know coming up with evidences. In the particular experimental behaviorist coming up with the evidences that yes in such and such context human mind would behave like this. So, there was also you know kind of ha things which say for example physiology was talking about, not the experimental physiologies when talks about the analysis of human behaviors, how the we can analyze human behavior referring to certain state of mind. And according to Froid there is something called an unconscious state of mind, one may ask the questions, does Froid talk about the mind at all the way ducat is theorizing in the mind, the answer is no. The Cartesian mind is a thinking mind, the Cartesian mind is fully conscious mind, you cannot imagine this mind without you know consciousness.

So, therefore, the machine of unconscious is something infect, indirectly supports the behaviorist notion of mind or the materialistic notion of mind. So, we would come back to that you know what are the conditions, you know mean culture of materialism which was there, you know which help materialism florist or materialistic theory of mind to florist, we will talk about it little later.

And what is important here is to taken out of is that Ryle was probably influenced by physiological positivist. So, Ryle's philosophical behaviorism when when we talks about the the meaning of the concept of mind, the kind of language which was used to requires mind, but certainly you know give us impression that you know probably Ryle was influenced by the development that was happening in particular philosophical circle called physiological positivism. And you know this circle and this law is also known as vena circle and I have mentioned about this few philosophers who were part of a vena circle as a higher noticely (()) and element can stand a very influential in developing new ideals about the concept of mind.

So, that is very important and if you look at positivism, then you can also historically state that how logical positivism was radical empiricist and that is something significant. And you know Hume, who is considered one of the radical empiricist and had this idea that there is nothing called mind and Hume was really rejecting the rationalist that mind is substance.

(Refer Slide Time: 25:40)

David Hume

- "Meaningful statements about the world must be expressible as statements about the actual and possible observations."
- · Statements like
 - Bachelors are unmarried
 - 3+2 = 5
- Above statements are concerned with concepts which are used to describe the world.
- Substantive assertions about the world are made with statements of matters of fact, and the assertions that concerned only with the conceptual or linguistic framework in terms of which we form substantive assertions are statement of relation of ideas.

So, for Hume meaning full statements about the world must be expressible as statements about the actual and possible observation, this is Hume's notion, that the how when we talk about meaningful statements, then it should expressible in terms of actual or possible observations. That was something very significant and if you I mean bachelors are unmarried or 3 plus 2 equal to 5 are certainly statements, which are considering meaningful in a context, but look at Hume's and particularly this statement of Hume, the substance about the world. I repeat the statements of matters of fact, so and all matters of fact are observable facts and assertions that concerned only with the conceptual or linguistic framework in terms of which we form substantive assertions or statements of relation of ideas, there are certain matters of facts and of ideas.

So, we talk about 3 plus 2 is equal to 5 and we certainly talk about how mathematical prepositions or mathematical statements are possible or how this statements are formulate based on the evidences, based on when, how do we count numerically certain objects like 1, 2, 3 apples and 2 apples you know make 5 apples. So, that kind of

evidences, because you do not really see the numbers there, you know as an existing object like apples, we really you know count them and that with the help of the number. So, that gives an idea or relation of ideas probably humans concerned with and the verifications theory of meaning is derived from this typical human you know position about the concept of mind. So, logical positivist where radical empiricist in that sense and you all know that different Hume talked about mind, he says when we're I tried to locate, just summarizing it, when ever tried to find out the mind, I only came across or stumbled again and again on my experiences.

So, empiricist take experience into account, according them experience is the foundation of knowledge, so the empiricist epistemology tried to point out that how experience is important and it is this experience is important. So, for example, that I am looking at you is important, it is not important how or what causes this experience, is this experience a voluntary experience? That is, that has not bothered Hume much, the way consult for Hume was to take experience as a kind of a street phenomena and see that you know where is necessary connects between see the mental and this a physical.

(Refer Slide Time: 29:57)

Carl Hampel

- Meaningful psychological statements can be translated into propositions of physics
 - Psychology is an integral part of physics
 - Only underlying signs/ symptoms of psychological states seem to lie behind the behaviour we observe

The unobservable mental phenomena are the complex psychological cause of behaviour.

So, let us look the experimental physiology which was you know humble also, was interested, I am trying to give what are the philosophical positions we have just had, I think when we read behaviorism, we have just theory of mind. You must read little bit of logical positivism that would help to understand you know how behaviorism is

influenced by logical positivist. Carl Hample is also very you know put an important thesis and the thesis like this, that is the meaningful psychological statements can translated into propositions of physics.

Look at the psychology in which experimental psychology tried to and look at human mind, so psychology laws are the similar to the parts of physics. So, when this psychology is a science of mind they were really trying to translate psychological laws or try to see that those psychological laws are formulated systematically at with physical laws. So, that was you know Hamples and reading of the development, that was happening in experimental psychology.

What do you understand? You understand only the underlying signs or symptoms of the mental states and then try to observe that part are the behavior caused. So, these symptoms and psychological states are observed, scientific observation are carried out with the help of scientific apparatus, those apparatus are important to recognize the science and the symptoms. So, the observable fundamental phenomena complex psychological cause for the behavior, so because what they find is certain kind of an physical state, the existence of the physical state or the opposition of the physical state or the kind of a chemical secretion that is happening in the brain or the kind of neural firing rather neural trying to change you know signals by radiating certain electrical wires, electrical magnetic wires. So, that was you know a kind of important observation which experimental psychologies were talking about.

Now, Hample, therefore is very important when he talks about the development of physical methods in experimental psychology.

(Refer Slide Time: 32:30)

Psychology

- · Introspective Psychology
- · Experimental psychology
- Application of physical methods:
 - Mass, wave-length, temperature, field intensity, etc.
 - Scientific psychology should limit itself with the study of bodily behaviour with which human and the animal respond to changes in the physical environment
 - every descriptive or explanatory step which makes use of such terms from introspective or understanding psychology as feeling, lived experience, idea, will, intention, goal, dispositions, epression being prescribed as non-scientific.

Let me and talk about little bit on this reference, as I mentioned earlier that psychology was only the concerned with an analysis of mind. So, probably the (()) psychology, it can be called introspective psychology, where as the kind of psychology which was developed by wattson, schemen and (()) that can be called experimental psychology, where experimental psychology is called as proper scientific psychology, because it was concerned certain observation phenomenon. Mass, wave length, temperature, field intensity are certainly observable phenomenon. So, bodily behavior with which human and the animal respond to changes in the case of physical environment, their existence in the physical environment are taken in to consideration. So, experimental psychology was mostly concerned with scientific evidences and they were really not describing what the mind is, whether they were only concerned with explanation of the mind. So, the concept like introspection, experience, intention are considering as you know as part of the dispositional capacity of brain.

Nature of expression

- 'p' use of concise and complete description of state of affairs.
- Meaning of 'p' is established by the condition of its complete verification.
- · 'p' not verifiable 'p' is a pseudo proposition
- · Finding out the symptom (specific event) of 'p'
- symptom (specific event) taking place in the body

So, nature of expression as I mentioned earlier, if P is used to concise and complete description of particular state, then this P, which represents a kind of expression of the mind, the fundamental states, (()) desire is a fundemental state and these can be expressed language now which is presented language. So, those if I tried to verify P I must look at what kind of brain state it is. So, verification will talk about the cause that is causing a kind of behaviors, a symptom that is causing, a symptom which is as a root and the root is a kind of an event which is taking place in the brain, if that event is not verifiable, then we consider that event is a kind of a pseudo or the expression is kind of a pseudo state.

Now, the experimental psychology was advocated by Hample, and a something very significant in the sence of that Hample was interested in looking at the methods which would help us explaining the behaviors, human behaviors. That was the experimental psychology which was concerned with, now this methods are prepared, this methods are formulated at power which as I said the power with the kind of a scientific methods and which we find in natural sciences, particularly physics. So, the natural laws and the psychological laws are almost identical in terms of their you know casual power, so the casual power for explaining for the mind power or causal power explaining the human behaviors.

Methodological Behaviourism

- Behaviourism attempted to put psychology in a respectable scientific footing - emphasizing the objective observable behaviour
- Laws of behaviourist psychology are based on the stimulus of the organism with the output responsive behaviour.
- · No inner qualitative mental phenomena exist
- Behaviourism is a method , not a specific ontological detrine.

So, the methodological behavior, you know try to attempt to put psychology in a respectable scientific footing, it emphasizes that the human behaviors are observable and there are laws which can you know explain that what is the kind of stimulus received from the environment and what kind of behavior it can be produced. So, there is a kind of a stimulus response theory, was developed by the experimental psychologist. As I as I mentioned earlier in the case of a you know the body brittle example, where we can really talk about there is a kind of a stimulus and there is a kind of response and you have particular stimuli P and P 1 is caused.

So, this kind of you know we find that frequency is more and it is also taken in a particular context or particular environment this happening. So, then that helps them to formulate the laws, the regularity of the occurrences is very important in this context. What is nullified is this, that there is no inners or there is no inners politetive experiences, these experiences are not qualitatively significant, either what is significant is what is the stimulus received by the body, what is this stimulus received body and how this body you know cause the responses.

So, behaviorism, particularly experimental behaviorism started talking about or formulated certain methods to understand the change in the behavior or to understand mind in terms of behaviors. In fact it explained those this positions with the help of the disposition and the certain laws or physical laws called them psycho physical laws.

Because they are not clearly physical laws, they are psycho physical laws behaviorism does not deny completely that there is no mind, there soft to this idea that is something called mind. But their intention was very clear; they were trying to look at mind from a scientific point of view. So, that is why the behaviorism is more interested to talk about a scientific understanding of the mind, both philosophical behaviorism and the experimental behaviorism where theoretically supporting each other.

Because in the case of Ryles philosophical behaviorism Ryle was trying to reject the semantic significance of the mental and various mental phenomena are considered as pseudo phenomena, because they are not really real. And what is real is only certain dispositions, which are considered real and whereas, in the case of experimental psychology, you will find that this reality is taken more seriously. In the sense that they are trying to record those observable facts, those evidences which would help them to from scientific laws and with the help of the laws they were trying to explain the behaviors.

And once when you locate the laws you find that there is magnification of mind, so both philosophical behaviorism and experimental psychology was trying to nullify the Cartesian substantive notification of mind that is very clear. Now, the question is whether there is a mind at all, to this questions the answer is no, in the sense that if there is a mind, that is un observable phenomenon and this mind is not seen. So, this mind is seen then how can we talk about the mind. So, what is observable is real and it is through symptoms we can formulate the laws, so that is what something significant is.

(Refer Slide Time: 41:02)

Philosophical behaviourism

- · Dispositional property
- · Behaviour is caused by Mental disposition
- · X is water soluble
- Definition: 'if x were put in unsaturated water, then x would dissolve'
- Mental states have multi-tracked dispositions

And there is another point which is to be noted is here, when we talk about disposition and dispositional properties we must look at that is mental disposition like desire, believe or fear, emotions, etcetera, there can be multi tracked dispositions. It is not that if there is a desire state, so, for example, there is a desire state and this desire state can cause particular kind of behavior, there is no one to one correspondence always, but there can be a kind of a multiple fact evidences were you have various things causing another behavior. So, this kind of a relationship which also possible, so we need to locate the concept of disposition very clearly and I think you would read Ryle's famous book the concept of mind, that is one of the classics written in the philosophy of mind. For Ryle has a specific factor on disposition and I am sure that will enlighten you to understand how disposition are important to talk about human behavior. So, Ryle's philosophical behaviorism as we know is something very significant, were we talk about head heck of solubility, etcetera.

(Refer Slide Time: 42:28)

Philosophical Behaviourism

- Having states of mind, not only in virtue of what the agent does, but also in virtue of what he would do, what he is disposed to do.
- · Headache ---- disposed to moan
- · --- rub your head
- seek out aspirin
- · Solubility ---- dissolved in water
- · Behaviour is a manifestation of certain disposition
- · Mind is being disposed to behave
- Hence, the intrinsic qualitative nature of states of mind is
 Hence, the intrinsic qualitative nature of states of mind is

That everything is you know potentially there and that can manifest different behaviors and different actions. And what was important Ryle or the behaviorist is this, there is nothing called mind which is real and it is to be considered as one of the substances, so that was something significant.

And the absence of mind or the absence of inner experiences are also nullified, so the idea that the mind is essentially there and that constitutes the experiences, is something in significant for the behaviorist, both experimental behaviorist and the philosophical behaviorism. Both were trying to reject this thesis that there is no kind of inner experiences and in this inner is private phenomena is to be detected. So, there is no privacy embedded in the discourse of mind that was very significant when we talk about the behaviorism as one of the theories of materialism. Because materialism as I mentioned earlier has many other theories, you can talk about brain mind identity theory. According to this I would talk about brain mind identity theory and functionalism in my next classes, but and there I would be discussing about armstrong (()) and see that how armstrong and plays talk about mind, brain identity theory, do they really reject the mind, that was the you know and that will be the questions, which will discuss in the next next class; thank you.