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## D. M. Armstrong on the Identity Theory of Mind

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### Abstract

*The Identity theory of mind occupies an important place in the history of philosophy. This theory is one of the important representations of the materialistic philosophy. This theory is known as "Materialist Monist Theory of Mind". Sometimes it is called "Type Physicalism", "Type Identity" or "Type-Type Theory" or "Mind-Brain Identity Theory". This theory appears in the philosophical domain as a reaction to the failure of Behaviourism. A number of philosophers developed this theory and among them U. T. Place, J. J. C. Smart, Herbert Feigl, D. Armstrong, and David Lewis are prominent. The main thrust of this theory is states and processes of the mind are identical to states and processes of the brain. In this paper, I am trying to delineate the view of Armstrong on the nature of mind.*

The Identity Theory of mind came into existence as a serious philosophical thesis in the late 1950's. Although this theory was introduced by the psychologist E. G. Boring in 1933, it took a long duration of time to be accepted as an alternative theory in philosophy. The pioneering works, which deserve credit for the acceptance of the philosophical version of this theory in philosophical domain, were - U. T. Place's "Is Consciousness A Brain Process?" (1956), Herbert Feigl's 'The "Mental" and the "Physical" (1958) and in 1959 J. J. C. Smart's paper "Sensations and Brain Processes" (1959).

D. Armstrong has great contribution to the Identity theory of mind. In his preface to the book *A Materialist Theory of Mind* he admitted that almost from the beginning there were philosophers who were materialists about mind. But this materialist

analysis of mind could not attract the philosophers of twentieth century till the appearance of U. T. Place, H. Feigl and J. J. C. Smart. Armstrong acknowledges Smart's influence on his thought with regard to the analysis of mind- body relation. He says, "Professor J. J. C. Smart converted me to the view, defended in this book, that mental states are nothing but physical states of the brain. He in his turn has acknowledged the influence of U. T. Place..... My intellectual debt to them remains profound."

Armstrong categorically and enthusiastically announced that he was and is happy to say that mental states and the states of the brain are identical, and this identity is a contingent identity. The Identity theory of mind is regarded by many philosophers as really paradoxical. They say that this theory of mind is very extraordinary. In this connection we may

refer the view of A. G. N. Flew who, in 1962 writes: “In the face of the powerful and resolute advocacy now offered *this admittedly paradoxical view* can no longer be dismissed in such short order.”

Armstrong too admits that when he first heard this theory he also found it paradoxical. He also thinks that not only he himself but many other philosophers shared the attitude of Flew. But he is sure that this attitude is confined exclusively to philosophers only. Like the first year university students they usually thought that it is not possible to regard mind as the brain and that is why they regard it as self evident to hold that the Central – state theory is false. But Armstrong holds that such a view of philosophers is not shared by others and it is evident that because of the potentiality, this theory enjoys wide support outside philosophy.

Armstrong holds that whenever we speak of ‘brains’, ‘brain-storm’, ‘brain-washing’, ‘brain-child’, racking one’s brains’ we actually speak about the mind. And if we ask the people who have general education and without having any philosophical training that whether mind is brain or is it separate from brain, many of them will answer that mind is brain. Some will in return, ask that if mind is not brain then what it is. Armstrong believes that there are persons who deny this fact and their denial is based on theological reasons. On the contrary, there are scientists and particularly the psychologists, who do not regard the Central-state theory paradoxical. Among them Hebb (1958) is a representative of this group. In his famous book ‘Text Book of Psychology’ he writes;

“There are two theories of mind, speaking very generally. One is animistic, a theory that the body is inhabited by an entity – the mind or soul – that is quite different from it, having nothing in common with bodily processes. The second theory is

physiological or mechanistic; it assumes that mind is bodily process, an activity of the brain. Modern psychology works with this latter theory only. Both are intellectually respectable (that is, each has support from highly intelligent people, including scientists), and there is certainly no decisive means available of proving one to be right, the other wrong.”

Armstrong believes that to maintain the unity of mind and body, the identity theory explains it in a very simple way. According to him, Brain is the pilot in the vessel as because physically it resides inside the body. To say that mind is ‘in’ the body and to say that mental processes are ‘inner processes’ are completely natural. He used the word ‘in’ primarily in spatial sense. But this sense of use of the ‘in’ must be denied by the dualist according to whom mind is a mystery and thus in any gross material sense mind is not in the body.

Armstrong says that as the attribute and the behaviourist theories can provide a simple principle of numerical difference for minds, such as, difference of place, so he expects that this can be provided by the Central-state materialism. He also believes that the interaction of mind and body can be explained by this theory in a very simple way. This theory derives the conclusion that mind and body interact on the ground that brain and body interact. According to Armstrong, from the implication of the Central–state theory we are allowed to say that it is not that we have a mind or that we do not have it, there is no sharp break because in a gradual way mind comes into being. This conclusion is drawn by Armstrong on the ground that there is evolution of the species and development of the individual and, in this process, in a gradual way brain comes into being. Thus Armstrong believes that the especial advantage of this theory and also of

behaviourism is that they represented the world-picture in a simple way.

But Armstrong also points out that there is a basic difference between the Central-state theory and behaviourism. The Central-state theory admits the existence of inner state where behaviourism denies. The Central-state theory holds that these inner mental states are physical states of the brain.

It is already mentioned that Armstrong developed the Identity theory originally advocated by Place, Feigl and Smart. But before his positive contribution to the theory, he delineated some of the serious objections of this theory that might be raised by the critics and subsequently he tried to meet these objections.

In the first place he considered the argument that any theory of mind to be satisfactory must have to admit the logical possibility of disembodied existence of mind. If the Central-state theory argued that mind is the brain then this theory does not admit the disembodied existence of mind as because there is no brain without body.

Secondly, an independent existence of brain states and processes could be conceived as these seem to be things. Even their existence could be conceived as, (e.g., patterns of electrical discharge in space) without requiring the existence of any brain. But it is not clear how the Central-state theory can account the mental states because these have no independent existence.

Thirdly, regarding intentionality, i.e., the power of the mental states to refer to things other than themselves is not explainable in the account given by a Central-state theory. Armstrong believes that this is not a problem only with Central-state theory, but no theory prior to it is able to give us a satisfactory solution on this problem.

Fourthly, it is found in the theory of behaviourism that in the some way or other behaviour or disposition to behave does

enter into the concept of mind. But what the views of central-state theory are with regard to this mental feature or how this theory does justice in regard to mental feature of behaviour is not clear.

The above mentioned problems were raised by Armstrong in his book *A Materialist Theory of the Mind*. But he also mentions some other drawbacks of the theory and their remedies. He claims that the difficulties of the central-state theory mentioned above will become pale in front of the present problem that he will raise as because this is a more powerful line of argument. He considers an argument that could be regarded as conclusive against the claim that mind is the brain. Consider the question whether the statement 'the mind is the brain' is a logically necessary truth or this statement is simply contingently true. Whether the defender of this theory desires to assimilate the statement with other statements like 'An oculist *is* an eye-doctor' or '7+5 *is* 12' on the one side and on the other side they try to assimilate the statement with 'The morning star *is* the evening star' or 'The gene *is* the DNA molecule'. Armstrong holds that it is not so easy to answer the above question as because it is a dilemma. To him, the statement 'The mind is the brain' is certainly not a logically necessary truth. In this connection he refers Aristotle who delineated brain as an organ which keeps the body cool and nothing more. And in this description of brain, Aristotle certainly cannot be blamed of denying a necessary truth, mistake although he committed, it was an empirical mistake. Armstrong suggestion is that among the contingent statements of identity we must have to find out a model if 'mind is the brain' is a true statement. The statement that 'the mind is the brain' must be compared with some other contingent assertion of identity like "The morning star

is the evening star' or 'The gene is the DNA molecule'.

Armstrong claims that if it is admitted that the statement 'The mind is the brain', then logically independent explanations of the meaning of the two constituting words 'mind' and 'brain' must be possible. In this connection he refers to the example of a contingent statement that 'the morning star is the evening star'. Here the meaning of the two phrases - 'the morning star' and 'the evening star' - can be explained like this way - a very bright star that appears and can be seen on certain mornings of a year in the sky is called 'the morning star'. Similarly, a very bright star that appears and seen on certain evenings of a year in the sky is called 'the evening star'. Here the meanings of the above mentioned two phrases can be given by logically independent explanations. On the same line of argument Armstrong mentions another statement that "The gene is the DNA molecule" and he claims this statement to be a contingent one. Here the meaning of the word 'gene' and the word 'DNA molecule' can be explained in the way that - gene is a principle that resides within us and because of which hereditary characteristics, like colour of the eye, are transmitted from one generation to another. The phrase 'the DNA molecule' can be meaningfully explained by saying that a certain type of molecule constituted by very complex chemicals and the nucleus of the cell is formed by this. Thus here also the meanings of the two phrases 'gene' and 'DNA molecule' can be given by logically independent explanations.

Thus Armstrong's conclusion is that to be meaningful to say that 'The mind is the brain' is to say that the meanings of both the words 'mind' and 'brain' can be explained in these ways. He is sure that in that case the word 'brain' will not create any trouble. But the problem is with the word 'mind'. In a quasi-ostensive way it is possible to explain

the meaning of the term 'brain'. But in the case of 'mind' to attempt to give a verbal explanation or ostensive definition of the meaning of the word is impossible. In that case he must depart from a physicalist view point. This problem is a great one that the central-state theory is facing.

Armstrong says that in virtue of certain physical characteristics of an object we call it brain and it is found inside the skull of the people as a sort of certain physical object. But if we treat this physical object also as mind we must have to add some *further* characteristics to it by virtue of which it is so-called. Because, the meaning of the word 'brain' and the word 'mind' are not same. But the question remains as to what this further characteristics are that are not found in the brain.

The above mentioned problem is stated by Armstrong in another way. According to him, it is the view of the central-state materialism that to be *aware* of our mental state is to be aware of mere physical states of the brain. But it is certain that we are not aware of the mental states as the states of the brain. These mental states, according to Armstrong, are of a quite peculiar sort - these are mental.

One of the physicalists, Paul Feyerabend, was daunted by this problem. His suggestion on this issue is that the world-view that is recognized by the materialist does not allow him to state any statement that may assert or imply the existence of mind. Thus talking about mind by a true Physicalism is an intellectual loss but it should talk simply about the operation of the central nervous system.

In order to have an explanation of the concept of mind Armstrong refers to the psychological way of thinking about man. In picturing man psychologist holds that man is an object upon which certain physical stimuli continually act and certain behaviour are elicited from him because of these

stimuli. Thus there is a causal chain between the stimulus and response and mind falls in between this causal chain to mediate our response to stimuli. But central-state theory says that it is nothing but physical processes in the central nervous system that falls between the stimulus and response. This theory even does not believe that mind is an epiphenomenon of stimulus and response.

Thus, according to Armstrong, solving of the problem of 'mind' is within our hand if we think of the psychologist's picture outlined above. From the psychological point of view a particular mental process is the effect of certain stimuli and also cause of certain responses and both of these processes are within man. The concept of mental state is that which is brought about by certain stimuli and which in turn brings about certain responses in a man. Armstrong points out that it is science to discover the exact nature of mind or mental states. He also agrees to the modern science the supposition that the central nervous system or more crudely and inaccurately, but more simply, the brain performs the task of mediator between stimulus and responses.

So far we have explored Armstrong's analysis of the issue of mind and brain. After explaining his own view he considers the view of Place and Smart which are called the classical exposition of central-state materialism. Armstrong points out that both of these thinkers consider only the side of stimulus, but not response. In this connection he quotes Smart (1959), "When a person says, 'I see a yellowish-orange after-image', he is saying something like that: *There is something going on which is like what is going on when I have my eyes open, am awake, and there is an orange illuminated in good light in front of me, that is, when I really see an orange.*"

Armstrong believes that having an orange after-image is explicated by Smart in terms of stimuli alone. Here in a suitable condition an orange acts upon a person. He opines that similar line is taken by Place also. Contrary to the view of both Place and Smart, Armstrong desires to defend a central-state account of *all* the mental concepts. According to him, it is our natural tendency to distinguish between thought or belief and the expression of thought or belief in words or action, between emotion and the expression of emotion in action, and also between the intention or aim and its expression in action. When something is squeezed out, we literally say that 'something is expressed' as we find that from olives, oil is expressed. If the same is applied to the mind, the picture of the inner state is that it yields or that it brings about out behaviour. It is sure that if this picture is to be rejected, there must be some strong reason behind it. There is hardly any reason that strong to reject that picture.

Explaining introspection Armstrong says that it helps us being aware of sense-impressions, sensations and mental images. These are regarded by him as most obtrusive sort of inner items. But it is true that sometimes we do not have thoughts and intentions. In that case they may be imagery without accompanying sensations. In analysing the position of Place and Smart in this regard Armstrong says, "I think, indeed, that Place's and Smart's position is a mere hang-over from the Sensationalism of the British Empiricists which attempts to reduce all actual mental items to impressions, images and sensations."

Armstrong holds that although both Place and Smart did not give an account of all mental concepts but subsequently Smart has changed his views and accepts all mental concepts in Central-State account. Armstrong believes that if someone admits inner mental states he will have to give all

the mental concepts in a central account and it is actually a theoretical economy. Armstrong says that the original ground chosen by Place and Smart on perception is inadequate as they explain it in terms of the characteristic effects of certain stimuli. This point is regarded by Armstrong as partial truth. A full truth about perception, according to him, is that a person can do certain things. In that case a person can systematically discriminate between certain classes of objects in his behaviour. A person's lacking in perceptual powers is picked up by certain inefficiency in his conduct. So, according to Armstrong, both stimuli and responses are equally important in perception.

After considering the views of Place and Smart Armstrong has given his own view on the concept of mental state. He says,

“The concept of mental state is primarily the concept of a *state of the person apt for bringing about a certain sort of behaviour.*”

Armstrong does not regard that mind is behaviour but he points out that mind is the cause of behaviour. This does not make him a patron of behaviourism. He denies himself to be a proponent of behaviourism as he forbids us to identify mind with behaviour. He identifies mind with the inner principle of behaviour.

Armstrong holds that for the sake of argument if we accept the view that to talk about mental state is to talk about inner states of the person apt for bringing about certain sort of behaviour then obvious questions come up about the nature of these inner states and what these inner causes are. Armstrong says that to answer this question is not an easy task and no logical analysis can help us in this regard. In his view only a high-level scientific speculation can solve this problem. But yet he puts forward

different accounts of the mind that have been advanced through the ages.

According to Armstrong, primitive view about the mind or spirit is that it is breath which makes a difference between a living man and a corpse. While making difference between the two, this theory makes difference between man and other sorts of things. Man differs from other living things in essential respects. A living man's behaviour is extremely different from other things, but the difference between corpse and other material object is little one. Moreover, the most essential features which make a living man different from a corpse is his breath. This breath or air is the spirit or mind which is responsible for inner principle of man's unique behaviour.

Other suggestions about the nature of the mind are that it is a flame in the body or it may be said that a collection of atoms which are specially smooth, mobile and scattered throughout the members of the body. Again, mind is thought of as a spiritual substance, or regarded as a set of special properties of the body. These properties cannot be reduced to the physico-chemical properties of matter. The irreducible properties are supposed by the Central-state Materialism as a physico-chemical working of the central nervous system.

Armstrong says that many features of the statement ‘The mind is the brain’ can be understood by a very good model provided by the statement ‘The gene is the DNA molecule’. The concept of the ‘gene’ was introduced by Brian Medlin to Biology. Mandel holds that this gene is responsible for producing certain characteristics in animals or persons. In explaining the nature of gene, Armstrong holds that, different sort of answers are possible. One of them is that the gene might have been an immaterial principle. Moreover, genes are responsible for the colour of our eyes. Biologist's

conclusion regarding gene is that, for the production of heredity characteristics it plays a vital role and this conclusion they have drawn from experiment on the substance that is found at the centre of cells: deoxyribo-nucleic acid. This identification of the gene and the DNA is sufficiently certain although it is impossible on the part of anybody to observe directly nor one could ever hope to observe in practice the causal chain from the gene to the colouring of the eyes. From this observation Armstrong's assertion regarding central-state theory is that, "...once it is granted that the concept of a mental state is the concept of a state of the person apt for the production of certain sorts of behaviour, the identification of these states with physico-chemical states of the brain is, in the present state of knowledge, nearly as good a bet as the identification of gene with the DNA molecule."

With this conclusion Armstrong declares that his preliminary sketch of the central-state is complete with this version.

Thus the Central-state materialism of Armstrong identifies beliefs and desires with states of the brain and in this regard Smart agreed with him. But Place does not agree with this view. Place is rather against the attempts to extend identity theory to dispositional states like beliefs and desires. His argument was that we have no privileged access to our beliefs and desires.

Place firmly believes that it is fundamentally sound to analyse the cognitive concepts like 'knowing', 'believing', 'understanding', 'remembering' in terms of disposition to behave. The same also true in case of volitional concepts, like 'wanting' and 'intending'. He further says that in the case of these dispositional mental states it is necessary to give a different account of the mind-brain relation. This account, according to him, is different from that of mental processes which he refers by the term 'consciousnesses'. By the term

'mental process' Place means the process in the brain and nothing more. But the dispositional mental states are not recognized by him as states of the brain. Dispositional state is causally dependent on the structure of the entity which bears this disposition, but in no way it is identical with the structure of the entity. Again, disposition has no existence apart from its structural underpinnings otherwise it will become a peculiar entity.

With regard to the notion of mental propensities, such as, believing a certain proposition to be true, or wanting something to come about, or intending to do something, there are arguments that these belong to a different category apart from mental capacities. Because in those cases none but the individual himself has privileged access to his own dispositional mental states. In this connection Place says, "But this is only because in these cases stating what you believe, asking for what you want, and stating your intentions are in themselves manifestations of the dispositions in which believing, wanting and intending consist"

Armstrong also rejects the argument that we have privileged access to our beliefs and desires. According to Armstrong, there are persons who may admit that it cannot be logically guaranteed that introspective awareness is free from mistakes but at the same time maintain that to our own current inner states we have a logically privileged access. But this view is denied by Armstrong. According to him, it may be that, someone's inner states can be understood by the person himself as because he himself is logically ultimate authority of his own inner states, but in that case, there is every possibility of his being mistaken. Thus Armstrong concludes,

"So it seems that, once incorrigibility is given up, logically privileged access cannot be sustained. No doubt we have a privileged access (at times) to our own

mental states, but it is an *empirically* privileged access"

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