CHAPTER III

THE ARGUMENTS FROM MENTALISTIC PROPERTIES

Introduction

According to critical design outlined in Chapter I, the arguments from the mentalistic properties are discussed here. Incorrigibility Argument (I), Intentionality Argument (II) and Location Argument (III) are here examined with a view to find out whether they have successfully identified a mentalistic component which is a dissonant component of the mind-brain identity theories. The problem of properties and predicates (IV) deals with the recent defense of their theories by Smart and Armstrong and this defense is also analyzed with reference to congruence and adequacy criteria. No such analysis has been previously presented in this manner. A general review of these arguments (V), ends with a claim that mentalistic properties form a dissonant component in identity theory.
I Incorrigibility Argument (IA)

'I am in pain now'. This statement according to IA is incorrigible. It is senseless to say that, "I think I am in pain now but perhaps I am wrong." Being incorrigibly and propositionally articulated is a property characterising the mental states. No brain process reports are incorrigible. Hence I T is false as I A is true.

Noren (1972) has formulated the incorrigibility principle as under:

IP. Necessarily for any person $x$, if there is a sensation event $y$ and time $t$ and if $x$ is sincere at $t$, $(k)$ knows his language and $x$ asserts or believes or reports at $t$, then $y$ occurs in $x$ at $t$.

The identity thesis as precisely formulated by Noren (1972), is stated as under:

IT. For all $x$ (persons), all $y$ (sensations) and all $t$ (times), if $y$ occurs in $x$ at $t$, then there is at least one $z$ (brain process) such that $z$ occurs in $x$ at $t$ and $y$ is identical with $z$. 
Noren has shown that I P clashes with I T, because a combination of I P and I T would result in the following:

NECESSARILY for y, z and t, if y reports a sensation y at t and if y is sincere etc, then he reports a brain process z at t.

Thus identity theory which argues for contingent identity between y and z will have to accept that when y experiences y and reports it at time t, he necessarily reports a brain process. Thus Noren shown that I P (i.e. incorrigibility principle) and I T (identity theory) are mutually incompatible. Of course this is the reason why I T rejects I P.

Nagel (1965) points out that I T theorists need not prove incorrigibility thesis as false. They can show that the Leibniz-Law protection is available to them. y = y, I know y. From this, it does not follow by Leibniz Law that I know y. The context is intensional and is not covered by L L.

Lycan (1972) also endorses Nagel type defence. He considers criterial authority as an epistemic notion.
and failure of "substitutivity salva veritate" does not destroy identity in intentional contexts.

Armstrong (1968) argues that as error is logically possible, when you put a mental state even a fraction of the second in the past, then no incorrigibility can be accepted. The implication of this is that the logical character of our certainty changes as we move from immediate past to the present.

The incorrigibilists have to admit that even the fraction of a second changes the nature of the incorrigibility.

"I am in pain now." Armstrong analyses this statement. If 'now' refers to the time before the person makes the claim, then there is no incorrigibility. If it refers to the time during which the report is being made then, as anything we say takes time, it can not be logically indubitable that I will be in pain by the time the sentence is finished. I have also to remember what my state was when I began my sentence, and there can not be incorrigibility attached to such claims.
Armstrong (1968) argues that pain and awareness of pain are logically distinct and hence a false awareness of pain is logically possible. Smart (1962) commenting on Baier's (1962) objection from privacy and incorrigibility, also refers to Humean dictum that what is distinguishable is separable and every distinct perception is a distinct existence.

Margolis (1973), a compositional materialist, rejects incorrigibility thesis. He points out that if he claims INDEUTATABLE knowledge of his own mental states, then OUR doubts about HIS states of mind would be necessarily pathological. Acceptance of LOGICAL indubitability result into solipsism. If A claims indubitability, then B's doubts become irrelevant. If A acknowledges relevant logical doubts of B, then incorrigibility fails.

Margolis (1973) rejects the doctrine of perfectly transparent mind. For any current mental states, alternative but CORRECT characterizations are available. It is NOT logically necessary that a person must hit-upon any one of the available characterizations.
Armstrong (1968) considers incorrigibility as a stronger thesis and privilege thesis as a weaker thesis and Armstrong considers the weaker thesis refuted along with the refutation of the stronger thesis. Of course, Armstrong rejects only to LOGICALLY privileged access and not an EMPIRICALLY privileged access. He agrees that we do have privilege access to our mental states. If the brain theory is fully developed and then if certain types of neurophysiological events come to be invariably associated with pains, it follows that if those kinds of brain processes occur and still the subject denies pain, then such a denial need not be accepted. It might turn out the subject is lying or that the brain theory was false or inadequate or both. Such contingencies have to be granted.

Rorty (1965) distinguishes between recognizing the state of affairs rightly but giving a wrong description of it and being able to describe a thing rightly once it is recognized for what it is, but not in fact recognizing it for what it is. This is a contrast between misnaming and misjudging. Rorty argues that being infallible could draw the distinction between misnaming and misjudging and having ascertained
that we are not misnaming, know that we are not misjudging. Rorty finds that such a required contrast is not available for statements like "I am in pain."

Thus, the incorrigibility argument is weak. Armstrong and Mergolis (1973) have raised crucial objections which have weakened it further. The question however is this, what is being reported even if corrigibly? Do I even notice something which though corrigibly reported, is different in kind from the report of brain-process? Suppose it turns out that electroencephalic patterns of certain kinds are invariably associated with pains or dreams images. In cases like this, the observer knows the CORRELATED process and he INDIRECTLY knows what the subject KNOWS directly. Even if the incorrigibility thesis fails, THIS distinction can never be collapsed. My submission is that if A and B are two persons and nothing incorrigibly reportable goes in either of them and only brain processes are going on, EVEN THEN, the A's experience of reading electroencephalographs would be a direct experience and his knowledge about B's brain processes would be still indirect. Some kind of visual experience or tactual or auditory experience is presupposed even to say that x's brain is undergoing certain process.
Incorrigibility presupposes direct reportability
and direct reportability characterizes the perception
in the subjects and such perceptions might be the
perceptions of brain processes but they can not be
themselves nothing but brain process. Perceptions
constitute mentalistic dimension and I A (i.e.
incorrigibility argument) has located a mentalistic
component in I T and that is the reason why by denying
incorrigibility and arguing against privacy Rorty
(1965) moved towards a more congruent theory, because
once sensations are admitted, then as they have some
peculiar properties not applicable to the brain
processes the reporting of sensation is bound to
reflect those properties. The argument here is that even
if the subjects report is corrigeble, the report QUA
report of sensations, is radically different from the
corrigeble reports about physical objects. Most
arguments against incorrigibility anticipate a mind-brain
correlation research and physiological technology but
correlation research is not identity - research.
Brain-wave research has shown significant correlation
between dram-reports and certain electroencephalographic
readings but this does not prove identity. Freud (1900)
for example distinguished between the manifest content
and the latent-content of the reported dreams. The real meaning of dreams escapes the person reporting dreams. Freud also found that some patients reported memories of past experiences of sexual assaults on them and it turned out that there were no such assaults and the patients were indulging in fantasies. Thus it must be admitted that are many factors which would prevent us from accepting a person's report just because it is a report of his own experiences, but this does not prove that there are no experiences. Armstrong's (1968) argument regarding temporality and corrigibility is impressive but that does not establish identity theory. Even if I A fails to refute I T, argument from corrigibility (CA) does not establish I T.

Freud's analysis of dreams shows that a person reports might be only the manifest contents of dreams and the latent contents are to be identified by the psychoanalysts. Similarly, the neurophysiologists might throw some more light on the causes of pains, which are directly reported by a person. It can not be said that what a neurophysiologist says about the pain exhausts all that can be said about the pain at any level. This shows that mental states like pain have a mode of reportability different from the mode of reportability of the natural states.
II Intentionality Argument

Mental states are intentional i.e. they have a reference to content and a direction toward an object whether existent or not. (Brentano, 1874) No physical phenomena ever exhibits such characteristics. Hence, as mental states are intentional and physical states are not, mind-brain identity theory is false.

After Chisholm (1967), a distinguished Brentano expert, McAlister (1976) has provided valuable insight into Brentano's doctrine of intentionality. McAlister (1976) has clarified that by "intentionality" Brentano wanted to convey the fact that mental phenomena take objects and physical phenomena do not take objects. This unique relation characterizing mental phenomena is WHOLLY lacking in physical phenomena.

Margolis (1973) admits intentionality as an important dimension of the mental. He is himself an emergent materialist (OMM+LMM) rule governed and applicable to PERSONS who are emergent particulars.

Willkerson (1974), himself an emergent materialist points out that it is hopeless to pick out an
extensional equivalence between an action statement and a physicalist statement. There are no set of equivalent statements corresponding to all kinds of intentional statements.

Nathan (1976) consider actions as intentional. Materialism is false if anyone ever performs an action. Either materialism is false or nobody ever performs an action. Of course, it is open to a materialist to argue that no one ever performs an action. It may be added that in such a case, the theory would be congruent without being adequate.

Lycan (1972) is not impressed by these objections. He points out that as the identity is contingent, this objection is not yet fatal to materialism. Even otherwise, it has not been shown that intentionality exclusively characterizes the mental. Intentionality is not a sufficient criterion of the mental.

It can be accepted with Lycan (1972) that Leibniz's Law admits of exceptions in intensional contexts, but Malcolm (1954) has turned this very intentionality exceptions against Smart's Identity Theory.
Smart (1969) has claimed that even if sensations are brain processes, a person may be taking about (for thinking about or describing) sensations and yet not be taking about brain-processes. Such an argument is supposed to protect identity theory by availing of the Leibniz-Law Intensional-ontologies exceptions. Malcolm (1964, 1965) argues that "to explain" is also an intentional verb. Thus, if thought is identical with brain process, then to explain the occurrence of brain-processes is not also to the explain the occurrence of thought. Thus, even if Smart is right in his I T, he would not be able to have only one explanation both for the occurrences of thought and the occurrences of brain process, because that would amount to committing an intentional fallacy. Now if Smart avoids this fallacy, his I T loses its point. He would no longer have any MOTIVE to espouse I T.

Malcolm (1965) argues that a neurophysiological explanation of the occurrence of a certain brain process is not an explanation of the occurrence of thought. An explanation of the occurrence of thought is the explanation of why the thought occurred to some person. Malcolm cleverly and rightly uses Smart's own argument against Smart himself. Smart has said that from the fact
that a person talking about thought is not talking about brain processes, one can not infer that thought is NOT a brain process. Malcolm agrees with this and then argues that if thought is a brain process, we should not conclude that just because a person is talking about thought, he is talking about his brain process. This is the most devastating objection. It blocks the theory. Like most of Malcolm's objections, this objection is unanswerable.

The point here is slightly different from the point made by Malcolm (1964-65). Malcolm shows, how even the identity theorists may commit "intentional fallacy." The point is that to say that there are intentional predicates is to admit that there are intentional properties. Hoping, looking for, searching etc. are intentional properties. Propositions about such intentional properties are intensional. It is clear that in arguing from the available exceptions to Leibniz's Law from intensional contexts, the identity theorists have OVERLOOKED that they have granted intensional predicates and intentional properties. Thus, in order to successfully defend \( \exists P \) against intensionality argument by the use of intentional excluder to Leibniz's Law, the advocates
of I T grant what they want to deny. No reference to this pardon is found in the literature of identity theory.

It may be that intentionality is not the peculiar mark of the mental. It does not characterize all and only the mental phenomena, but then it does not characterize neural processes at all and it does characterize at least some mental phenomena. This does block one-to-one identity between the mental phenomena and the brain phenomena.

III The Location Argument

The mental is the non spatial and non-extended. The physical is the spatial and the extend d. Hence the mental is not the physical. If so, mind-brain identity theory is false. This is the Location Argument.

Smart (1959) has anticipated this objection. The after image is not in physical space. The brain process is in physical space, hence after-image is not a brain process.
Smart immediately dismisses this objection. He claims that only the experience of having an after-image is a brain process. After-image itself is not a brain process. The experience of having such an image is identical with brain process.

Shaffer (1961) suggests that a new convention can be adopted for speaking about mental states such that they would be said to be located precisely where brain processes are located. Shaffer (1965) admits that given our current conception of the mental states, the location argument would rule out identity theory a-priori, but if we introduce new conventions about talking about the location, the identity theory can be made intelligible.

Coburn does not agree with Shaffer's (1961) point regarding the new conventions. Adopting such conventions would render pain-experiences as public entities. This would involve a major conceptual revision inconsistent with the original concept of the mental. Of course, Shaffer does not agree with Coburn's objections. Mental events have temporal
location and yet they are not thereby rendered public events. The same would be true of its spatial location.

Malcolm (1965, 1972) comes close to demolishing identity theory by his location-argument. He finds identity claim not false but unintelligible. Struct identity requires spatio-temporal coincidence and such a criterion can not be satisfied in the case of mind-brain identity. If $x$ is a brain process and, $y$ as a sudden thought, then $x \equiv y$, if and only, if $x$ and $y$ are at the same place and the same time. The test which would determine the location of thought within the brain has to be logically independent of the test which would determine the that a certain brain process has occurred. Contingent identity requires logically independent identification procedures. To Malcolm, the idea of such a test is unintelligible. Identity theory therefore has no clear meaning.

Malcolm (1965-1972) also objects to Smart's claim that a brain kept alive IN VITRO i.e.
detached from the human body, can have experiences. Malcolm considers bodily behaviour in social setting as relevant for mentalistic concepts. Malcolm's contention is that "BEFORE, see hear, think; not brains". (1972, p.77) A brain does not participate in a form of life. It is true that bodily sensations are located but people do not feel sensations in their brains. Bodily sensations are not brain processes.

Bradley (1969) has shown that many sensations can be specified which are not identical with any state or states of the brain, as they are spatially remote. If sensations and having of them form a complex, then the complex is not fully located in the central nervous system.

Hofmann (1970) admits that Malcolm's objection is very serious and it successfully applies to Smart's theory, but he also claims that an identity theory can be revised to overcome Malcolm's type of location objection. He revises the theory by saying that the identity could be conceived
not between sensations and brain process, but between a person HAVING a certain experience and a person BEING in a certain brain state. A person having a certain experience is contingently identical with a person being in certain brain state. Such a revised version of identity would satisfy Malcolm's (1965) criterion of strict identity because both the expressions denote what is able location just where the person is. Nagel (1965) also proposed to identify person's having a sensation with his body being in a physical state.

It is interesting to see the direction of this revision. Nagel (1965), for example, concedes that such a view becomes a weak physicalist theory in the sense that it does not require that a physical conditions be found identical with every psychological condition. There is however another aspect to this revision. The theory now would assert that a person p, who experiences pain is also the same person p, who experiences certain neural processes. This is the identity of a person with some property with the same person with another
property. Identity theory in this sense is too weak to be interesting. At best it is an aspectualism or aspect correlation. Smart (1959) himself tried to answer location argument by saying that "after-image is not a brain process, but the EXPERIENCE OF HAVING AFTER-IMAGES is a brain process" (Smart, 1959, in Borst, 1970, p. 61) (ITALICS ADDED). Now in a sense Smart is right. The experience of having after-images does involve some brain process, but he is not satisfied with this claim. He endorses a stronger thesis to the effect that though we have the experience of having after-images, there are no after-images at all. This is where it is not possible to follow him. If there are no after images, what is this HAVING of the experience of after-images?

The "having-location" is rather clumsy. It is applied to sensations only. To the brain-processes, "being-location" is applied. Your having a sensation means your body being in a certain neural process. This is what Hoffman (1970) assets. Smart only asserts that your experience of having an after-image is itself a brain process.
Margolis (1973) raises the question whether having of an emotion may be located in the same way as the having of a physical condition. As predication, "having........." or "being ........" is univocal for persons and bodies, but the problems is not merely the problem of predication it is an ontological problem of possession or attribution.

The identity theorist must show that the use of the possessive sense of 'have' if asymmetrical for persons and bodies, does not upset the thesis or 'is' indeed symmetrical for persons and bodies or is symmetrical at least for ranges of predicates that the thesis must accommodate. (Margolis; 1973; p. 252).

Margolis has raised an important question. The advantages accruing to identity theory from the use of the expressions like "having............." or "being ..............." do not clarify the mode of the refutation of location argument. It can be said with Smart that having the experience is the same as brain process or it can be accepted with
Hoffman that person having an experience is identical with the person being in some process. The theory of Hoffman moves towards a molar level because the category of person is introduced to meet the location argument. At a molar or macro-level, it is obvious that person is bound to be undergoing some brain process when he is experiencing some sensation. If this is a identity theory it is not an interesting theory because the original thesis was that sensations are brain processes and the revised thesis is that some states of person are identical with some other states of the same person. The theory then moves towards Strawsonian theory of persons and it has no resemblance to the original identity theory. A person's state of seeing red and his state of being under some kind of reaffinal stimulation are in a sense identical. It is the same person having two states or it can be said that two states are the same states of the person. The latter alternative is what has been considered legitimate by Huffman (1970). Location argument has thus unsettled the identity theory.
Altrichter (1973) agrees with Malcolm that it makes no sense to apply space-predicates to the mental states, processes or events. It is nonsense to ask, "Would you please tell me WHERE is my opinion about the emancipation of women?". By agreeing with Malcolm, Altrichter endorses the view that if brain-processes have spatial location, then as mental processes can not be said to have location, identity theory fails. Altrichter has considered an alternative hither to not discussed in this context. It is the possibility that even the brain processes might not be considered as having any location.

The representatives of identity theory have not differentiated the following concepts according to Altrichter.

(i) brain states (ii) brain processes and
(iii) brain phenomena.

States are always states of something e.g. motion is a state of body. The following question about motion is senseless.

Where is and how many meters long
is such and such motion of the body?
Space predicates thus are not applied to the states of the body but to the body itself. Altrichter applies the same semantic and conceptual considerations to the notion of processes. The following question is ruled out about the processes.

Where is and how many meters high is the growth of Walnut tree?

Altrichter's contention is that we can ask location-questions about moving BODIES and growing TREES but corresponding questions about MOTION or GROWTH are senseless. This is because states and processes are conceptually dependent upon the subject of states and processes. Altrichter thus claims that the asymmetries arising out of the spatial predicates can be avoided, as neither the brain states (or processes) nor mental state (or processes) can be spoken of as precisely located. He has also noted that the term 'mental phenomena' has not been given precise meaning even by Malcolm and hence we do not know whether location argument applies to it.

What Altrichter has shown is that location argument does not upset identity theory because even the brain processes can not be meaningfully said to
be precisely located. Thus, a moving body has a location and it might be vaguely said that its motion is located where the moving body is.

Similarly, it can be said that brain processes are occurring where the brain is. Still however it should be admitted that neurophysiologists have been talking about total cerebral activity recorded as the brain waves as well as electrochemical activity recorded even from a single cell by microelectrode techniques. So the subject of processes might be even a single point or part of the brain. Though certain spatial questions about processes are rightly ruled out by Altricheter, it does appear to me that if we adopt Altrichter's mode of talking about processes we could say that imagining, thinking and feelings etc. can be predicated of a locatable brain. "How much thinking weighs?" is a wrong question, but even by Altrichter's standards, "What is the weight of a thinking brain?" Would be a valid question. The question would be as valid as the question; "What is the size of a degenerating brain?" Now such questions are valid, but what would be the point of asking the first of the above-stated questions?

As Malcolm (1965, 1972) has shown, it is the PERSON who thinks and not the brain. Of a particular person
it can be asked "How tall is this person?" but it is doubtful whether there will be any point in asking: "How tall is this thinking person?" Thus even if we grant Altrichter's claims, there is something odd about spatial questions about mental processes even when we tie the process-word with the thing-word. Due to the impact of Altrichter's contribution to the location argument, the argument can be reformulated as under:

If processes and states are conceptually dependent upon the things and if mental states and processes are identical with physical states and processes, then it follows that mental states and processes are conceptually dependent upon physical things. If the identity theory is contingent, such a conceptual dependence must be ruled out. If it is not ruled out, we can ask sensible location questions BOTH about SYNOPTICALLY TRANSMITTING brains as well as VIOLENTLY ANGRY brains. But it is doubtful whether we can speak of violently angry brains or modestly dissenting nerves. If we can not speak of brains characterized by such predicates then it follows that mental states and processes not the same as physical states and processes.
IV The problem of Properties and Predicates

We have seen how Altrichter has raised an interesting question about states and processes. The major arguments we have surveyed here are all concerned with claiming that mentalistic properties are peculiar and hence not identical with the neurological properties. They thereby invalidate the identity claim. So unless identity theorists have a fresh look at the problem, some of the arguments we have discussed here are bound to block the identity theory even at the statement level. It is the aim of this work to find out whether under the pressure of mentalistic component, the theory attempts a move towards getting rid of the component by restructuring it in a congruent direction. It is claimed here that this is exactly what has happened.

In this recent defense of I T. Smart (1972) comes to the conclusion that properties and states are entities postulated by common sense. He then reemphasizes the point that a "purely physicalist language whose ontology contains nothing over and above ultimate entities of physics" (1972, p. 160) is to be accepted.
Smart (1972) moves towards a completely unidimensional ontology. Whatever there is a value of only one kind of variable i.e. physicalists variable. As Smart puts it,

"brain states are four dimensional parts of brain stages which differ markedly from time-slice to time-slice" (ibid p. 161).

Smart eliminates properties processes and even causes. A purely physicalist language based on four-dimensional world view of modern physics is adequate according to his recent defense.

Armstrong (1972) also, in his recent defense, recommends that the notion of each distinct predicate associated with its own peculiar property should be rejected. According to Armstrong (1972) there are "indicating predicates" which indicate the property F in virtue of which they apply to object a. Some predicates not only INDICATE but ANALYSE the property F and some predicates neither indicate nor analyse but DESCRIBE the property F. Thus one property may be covered by many kinds of predicates. Armstrong thus offers a
new kind of criterion for contingent identity, when we apply two logically distinct predicates and when one predicate indicates what other predicate analyses, we have contingent identity. e.g. "Hot" is an indicative predicate but "mean kinetic velocity of molecules" is an analysing predicate. It may be that one predicate describes and the second analyses the same property. e.g. "Anger" describes a property which brings about certain sort of behaviour. The predicate, "certain sort of firing of neural circuits" analyses the same property, referred to by the descriptive predicate.

A materialist proceeds from indicating predicates to describing predicates and then to analysing predicates.

Recently Armstrong (1978) asserts hypothesis that the world is a single spatio-temporal system completely described in terms of completed physics. Armstrong (1978) carries on his analysis of predicates further and claims that in analysis, the inner structure is spelt out. The progress of science lies in passing from the
external to the analysing predicates. Mental predicates are "external predicates". Predicates functions in different semantic fashions.

Smart (1972) has affirmed pure physicalism. Armstrong (1978) has analysed the relation between properties and predicates and has affirmed pure physicalism. It is thus clear that the arguments from properties are very powerful arguments and the defense was legitimately called for.

Taking up Armstrong's mode of defense first it appears that he has finally accepted basic distinctions between some kinds of predicates. The distinctions are epistemological and to that extent that they are valid. It is undoubtedly true that analysing predicates are required by science, and the progress of science lies in moving from the indicating or external predicates to analysing predicates. Heat is properly analysed as mean kinetic velocity of molecules. The only point of dispute with Armstrong is whether the distinction between analysing and descriptive predicates is also the distinction between psychological and neurophysiological
predicates. Armstrong's classification can also be applicable within the domain of psychological predicates. "Intelligent" for example was a descriptive predicate at common-sense level. At psychological level, it is linked with testing-procedures and statistical analysis and is operationally defined as well theoretically conceptualized in terms of factor-analysis. It could then be treated as analysing predicate.

Armstrong (1978) has made a very valuable contribution to semantics, logic and philosophy of science by his recent classification of predicates. He has also given us new criterion of contingent identity in terms of kinds of predicates. It can very well be admitted that most of the mentalistic predicates are external and merely indicating. But Armstrong has argued for a much stonger thesis i.e., he has argued for a view that all analysing predicates would turn out to be physicalistic. It is here that one would like to be little cautious.
If, as Armstrong has claimed, the progress of science is from indicating to analysing predicates, psychology could progress in that direction. If psychology could progress in that direction, it is an empirical matter whether all the psychological predicates will turn out to be physicalistic analysing predicates. We must distinguish between ordinary language mentalistic predicates, psychological predicates and physicalist predicates. Armstrong considers that ultimately all analysing predicates will be neurological predicates. As a hypothesis this is really interesting, but it is difficult to establish such a hypothesis. On the basis of intelligibility of of this theory materialism becomes a meaningful theory but only as a partial level. Total materialism can hardly be a scientific theory. It is bound to be an open question as to which kinds of indicating predicates will turn out to be certain specified kinds of predicates. 'Ego-strength' or 'self-image' are predicates which would be considered as analysing predicates. Armstrong's theory of predicates is very recent, and it requires further study by psychologists.

Even if indicating predicates turn out to be analysing neurological predicates, it does not imply
that materialism is established. "Hot" is an indicating predicate; it can be characterized by analysing predicate, "mean kinetic energy of molecules". This means that heat can be analysed 'with reference to statistical mechanics.' Such reductions are necessary for science. Analysing predicates have explanatory value. In fact, Place (1956) has already shown that two sects of observations are to be treated as observations of the same event "where the technical scientific observations set in the context of appropriate body of scientific theory provide an immediate explanation of the observations made by the man in the street" (Place, in Borst, 1970)p.48).

Two kinds of questions should be distinguished here. A is explained with reference to B; and A, which is explained with reference to B, is itself B. These two claims are not properly distinguished either by Armstrong or by Place. It is one thing to say that heat is explained by energy of molecules; it is another thing to say that there is nothing like heat but the energy of molecules. If there is nothing like heat, the indicating predicate "hot" would not ever entered into our language. 'Seeing red' is an indicative
predicate: "stimulation of certain kind of retinal cells" is an analysing predicate. The relation is the relation of causation, not the relation of identity. Causal explanation is not an identity explanation. Identity-philosophers have not adequately discussed the epistemic differences between explanation and reductive identity. Some dependent variables in psychology can be explained with reference to the independent variables of neurophysiology. This is not identity theory; it is a reductive explanation-theory. Repressed desires can explain dream-contents, but that does not mean that repression and dreams are one and the same things. So unless it is claimed that all explanation is the elimination of explanans, identity theory is not established.

So, firstly, it is found that the distinction between indicating and analysing predicates is not the distinction between psychological and neurophysiological predicates, because there might be psychological analysing predicates; secondary, even if all analysing predicates indicating psychological properties are neurophysiological predicates, it might only imply that they are linked by way of explanation and not identity. Thirdly, it is here claimed that the every distinction between indicating and analysing
predicates presuppose that human organisms are equipped with observation abilities and conceptual abilities. If observation is admitted then sensations are admitted. The sensation of heat make the application of the predicate "hot" possible. Thus the argument here is that if there are indicating predicates then there are sensations. Such sensations pick up directly some aspect of what there is which is then analysed conceptually. So unless sensations, as distinct from brain processes, are somewhere presupposed, the distinction between analysing and indicating predicates does not get any legitimacy. So, in order to maintain that there are indicating as distinguished from analysing predicates, sensations should be conceded. Sensations are thus not exactly identical with brain processes and indicating predicates and analysing predicates do not denote exactly identical items.

Thus, the recent discussions by Armstrong, though very useful for general semantics, does not advance the cause of totalistic ontological materialism.

The same can be said of Smart's (1972) claims. Smart reaffirms his reductive materialism and just proposes to do away with causes and properties. Inspite
his claims to contrary, his position has moved towards eliminative materialism. Smart evades the mentalistic component by denying the relevance of the concept of properties and Armstrong claims to solve the problem by making new distinction between analysing and indicating predicates. The distinction which is legitimate, either retains sensations as sensations or eliminates itself.

V General Review of the Arguments

Applying the criterion of congruence, it is obvious that intentionality and location arguments have converged to identify a mentalistic component which could not be compatible with purely unidimensional physicalist ontology. If whatever exists is the value of one kind of variable i.e. the physical variable, then it is not clear how certain states or events or processes possess qualities like direct reportability, intentionality and absence of precise locatability, i.e. non-spatiality. Brain states are not directly reportable, nor intentional nor non-spatial. If it is said that whatever is a value of physical variable and these properties must be predicated of the brain-processes then the concept of brain-processes is changed radically.
If these properties are not accepted, then theory is strictly unidimensional but totally inadequate because the theory argues for a superiority over behaviourism and yet fails to account for what there is in the world. It is to be recalled that a unidimensional materialism is a materialism that accepts that whatever there is is a value of only one kind of variable i.e. physicalist variable. Neurophysiological materialism is physicalist in the sense that neural processes are electro–chemical processes. Thus kind of unidimensional materialism is a total world-view and not just a partial scientific hypothesis. It is thus not affected by the changes and advances of modern and recent physics. A multidimensional materialism would be a theory that though whatever there is is a value of more than one kind of variable, ultimately the physicalistic variables are basic and more important. i.e. conscious processes are emergent properties of the physical organism. Smart (1959, 1972) is not prepared to accept even this type of emergent materialism. There are no emergents and man is NOTHING but a physico–chemical system.

The emergent materialism or the deterministic materialism is a kind of dualism. This is because
what there is in the world can in some causes by
characterized in terms other than the terms of physics.
Such multidimensional materialism [e. g. Compositional
Materialism of Margolis (1973)] admits experience or
properties of experience but claims to derive it from
the laws of basic science. Explanatory reductionism
is compatible with the acceptance of materialism. To
admit \( x \) and explain it by \( y \) is not to deny \( x \).
To admit \( x \) and explain it by \( y \) is to admit that
\( x \) is \( y \). This is the claim of identity theory.
This is a restrictive principle, because the explanan-
dum and the explanans should be then treated only as
the values of the same variable. Identity theories,
in making explanatory claims, moves towards collapsing
the distinction between explanation and identities.
That is the reason why we find that Smart (1959) and
(place (1956) are reluctant to admit that there are
phenomenal properties. They are suffering an approach-
avoidance conflict or ambivalence regarding phenomenal
properties.

Smart (1959) denies that there are after images
and Place (1956) claims that in talking about looks
and feels we are likely to commit phenomeological
fallacies. Denying that such properties are presented
in a direct experience is a way out from the need of admitting mentalistic component in the theory. This renders the theory congruent but at the cost of its adequacy. A question may arise as to whether adequacy here defined is not arbitrary criterion just to refute identity theory in an a-priori manner. This is not so because the proponents of identity theories themselves complain of the inadequacy of behaviourism. A criterion of adequacy is here framed while taking into account what the neurophysiological antimentalists themselves consider adequate. Again, the neurophysiological antimentalist claim that that whatever there is in the world can be adequately explained in the terms of physics. So, on the one hand they reject behaviourism because it does not accommodate experience or properties or raw-feels etc; on the other hand they themselves deny these experiences and argue for a congruent materialism.

If they accept that there are pains, after-images and sensations then the problems of incorrigibility, location, privileged access etc. are bound to arise. It may turn out that a specifically framed incorrigibility argument or a location of argument might be defective, but the focus of this study is not on a
specific group of arguments advanced or refuted. The study mainly deals with the problem whether the arguments converge towards a consensual indication of a refractory element in the theory of mind-brain identity. The detailed versions of the argument need not detain us here as they are amply documented in the current literature on the subject. An attempt is here made to find out whether given the arguments from mentalistic properties, a particular mode of refuting them adopted by the proponents of the theory stumble upon a refractory and dissonant component.

The structure or the modes of refutation of the arguments from properties that emerge from a critical study are as under:

(i) An appeal to the legitimate exceptions of Leibniz's Law. e.g. it is claimed that epistemic and modal properties are excluded from the need to satisfy Leibniz's Law, hence the following argument is disallowed. If we know $\chi$ without knowing $\gamma$ and yet if $\chi = \gamma$, then identity claim is to be withdrawn. Defense against such arguments are available by an appeal to epistemic and modal exceptions to Leibniz's Law.
(ii) Denial of the properties claimed to be mentalistic. Rorty (1965) denies that there are sensations. It is an end of the matter, because the materialism is eliminative.

(iii) Another approach is to claim that whatever can be claimed as true of the mentalistic properties can be claimed to be true of the brain processes which are contingently identical with it. (Lycan, 1972). This would require a radical change in our concept of brain and brain processes.

(iv) It has also been admitted (Nagel 1965) that there are independently ascribable properties such as being hot or cold which can not be significantly applied to a collection of properties PE R SE. Nagel (1965) liberalizes physicalism by claiming that it may be too much to except a specific physical counterpart for each particular psychological phenomena.

(v) It has also been claimed that it is not the particular quality of experience but the having of the experience which is a brain process. This is Smart's view. To have an experience is the same as the brain process. But the difficulties of such a position are
obvious. To have an experience of after images or phenomenal qualities is to admit that there are phenomenal qualities or after images, but Smart's denies this implication. The question arises as to what it is that is experienced. Having an experience of pain is to be in pain. It may be that to be in pain is itself a brain process, but then the brain processes are phenomenologically experienced as pains. So there is a dimension of experiences not exhausted by neurological predicates. To grant this is to grant qualititative mentalism, and Smart denies this.

Thus, the arguments from mentalistic properties have evoked the outright denial of such properties (Rorty) or treating the having of experienced properties as itself a brain process. Both these accounts are revisionary. A revisionary account of mental properties is an account such that, when the arguments from mentalistic properties are put forward, the theories move towards either the denial that there are experiences and properties phenomenally experienced or the claims that such properties are after all the properties of brain. Even if "raw-feels" are admitted as Feigl (1960) does, they are considered to be
identical with brain processes. If there are no sensations or experiences, if there is neither incorrigibility nor privilege access nor intentiality nor non spatiality then the antimentalism is unidimensional but not adequate; if there are such properties, then antimentalism is adequate, but not unidimensional. The mentalistic component as captured by the arguments thus is a dissonant component which forces the theory to be either adequate or congruent but not both.

It may be the case that antimentalist theories might claim that they would give up the criterion of adequacy and be satisfied with the criterion of congruence. The views of Feyerabend and Farty are congruent with regard to the components and being congruent with regard to the components would mean that nothing else exists except that which is captured by the components of a theory. Thus a pure physicalism i. e. OUM with LUM would suit their purposes and Farty (1965) himself has claimed that the half hearted materialism is of no significance.

A difficulty is bound to arise with such a defence. The present analysis of the arguments would
lead us to the claim if that if there are no phenomenal properties at all or if nothing characterizes something mental because nothing mental occurs, then the illusion of having an encounter with non-neural properties itself should be intelligible on the premises of the theory. It is found that except Rorty's demon hallucination reference, no identity philosopher has found this problem worthy of comment.

Any monistic philosophy with a totalistic orientation is bound to explain the illusion or ignorance which prevents the perception and articulation of the underlying unity or identity. Neurophysiological antimentalism has no theory of illusion regarding the attribution of mentality to nervous system. Even after our knowledge of the retinal stimulation, we continue to see colours. Thus scientific explanation does not dissolve phenomenal properties. In fact, scientific explanation presupposes them. The scientific explanation of sunsets does not dissolve our illusion of sunsets. It makes the seeing of sunset phenomenon more intelligible. The same can not be said about philosophical theories. Smart (1959) does not say why
after-images are seen as after-images. He denies them.
Scientific research depends upon the possibility that we will encounter certain objects and properties in our phenomenal field. N M wants to collapse the phenomenal field into physical field.

The phenomenal field can not be denied. In fact, Wundt inaugurated psychology as a science a century ago by saying that psychology deals with immediate experience and its data are phenomenal. (Boring, 1950) Of course, Wundt was a dualist and a parallelist, but he was also a physiologist. The reality of immediate experience can not just be wished away. The qualities of immediate experience are obviously different from the qualities attributable to nerve-events. The difference can be explained, but it can not be eliminated. O U M fails as an explanation because either it neutralizes the properties reported (Smart) or eliminates them and thus to eliminates the phenomena to explained (Forty).

It can therefore be concluded that the arguments from properties characterizing the mental have been successful in identifying a component in antimentalism (i.e., N M) which is dissonant and
hence the theory is either congruent or adequate, but not both.