Introduction

To include Skinner in a philosophical study requires some justification even though he is the most outstanding and distinguished professional psychologist of this century. Skinner's behavioural revolution in recent psychology has philosophical foundations and implications clarified by Skinner himself. Malcolm (1964) Blanshard (1967) Alston (1973) Flew (1978) and Armstrong (1968) are the major philosophers who have critically reviewed Skinner's conceptual contribution to philosophy of psychology as well as the philosophy of mind. Day (1964), a psychologist, has pointed out ten similarities between Skinner and Wittgenstein. Chomsky (1959) has critically examined Skinner's psychology of language.

Skinner has been included in this work as an antimentalist because he has been so characterized. (Day, 1969). It is the purpose of this critical study to find out whether unidimensional ontological
materialism is a plausible mind-body theory. Skinner's operant analysis, like Ryle's dispositional analysis, claims to be an adequate mind-body theory both for scientific as well as ontological purposes. Skinner's experimental research and theorizing in psychology of learning and language are being continuously reviewed by competent psychologists in relevant and allied areas of research. We are not here concerned with Skinner's empirical contributions to psychology which are monumental and pioneering by any methodological standards.

Skinner has contributed enormously to the concepts and research on operant conditioning and the critique of Skinner's concepts attempted here does not undermine his methodologically fruitful research. Skinner has himself chosen to operate at a philosophical level by raising wider issues like men versus machines, freedom, dignity and responsibility, religion, science and human control, cartesian dualism etc; it is here that philosophers have reacted to Skinner's views. Skinner has addressed himself to wider issues of philosophical interest and has claimed that his operant-analysis can be applied to the whole area of human
life. It is this claim that makes Skinner philosophically controversial without being scientifically challenged. As Frankl, a psychiatrist has put it:

The present danger does not really lie in the loss of universality on the part of the scientist, but rather in the pretence and claim of totality.

What we have to deplore therefore is not so much the fact that scientists are specialising, but rather the fact that specialists are generalising.

(Frankl, 1969; in, Schumacher, 1977, p. 14.)

Skinner, as a specialist, is generalizing and it is this that has made him philosophically controversial.
I Skinner's Philosophy of Psychology.

In order to assess Skinner's concepts and assumptions, a brief introduction to Skinner's philosophy of psychology is essential. The following aspects characterize Skinner's approach.

(i) Skinner rejects prior postulation of theory and checking it against empirical evidence. Skinner is an "inductive behaviourist".

(ii) Skinner, as an observationalist and inductivist, confines his system to description rather than explanation. Explanation is reduced to description and the notion of function replaces the notion of causation. Skinner's empiricism is radical.

(iii) Skinner advocates operationism. It includes talking about one's observations, the manipulative procedures, the logical and mathematical steps and NOTHING ELSE.

(iv) Skinner's position is "methodological antireductionism." (Wolman, 1960). He is not a neurophysiological antimentalist. Human behaviour need not be referred to micro-level neurophysiology for being made scientifically intelligible.
There is no need to appeal to neurophysiological level of observation.

(V) Skinner considers only the operant and functional analysis linking independent and dependent variables. Skinner is a peripheratist and does not recommend the concepts of self will-power or any other internal mentalistic of neurophysiological constructs as mediational or linkage concepts. As against Armstrong's central-state philosophy of mind, Skinner recommends and adopts in practice, the peripheral, outer, external and environmental categories for psychology. Reflex is the basic unit of observable behaviour and scientific laws governing reflexes can include static, dynamic and interaction laws.

(vi) Skinner's book, About Behaviourism (1974), is a summary statement of the philosophy of science of behaviour. (R. Schnitter, 1975). For Skinner, the main task of the philosophy of science is the clarification of nature and purpose of scientific analysis. The analysis ought to be functional rather than structural and it should be the same-level analysis rather than multiple-level analysis. There is no room in the analysis for the reductive language of
physiology or the seductive language of mentalism. Skinner rejects ordinary-language mentalism and cognitive models. Behaviourism is not a science of human behaviour; it is the philosophy of that science. As a philosopher of behavioural science, Skinner lists the following obstacles to the science of behaviour:

(a) The wrongly conceived notion of privacy of experience.
(b) The wrongly conceived notion of the role of feelings.
(c) Overemphasis on nervous system as an explanation of behaviour.
(d) Fascination with the inner, the occult and the personally felt rather than scientific concerns with the whole organisms in relation to environments.
(e) Misplaced concern for the person as free creative agent, and inner man.

Behaviour has to be investigated as a scientific datum in its own right. Science of behaviour should get rid of 'psychic fiction' as well the fiction of "nervous-system explanation". There is no inner man driving the body.
(vii) Skinner recommends the dissolution of mentalistic language for science. Terms like "smells," "sees," "feels," "finds," "angry" etc., are to be avoided. Behaviour is to be conceived as dependent variable. Skinner insists that events must be capable of description in the language of physical science. An experimental analysis describes stimuli in the language of physics.

(viii) Skinner condemns anthropomorphism. Skinner (1971, Beyond Freedom and dignity) points out that physics has stopped personifying things and he is surprised that the behavioural sciences still appeal to comparable internal states. He illustrates the PRESCIENTIFIC mode of talking about behaviour by referring to following words and expressions:

"Attitudes," "pride;" "sense of responsibility;" "will to power;" "self-respect;" frustration;" "feelings of alienation;" "lose of confidence;" "faith in man's inner capacities" etc.

Skinner points out that there is nothing like this in modern physics. Thus, Skinner considers attribution of purposes, beliefs etc to human beings as anthropomorphism. Skinner rejects the "autonomous men" just as Ryle rejects the dogma of a "ghost in the machine" Skinner asks us to consider a science
of behaviour which dispenses with states of mind, feelings, character, plans etc. Mentalistic language and mentalistic explanations have no place in psychology as science of behaviour in relation to environment. Skinner suggests that Descartes excluded human organism from environmental determinism presumably to avoid religious controversy. "A self is a repertoire of behaviour appropriate to a given set of contingencies" (1971, 189). There is thus no cartesian soul or substance. It was a concession to theology. The picture of a body with a person inside is to be given up; a body is a person in the sense that it displays a complex repertoire of behaviour. Man, according to Skinner, is a machine in the sense that he is an extraordinarily complex system behaving in lawful ways. Environment takes over the functions ascribed to autonomous man. This is guiding idea of Skinner's philosophy of behavioural science.
II Operant Analysis

We have seen how Ryle's dispositional analysis is an attempt to demolish the dogmatic ghost-in-the-machine type of dualism (chapter V). Skinner's operant analysis is an attempt to demolish the myth of inner, autonomous man. Ryle's analysis was conceptual; Skinner's analysis is experimental. Skinner has addressed himself to wider issues of philosophical interest since the last two decades after a long and distinguished career as an experimental psychologist and as a leader of rigorous post-Watsonian behaviourism.

Operant theory is the view that psychology involves the study of the relation between 'input and 'output'. Harzem and Miles (1978) have shown that operant theory, like Ryle's analytical behaviourism, claims that statements about person's mental life require to be translated into statements about his actual or possible behaviour.

Operant psychology is a revisionist psychology. It advocates new terms and concepts like reinforcer, discriminative stimulus, response rate, steady state,
interresponse time, post-reinforcement pause, schedules of reinforcement etc. Such concepts are neither neural nor mental; they are behavioural. Let us illustrate the programme of operant analysis by translation. The behavioural translation follows the ordinary language statement in the following:

1. (a) He feels insecure.
   (b) His behaviour is weak and inappropriate.

2. (a) He is dissatisfied or discouraged.
   (b) He is seldom reinforced and as a result his behaviour undergoes extinction.

3. (a) He is a neurotic.
   (b) He engages in a variety of ineffective modes of escape.

Skinner's central concept is "behaviour-being-reinforced". Behaviour OPERATES upon the environment to produce consequences. Such behaviour is called "operant behaviour". The environment can be manipulated. A technology of operant behaviour is recommended by Skinner. Ryle's programme of analysing our concepts and Skinner's programme of revising them have much in common. (Harzem and Miles, 1978)
Skinner agrees with Ryle (1949), in not wishing to speak of cognitive acts. Platt (1973) considers Skinner's approach as radical reprogramming of psychology. It is a revolution in psychology. Skinner's theory of operant learning considers reinforcing consequences of behavior as extremely important.

Skinner has worked on operant conditioning. In operant conditioning, the REINFORCER (e.g., food) follows upon organism's own behavior. Presenting the food when the response is EMITTED is called REINFORCEMENT. When the bar-pressing response of a rat is reinforced by food, the response will exhibit increased frequency. Operant responses are reinforced according to the CONTINGENCIES of reinforcement. In short, the basic principle of Skinner's psychology is that behavior of OPERATES upon the environment to generate consequences. Pavlovian conditioning is a respondent conditioning; Skinner's type of conditioning is known as "OPERANT CONDITIONING." OPERANTS are simple but freely EMITTED responses. Occurrence or nonoccurrence of reinforcement is governed by certain rules known as "SCHEDULES OF
Fixed-ratio, variable ratio, fixed-interval and variable-interval are the four kinds of schedules of reinforcement. They are combined into compound schedules. Behaviour is gradually moulded by schedules of reinforcement. Thus, responses freely emitted by organisms are affected by various schedules of reinforcement. "SHAPING is a technique based on the principles of operant conditioning, in which an organism's behaviour is gradually moulded into specific desired patterns through the careful administration of positive reinforcement." (Baron, Byrne, Kantowitz, 1977, p. 633).

Operant conditioning is also called "INSTRUMENTAL CONDITIONING" as it is a type of learning that uses reinforcers to change the frequency of behaviour. (Bourne and Ekstrand, 1976, p. 512)

Harzem and Miles (1978) have shown that operant psychology makes a distinction between "episodic" words and "extra-episodic" words. "X is walking down the road". This sentence expresses one episode. "X coughed," again refers to an episode, 'X revoked', when said during a bridge entails that certain things were the case over and above the playing of a particular card by X. "Revoke" is
thus an extra-episodic word. Ryle (1949) has raised the question about the difference between saying of a bird that it is flying south and saying that it is migrating. Harzem and Miles point out the difference is the difference between episodic and non-episodic words. 'Migrating' is a non-episodic word. They suggest, that Ryle's dispositional analysis, is not applicable to all words, and yet, the distinction should be drawn not between the dispositional and the non-dispositional words, but between the episodic and non-episodic words. For RESEARCH PURPOSES, Harzem and Miles (1978) recommend a language with minimal extra-episodic commitment. Skinner's language is a language of episodes which are behavioural. Skinner's operant programme describes the results of experiments in precise episodic language. e.g.; "X pressed the lever". Harzem and Miles maintain that "many of the 'mentalistic' words which figure in traditional philosophical and psychological discussion are extra-episodic in character." (p.63) Many of the words like 'know', 'recognize', 'learn', 'forget' etc., are extra-episodic and it is necessary to eliminate them for scientific purposes not because they are mentalistic, but because they are extra-episodic.
Operant analysis involving the concept of 'behaviour-being-reinforced' is itself reinforced by the use of episodic language. Skinner has not only argued for operant analysis of non-verbal behaviour, but he has, in his book, *Verbal Behaviour* (VB, 1957), applied operant psychology to the analysis of linguistic behaviour also.

In VB, Skinner argues that verbal behaviour is no different from other behaviour. It is a result of stimulus-response reinforcement contingencies. Skinner's main thesis is that the conceptual scheme which has been adequate for explaining behaviour is also adequate for explaining verbal behaviour. Skinner is concerned with identifying controlling variables of verbal behaviour. Like Wittgenstein (1953, section 116), Skinner finds the policy of bringing words back from their metaphysical to their ordinary use quite rewarding.

Skinner claims that thought is simply a verbal behaviour. Verbal responses are strengthened by contingencies of reinforcement. When unpattemed vocalizations are selectively reinforced, a child acquires verbal behaviour.
The initiation, frequency, shaping and chaining of responses is to be understood with reference to environmental stimuli. Neither privacy, nor privileged access nor first-person sentences threaten operant behaviourism. Like Wittgenstein (§953), Skinner talks about public accompaniment of private stimulus which controls the responses. Collateral behaviour, along with verbal response, 'my tooth aches', is reinforced by community. Verbal community characteristically reinforces a given response in the presence of given stimulus.

Skinner tried to convert philosopher Whitehead to behaviourism. Whitehead challenged him to show how speech can be fitted to the behaviouristic scheme of things. Skinner took the challenge very seriously and he has made a good-case for treating verbal behaviour like all other operant behaviour, determined by stimuli and reinforcement. (Woodworth and Sheehan, 1965).

Skinner distinguishes between MAND and TACT. The mand is speaker's response to internal stimulus such as hunger or pain. A TACT is speaker's response to external stimulus.
MAND is a verbal response. It is controlled by antecedent motivating state. The mand 'food', can be reinforced by the listener supplying food. Deprivation states are the antecedent conditions generating mands.

"ECHOIC" is a verbal response controlled by antecedent verbal stimulus. e.g., when father says, 'Dinosaur' and when a child repeats the same word, it is an echoic behaviour. If a parent says "one, two" and a child responds "button your shoe", as the verbal response is controlled by antecedent verbal stimuli, it is known as "INTRAVERBAL". When a nonverbal discriminative stimulus controls a verbal response, it is called a "TACT". Skinner shows that metaphoric and metonymic extension of facts can explain many kinds of verbal behaviour. When a response is controlled by a stimulation arising from speaker's immediate prior stimulation it is called an AUTOCLITIC. e.g., "That fruit bowl reminds me of oranges". Autoclific frames determine the syntactic structures.

Segal (1977) clarifies that functional behaviourism does not require that the control of behaviour should never lie in the way the organism reacts to
the environment. The speaker emits verbal response and the listener supplies reinforcement, non-reinforcement or punishment. This influences the probability of speaker's response. Skinner applies principles of operant psychology to verbal behaviour. Language is conceived by Skinner with reference to context of the verbal community. Skinner, like Wittgenstein (1953), rejects the essentialist account of language. He is more concerned with how verbal responses are reinforced rather than with the referents of verbal responses. REINFORCEMENT rather than REFERENCE is Skinner's category of language-analysis.

It is interesting to note that as scientists also are behaving organisms, they emit a particular kind of verbal behaviour. The professional verbal behaviour of philosophers and scientists is also controlled by contingencies of reinforcement. Day (1969) points out that a radical behaviourist responds to the professional language of his colleagues and critics by attempting to discover the variables controlling their verbal behaviour. Skinner would like to ask not whether what a man says is true, but as to what a man says is true, but as to what makes him say what he says.
III. Arguments Against Skinner's Operant Analysis

We should clearly distinguish between two positions; viz, (i) There are non-dispositional, non-behavioural and non-neural mental states and (ii) They are not required to be postulated for psychological operant analysis. The first position, as a mentalist component, can be a legitimate part of any psychological theory without being incompatible with methodological behaviourism. The second position is only explanatory or methodological antimentalism and unless it is connected with the denial of (i), it can be accepted for certain purposes within psychology. A misunderstanding would arise if (ii) is always taken to imply the denial of (i). Skinner clearly that operant analysis in terms of stimulus-response and reinforcement is adequate for behaviouralistic psychology. What has been disputed is whether the denial of (i) follows from the assertion of (ii). Philosophers have commented upon this particular implication.

The following major arguments have been selected here as illustrations of philosophical response to Skinner's extension of operant analysis to areas of philosophical interest.
(1) Blanshard's (1967) argument from consciousness.
(ii) Alston's (1973) argument from private data.
(iv) Chomsky's (1959) argument from inadequacy of operant analysis.
(v) Argument from antitheoretical approach.
(vi) Argument from Anthropomorphic Fallacy.

Considering scattered arguments from various sources does not add up to a general comprehensive evaluation. So in the next section, we would deal with a general appraisal of Skinner's position. The arguments taken up here are the major philosophical arguments and they have a break-through value in the ongoing debate.

(i) Argument from consciousness.

Blanshard (1967) thinks that the difference between the old and new behaviourism is a difference in policy rather than in philosophy. In a debate with Skinner, Blanshard argued that;
(i) Consciousness is and it is not reducible to physical changes.

(ii) The denial of consciousness is in conflict with modern science.

(iii) To reject the efficacy of consciousness is to make nonsense of all practical life. For example, Blanshard wonders whether jealousy had nothing to do with Othello's action. Could Skinner say that Romeo's love for Juliet was not a motive for anything?

Skinner replied to these objections by saying that nothing is gained by introducing mental entities when observable contingencies of reinforcement can account for discrimination, abstraction, concept-formation etc.

Blanshard expressed his dissatisfaction with Skinner's reply by pointing out even if pains are caused by environmental contingencies, pain itself is not a physical thing. Toothaches can not be seen and hence are not physical things even in ordinary sense.

In short, Blanshard has raised objections which are rejections from mentalistic properties and we have discussed similar objections to neurophysiological antimentalism i.e. mindbrain identity theories. It is one thing to say that there are no mental states and another thing to say that they are not required for scientific purposes.

Blanshard, in our terms, has challenged both these views.
His claims imply that conscious events do take place and that they do have a role in science. This means that Blanshard rejects Skinner's explanatory as well as antiological antimentalism.

(ii) Arguments from Private Data.

Alston (1973, 71-102), a philosopher, has thoroughly examined the problem of behaviourism with reference to private data.

In his review of relevant literature on the subject, Alston has noted that psychologists investigating perception, thoughts, imagery etc. are utilizing the reports of the subjects of experiments. Research in which such reports are utilized is called "mentalistc research" by Alston. A behaviourist, confronted with such mentalistic research, has either to reject it completely and substitute purely physicalist interpretation of behaviour or he must legitimize the mentalistic research by reinterpreting it in accordance with behaviouristic principles. The reinterpretation lies in introspective data to be treated not as FURNISHING empirical data about the mental, but as BEING public data themselves.

Alston argues that (1) the behaviourist position misrepresents the place of introspective
reports in psychological research; and (ii) As mentalistic research need not be proscribed by a ban on private data, it follows that private data can satisfy the methodological requirement of science. Of course, Alston makes it clear that the term "Introspective reports" as used by him includes immediate unreflective judgments also. To avoid any misunderstanding, Alston characterizes introspective reports as "First Person Immediate Psychological State Reports" i.e. FPIPSR.'

(a) The Characteristics of FPIPSR.'

For Alston, FPIPSR has the following characteristics.

(i) In it, a person attributes a psychological state to himself.

(ii) It is immediate i.e. not based on other beliefs of a person.

(iii) It is commonly taken to be immediately warranted.

(iv) Only the person in question satisfies all the three conditions.

FPIPSR.'s are about a wide variety of contemporaneous states i.e. sensations, thoughts, images etc. They are not infallible.
(b) **Empirical Sciences and FPFSR**

Alston argues that in any empirical science, propositions are derived from other propositions; e.g. "Rat R is hungry", can be derived from, "Rat R has not been given food since last twenty four hours." But, it is not the case that ALL scientific claims are supported only by some other propositions. Science, in inference. Somewhere the statements have to be supported by direct experience. Science does require protocol statements. Now a behaviourist's rejection of FPFSR's as a protocol statements entails that it's empirical basis has been taken away. A way out suggested by the behaviourists is that the experimenters' reports of the subjects' reports function as protocol statements.

(c) Change of hypothesis

Alston points out that in treating verbal reports as merely behavioural data, the experimental CHANGING his hypothesis though he may not be aware if it. He will have to treat overt utterances rather than treat overt utterances rather than private states as the dependent variables of his experimental design.

Alston raises methodological objections to such procedures. Initially you start with the hypothesis (to be tested) that under certain stimulus's, a subject
will see red or green or blue; now, because of the ban on private data, you will have to reformulate the hypothesis by saying that under simulation S, subjects would say 'red' or 'green' or 'blue'. The hypothesis about seeing is changed to the hypothesis about saying. Alston claims that such new dependent variables are not extensionally equivalent to the originals. Conditions which govern my seeing of something green are not identical with the conditions which govern my saying that "something is green". Verbal reporting is influenced by many other variables. Hence the hypothesis regarding seeing of green objects and the hypothesis regarding saying something about the green objects are different and by reducing "seeing green" to "saying that something is green", a behaviourist is methodologically confounding his dependent variables.

Alston also points out that even in claiming that the behaviourist is using only the notion of "saying how the sphere looks to him", the behaviourist has indirectly committed himself to private mental data. Of course, there are occasions in psychotherapy, where the subject's reports are not construed as protocol statements. Verbal reports, in experimental situations, can however be better conceptualized as accurate descriptions of the experiences of the subjects.
Thus, Alston concludes that preserving the substance of mentalistic results while construing the dependent variable as an item of verbal behaviour is an attempt which is doomed to failure for methodological reasons.

(d) Hypothetical Constructs.

A second alternative is available according to Alston. A behaviourist can argue that he is not construing his revised dependent variable as extensionally equivalent with the original mentalistic variable, but he is treating the verbal reports as indicators of the hypothetical constructs i.e., constructs denoting postulated non-observational inner processes. Reports, then, are indicators of internal states. This seems to be initially a promising alternative, but ultimately it becomes indistinguishable from the introspectionist theory that verbal reports are indicators of inner mental states. Alston admits that if FPIS is treated merely in phonetic-act terms or locutionary-act terms then it need not lead us to treating them as protocol-statements. For, example, the verbal reports can be taken as vocally produced sounds presented in a particular graph. In such a situation they need not be taken as reports indicating the inner processes.
Only PPiPSR s at illocutionary act-level (i.e. S said that the object no longer looks red) are reliable indices of the mental states reported. Alston does not consider it very promising to interpret verbal reports only acoustically, because mere sound-sequences may express many different states. There is no matching between the illocutionary acts and acoustical productions.

Alston believes that due to such considerations, behaviourist prescription of private data can not be compatible with the substance of mentalistic research.

(e) The lifting of the ban on private data.

Alston has observed that if mentalistic research is not invalid and if it is not to be prohibited methodologically, then the ban on private data has to be methodologically lifted. We need not be committed to the old version of structuralist psychology in order to restore the status of PPiPSR s. The structuralist psychology was atomistic and it was restricted to the study of consciousness only. One can reject such a structuralism without undermining PPiPSR s. Even the old notion of introspection as observation of specially distinguishable states can be rejected.
Thus, for Alston, FPIPSR's are respectable candidates for protocol statements. In checking the accuracy of FPIPSR's, we may check many considerations other than the psychological states reported. They are not incorrigible.

Alston's critique implies that the reporting of mental state can not be eliminated even methodologically because if it is done, the researcher would be testing a different hypothesis from the hypothesis he wanted to test. e.g.; if a researcher wants to know under what conditions a person sees red and then suppose he treats his (subject's) verbal statement of having seen red as merely one kind of behaviour elicited under particular conditions, then the hypothesis is changed by the ban on private data. Skinner does not want to put a ban on private data, but argues that the reports of such data are themselves to be treated as verbal behaviour shaped by certain environmental contingencies. Alston's general critique applies to Skinner because Skinner is bound by methodological considerations to reject FPIPSR's.

Skinner admits that a behaviourist philosopher must face the problem of privacy and privileged access. He may do so without abandoning behaviourism.
Skinner does not believe that events going on within the organism's skin have any special properties. A private event has a limited accessibility, but no special nature.

Skinner claims that verbal response "red" is established by community when it is made in the presence of red stimuli. But the question is, how can, "my tooth aches", be at all established by a verbal community through differential reinforcement? "My tooth is broken", such a verbal response can be established because both the individual and the community have an access to the stimulus for "broken".

Skinner, like Wittgenstein, suggests the possibility that we observe public events which accompany such private stimulation (i.e. toothache) or we observe some identifiable response such as scratching and thus by the child can be taught to say "That itches" or the verbal community finds it very difficult to arrange contingencies required which can teach a child to call one pattern of private stimuli "diffidence" and another "embarrassments" (1969 p. 230, 1954, p1 260, 261) Still however, the principle that under certain contingencies of reinforcement,
an organism learns to react to the world, holds for all human responses. What Skinner emphasises is that the private events within the skin, due to poor accessibility and lack of obvious verbal reinforcement, are sometimes less exactly and distinctly known. Skinner rejects the Cartesian thesis that the mind is better known the external world.

Skinner also rejects the notion that one does not see the physical world but only the non-physical copies called "experiences". "Sensations, images and their congeries are regarded as psychic or mental events, occurring in a special world of "consciousness" where although they occupy no space, they can nevertheless often be seen" (P.276, 1954)

Skinner points out that when there are no stimuli present, the response beginning with "I see _____", must be explained in terms of respondent and operant conditioning. Skinner explains privacy with reference to organism's responding and discriminating and its being reinforced by the verbal community. A verbal report is only a response of an organism, it is a part of behaviour. There are events of which the report is a function. The boundary between the public and the private is not fixed. The contingencies necessary for self-descriptive behaviour
are arranged by community when it has reason to ask, "what did you say?", "Did you say that?" and so on (VB, 3/4).

Skinner argues that private events pose no problem for the philosophy of behavioural science. They are either stimulations or responses. Private stimulation may be discriminating reinforcing or punishing. They involve interoceptive and proprioceptive nervous system. Here the behaviourist has not direct access to the controlling variables.

For Skinner (1974), the private events can control behaviour only by entering into the contingencies of environment. Private events can be traced back to the past history of the individual through the action of environmental contingencies. Skinner claims that behaviourism can describe private events through natural contingencies though some interpretations would be necessary here.

Roger Schnaitter (1975) admits that at times Skinner's response seems to be more like an epiphenomenalist and at times it resembles identity theory. Schnaitter observes that to characterize Skinner as an epiphenomenalist or an identity-theorist is to believe that Skinner's verbal behaviour is under the control
of the same variables as those controlling the verbal behaviour of the philosophers. A philosopher's critique of Skinner would not appeal to Skinner because Skinner would claim that a philosopher's verbal behaviour is controlled by those contingencies of reinforcement which are extraneous to the experimental set-up in a laboratory.

Skinner (1974) points out that he does not share Watson's zeal to eliminate the study of introspective life. Psychologists have to provide an explanation of private events, still however, Skinner asks us to be cautious in accepting verbal reports at their face value. Skinner does not underestimate the complexity of human behaviour. Skinner is more concerned with the events in our environment which cause behaviour. Skinner "deemphasises" the inner events for behavioural psychology (Ryckman, 1978, p. 230).

Alston's critique however does raise a valid point even if Skinner's account of learning of language referring to private events is not controversial. Alston's argument of change of hypothesis and variables is not still adequately countered.
(iii) **Argument from first-person attribution of mental predicates.**

Norman Malcolm (1964, 1972) considers behaviourism as a philosophy of psychology and he points out that Skinner has himself characterized it as "a philosophy of science concerned with the subject-matter and methods of psychology." (Skinner, 1964, p 75).

Malcolm shows that Skinner, as a philosopher of science, is "engaged in translating and reducing the misleading mentalistic expressions of ordinary language". (Malcolm, 1964) Skinner behaviourally unpacks the common-sense mentalistic abbreviations. As a philosophy of psychology, behaviourism is the antithesis of introspectionism.

Malcolm, a follower of Wittgenstein, endorses Skinner rejection of introspectionism as a philosophy of psychology. Wittgenstein did the same by his attack on private-language. The doctrine that each of us gains mastery of psychological concepts from private introspection would make communication impossible and language private. This is the hard core of logical truth contained in behaviourism.
For Malcolm, behaviourism fails in the first-person case. When I say "I feel excited", it does not mean that I verify that my hands are trembling and that my voice is quavering and therefore I conclude that I am excited. This was assumed by Carnap, but, really speaking a man does not conclude that he is excited. He says that he is and he is, but his utterance is not the result of self-observation. I do not verify that I have a headache or toothache. The error of introspectionism lies in the fact that for such a theory, the first-person reports are based on observation of a special type; the error of behaviourism lies in conceiving of such statements as subject to external observation. The first-person third-person asymmetry is fatal to Skinner's behaviourism.

Malcolm points out that behaviourism is right in insisting that there must be some tie between the language of mental phenomena and outward circumstances and behaviour. But, for Malcolm, the error of behaviourism lies in its failure of appreciating the peculiar status of first-person psychological sentences. Man's status as a subject is bound up with the first-person utterances. They are non-criterial ascriptions. "Self-testimony is largely
autonomous, not replaceable even in principle, by
observation of functional relation between
variables." (1964, P 154).

Malcolm does not consider Skinner's defense
that private stimulus is the physical-private-stimulus
is the physical event inside the organism. First-
person statements are not softened "manda". When a
person has a headache, he may take someone's help in
determining the cause of headache, but-for cause-of
headache, but for Malcolm, there is no sense in claim-
ing that he requires observations for determining that
he has a headache.

Malcolm (1972) rejects the Lockean view that
mental concepts are obtained from introspection. He
also challenges the claims of behaviourist philoso-
phers that ascription of mental predicates to oneself
and others is symmetrical in respect of verification.
Malcolm, analysing Skinner's version of self-ascrip-
tion of mentalistic predicates argues that "people do
not byse their announcements of their intentions on
their awareness of events in their bodies" (p,84).
He points out that Skinner's conjecture to widely
remote from facts. Dispositional mental concepts do
not possess this asymmetry of ascription, but for a
great range of concepts such an asymmetry is very
sharp. Overlooking such an asymmetry would lead us to a Camp (1959) type of view that psychology is a branch of physics. Such a view is false because we rarely perceive peoples' action in purely physical terms.

(iv) Argument from inadequacy of operant analysis.

Chomsky (1959) has reviewed in details Skinner's *Verbal Behaviour*. We will only discuss here those aspects of Chomsky's critique which are relevant to our evaluation of Skinner for philosophy of mind and philosophy of science.

Chomsky's major point is that the notions of stimulus, response and reinforcement are well-defined within the contexts of experimental design and set-ups but when we apply them by extension to the whole of human behaviour, including verbal behaviour, we take many difficulties. If the stimulus is interpreted very broadly as any physical stimulus impinging on the organism and if any part of the behaviour is called a "response", then according to Chomsky, behaviour has not been demonstrated as lawful. If a narrower construal of 'stimulus' and 'response' is endorsed, then behaviour, by definition, becomes lawful. Skinner cannot escape from this dilemma.
In BO, Skinner defines 'stimulus' and 'response' narrowly, but in VE he generalizes his findings beyond laboratory settings.

If we look at a red chair and say 'red' the response is under the control of the stimulus redness. If we say 'chair' it is under the control of the collection of properties (for Skinner, the object) chairness.

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The device is as simple as it is empty. (Chomsky p. 553)

Properties are "free for the asking", as Chomsky puts it. Skinner overuses the concept of stimulus-control. Skinner has given a number of examples where utterances are under a variety of stimulus-control and the expressions 'stimulus', 'control' etc. lose their meanings. The same is true of Skinner's concepts of 'response' and "reinforcement."

"Reinforcement", a key term of Skinner's behaviourism, is precise for experimental setup but useless for wider issues. Chomsky examines a number of statements about reinforcement. He finds that persons can be reinforced though they omit no response; "X is reinforced by Y", becomes a shorthand for "X likes Y," "X wishes that Y were the case" and so on. The notion of reinforcement has not clear content.
Chomsky finds no evidence that shaping of verbal behaviour through differential reinforcement is absolutely necessary. Chomsky does not agree with Skinner that Skinner's formulation is superior to the traditional theories of reference and meaning.

Chomsky does not undermine Skinner's experimental psychology. He rejects the concepts precisely tied to the experimental set-up and extended to comprise all verbal behaviour. Chomsky explains performance with reference to internalized grammar.

The Skinner-Chomsky debate is more relevant for philosophy of language and linguistics as well as psycholinguistics, but Chomsky's contention that Skinner overuses his concepts which were initially tied to experimental set up is an important one. It is for this reason that we have briefly referred to Chomsky here.

(v) Arguments based on antitheoretical and reductionist approaches

Michael Scriven (1956, 1964) has subjected Skinner's behaviourism as a philosophy of science to a critical appraisal.
Scriven objects to the anti-theoretical stand taken by Skinner. Skinner claims that science of behaviour require no theories. For Scriven, (1956) Skinner's claim amounts to the belief that deductive explanation of the basic laws of science of behaviour is not available and is pragmatically worthless but Scriven wonders how far Skinner can escape theorizing even during his execution of experimental design. Defining response in terms of achievement is itself a theoretical exercise. Scriven points out that Skinner has to endorse the theoretical assumption that learning processes are characterized by orderly changes.

In fact, according to Scriven, Skinner has failed to prove that a logical error is involved in micro-theorizing at neurophysiological level.

Similarly, Scriven argues that the stimulus-response interpretation is difficult to maintain for all mentalistic interpretations. Skinner, though an antireductionist as far as the reduction is neuronphysiological language is concerned, is a reductionist in so far as the mentalist language to the stimulus-response language is concerned. The trouble with Skinner is that he conflates two
distinguishable positions; viz, (i) There are no mental events and (ii) There are mental events but not accurately reportable. Skinner's hostility to inner-states is not scientifically justified.

Thus, for Scriven, Skinner's anti-theoretical and language-reductionist strategy is not adequate even for psychology. Scriven (1966) shows how the other-minds problem, private-language problem and the mental-causecity problem are relevant for psychological research.

(vi) Argument from anthropomorphic fallacy.

Skinner has argued in his Beyond Freedom and Dignity that ascription of purpose to men to an animistic way of looking at them and for a behavi­ oural science, we better discard the notion of purpose.

Antony Flew (1978) is very harsh on Skinner for having claimed this. Flew calls it 'grotesque assumption'. Ascription of mental state is pre-scientific, according to Skinner Flew submits that it is pre-scientific only in temporal sense, i.e. it was going on long before science emerged, but that does not mean that ascription
of purpose is pre-scientific in the sense that it is unscientific.

Anthropomorphism is a fallacy only because human beings have purposes.

For Flew, any psychological programme committed to the contrary is, by such a 'preposterous commitment' alone, thoroughly discredited. Purposive notion by itself is not a superstitious idea. Only its misapplication results in anthropomorphism. Skinner fails to draw the distinction between the misapplication of ideas and superstitious ideas.

Skinner's notion of the presuppositions of science of psychology involve the elimination of purpose and the elimination of human agency. Such a philosophy of psychology is inadequate for subject-matter of psychology, according to Flew. The following, aptly characterizes Skinner's attitude to human sciences:

"What my net will not catch is not fish"

(Flew, p.150).

(vi) Comments on the arguments

It emerges from the consideration of the
arguments that Malcolm and Flew have made important breakthroughs by their arguments. Flew's argument would lead Skinnerians to be cautious about totally denying the ascription of purposes to human beings. Skinner's point that nothing comparable to it is found in physics is relevant because psychology is not physics. Such observations by Skinner have led the scholars to believe that Skinner is an ontological materialist. We are surprised that Skinner is surprised that physics does not talk about purposes. Malcolm's argument has the effect of restraining the omnipotence of third-person attributions. Science is essentially a third-person approach, but in securing data it has to rely upon first-person reports. This has been clearly brought out by Alston's argument, because behaviourists can not dispense with the mentalistic research. Chomsky-Skinner controversy might be better lift to linguists, but Chomsky has shown how Skinner's concepts fail to be comprehensive.

IV Skinner's Antimentalism - An Appraisal.

Eysenck (1975), ranked as the most influential psychologist after Skinner and Piaget, warns us against misunderstanding Skinner's contribution to psychology
by pointing out his inadequacies in other areas. Eysenck (1975) complains that amateur philosophers who lose around arguments on freewill and determinism never come to grips with some very fundamental facts found by Skinner. Skinner's premises are based on experimental studies and have to be criticized on technical grounds. Eysenck argues that Skinner's concern is with philosophy of science not with epistemology and other ancient disputes. Skinner does not ignore consciousness, feelings or states of mind; it has a place for intention or purpose. It does assign role to a self or sense of self.

Harzem and Miles (1978) also do not consider the charge of being "soulless" as legitimate against Skinner's approach. Skinner's approach expresses reservations against Cartesian dualism. Operant psychology is behavioristic only in the sense that a part of its programme requires translation of the sentences containing words such as "know" or "recognize" In fact, operant concepts are applicable universally. In any situation we can always ask for stimuli and responses. Harzem and Miles (1978) carefully use their words while pointing out what Skinner does not deny. They claim that Skinner does not deny the characteristic
human skills. This means that Skinner does not along the concepts of skills, capacities and tendencies. What is often overlooked in such ingenious defenses is the question whether Skinner denies mental occurrents rather than mental abilities.

Of course, Harzem and Miles (1978) argue that the claim that everything is material is meaningless because the word, 'material' has no contrast in this case. "The use of one member of a pair of terms is parasitic upon there being a polar or contrasting term, and if no such contrast is intended, then the use of original term is misleading." (1978, p. 24). It is in this sense that behaviourism should NOT be characterized as materialism. Harzem and Miles recommend the techniques of Austin and Wittgenstein in analysing such metaphysical polarities.

Ryckman (1978) has evaluated Skinner's operant analysis as scientific theory in terms of the following six criteria:

Ryckman (1978) finds that though Skinner has not constructed a theory that rivals Freud's in terms of comprehensiveness, Skinner's theory satisfies the other criteria successfully.

Hall and Lindsey (1978) have shown that as Skinner's position is concerned with behavioural change learning and modification of behaviour, his theory is more relevant in the area of personality-development rather than personality-structure.

Wrightsman, Sigelmen and Sanford (1979) claim that Freud, Rogers and Skinner, each developed a personal philosophy of human nature and Skinner's assumption is that there is no inherent human nature that is either good or bad because man is what he learns as a result of experience.

Skinner's personality theory does not require the concepts of self, ego, Id or other mentalistic concepts. Skinner is a strong determinist and explains the concepts of freedom, dignity responsibility and character in terms of the contingencies of reinforcement. Thus the programmatic and pragmatic orientation of Skinner has proved to be extremely valuable in psychology, but his philosophy of human nature has been challenged by Rogers, a humanist-existential psychologist.
Stevenson (1974), a philosopher, has included Skinner's theory among the seven major theories of human nature comprising the theories of Plato, Christianity, Freud, Marx, Sartre and Lorenz. Stevenson notes the following comprehensive claims of Skinner's operant approach.

(i) Skinner's theory of universe can be called "Scientism".

(ii) Skinner's methodology is austere and he rejects all unobservables; mentalistic or neurological.

(iii) ALL behaviour is governed by causal laws and ALL behaviour is a function of ENVIRONMENTAL variables.

(iv) Sartre claimed that we are free but we pretend that we are determined, Skinner claims that we are determined, but still like to think that we are free. Individual freedom is a myth.

This sample of appraisals of Skinner, both with regard to his science and philosophy of science, convinces us that Skinner as a rigorous experimental psychologist is superior to Skinner as a philosopher of human behaviour.

I have shown in part II of this work that neurophysiological antimentalists claimed superiority over
behavioural antimentalists by claiming that behaviourism is inadequate because it does not accommodate the experiential dimension of mind. It turned out that by advocating the mind-brain identity theory, they also failed to accommodate the mentalistic component in their own theories. In so far as they accommodated the mentalistic component, they had to move away from the exclusively unidimensional ontological materialism, which supported their identity theory.

It now emerges that neither Ryle nor Skinner can be construed as an unambiguous unidimensional materialist. Both of them have been concerned with rejecting explanatory fictions expressed in mentalistic language. Skinner rejects them for scientific purposes and Ryle rejects them for conceptual and analytic purposes. It is my claim is that Skinner's operant analysis is only an explanatory antimentalism and explanatory antimentalism is not real ontological antimentalism.

In my paper (Bexi, 1975), I have shown that even in Skinner's recent books (Skinner, 1969, 1972), there is a peculiar ambiguity regarding the status of the mental. Skinner abolishes the concept of inner man as an explanatory device. Skinner speaks of "disregarding
or ignoring the dimensions of the world of mind. 

(1972) I have shown that if mentalistic ascription
is a verbal behaviour maintained by verbal community,
it is surprising why radically false mentalistic
language should continue to be reinforced at all.
(Baxi, 1975)

It can therefore to be maintained that in so far
as operant analysis or dispositional analysis rejects
the postulated explanatory mental entities for the
purpose of scientific explanation, it is not ontolo-
gically antimentalist. It is antimentalist only if
experiences are not at all admitted at any stage. We do
find some lack of clarity on this point on the part of
Ryle and Skinner and hence the critique of Ryle and
Skinner capitulates on the alleged ontologically
unidimensional materialism of Skinner or Ryle if they
share such a view, it has not been as clearly
articulated as is done by the identity theories. In our
appraisal of Ryle (chapter V), we found that ALL
mentalistic concepts can not be dispositionally
analysed and even if all mentalistic concepts are
dispositionally analysable, such an analysis for the
purpose of science or language, does not exclude the
concept of mind as denoting the non-behavioural non-neural
and non-dispositional occurrences.
The view argued for here is that a lot of confusion is generated by the proponents and critics of behaviourism simply because they do not unambiguously differentiate between what may be called "explanatory antimentalism" and what may be recognized as "ontological antimentalism". This thesis is an argument to the effect that a theory which accepts the existence of mental processes, states, events, etc., but explains them by behavioural or neurophysiological concepts is still a mentalistic theory. If at all it can be treated as antimentalistic, such a theory might be called "explanatory antimentalism". When critics assess Ryle's or Skinner's theory, it has to be clearly stated whether they are arguing against explanatory antimentalism or ontological antimentalism. To say that whatever is, is an instantiation of physicalist variable only and there is nothing corresponding to any mentalistic description would be a position aptly characterized as ontologically unidimensional materialism (OUM). To say that mental states exist, but the concept of mental states has no explanatory power is an explanatory antimentalism and it is compatible with any materialistic theory consonant with the acceptance of mental as distinguished from the neural and behavioural.
Critics collapse the explanatory antimentalism with ontological antimentalism and defenders of behaviourism also commit the same fallacy. This is perhaps the reason why Eysenck (1975), Harzem and Miles (1979) and others are inclined to argue that Skinner has been misunderstood by philosophers because Skinner does not deny the existence of mental states.

It is necessary to be clear about the distinction discussed above which unfortunately has not been emphasised as clearly as required. If Skinner, Ryle and Wittgenstein do not deny the mental states ontologically, then their views have a mentalistic component. It is a different matter whether the mental states thus admitted have any explanatory value for psychology or the science of language.

It is the argument of this study that if Skinner's or Ryle's approach is construed as a view which claims that mentalistic statements require public checking in their third-person use, then such an approach is valid and required necessarily for scientific purposes. If however Skinner's or Ryle's approach is treated as implying that nothing whatever corresponds to any mentalistic expression except the behavioural events, then
such an approach, as an OUM, is congruent without being adequate. It is claimed here that saying that the mental can be understood in the context of the behavioural, presupposes that there is something mental as distinguished from behavioural. Requirements of scientific methodology and the needs of philosophical analysis of concepts do not always coincide. Physical causality of psychical events is not to be denied. If I ascribe my toothache to the frustration of a soul within me, then I am unnecessarily resorting to ghost-in-machine (Ryle) or inner autonomous man (Skinner). My point here is that to reject the autonomy of mental is not to reject the existence of the mental. This may appear too trivial and obvious, but a lack of clarity on such issues have a cumulative effect on the amount of support extended to counterintuitive theories like ontological antimentalism.

Let me further illustrate my point. Supposing a psychologist is administering a logical reasoning test to me. Suppose it turns out that though I am married person, this particular fact is irrelevant for his purposes. From this, if does not follow that I am not married at all. Supposing however, a psychologist is testing me for my marital-adjustment. Now here my having
a wife is absolutely relevant for his research purposes.

Relevance of research purposes depends upon the interests of the projects concerned. If a psychoanalyst is interpreting dreams, he will be vitally concerned with what appeared in the dreams, if a physiological psychologist is dealing with dreams, he may ignore the dream-reports and may concentrate only on the EEG graphs correlated with REM sleep and other physiological indicators.

So it is surprising that so much has been said about scientific purposes and so little has been said about ordinary purposes of everyday living. An explained sunset is still a sunset. A behaviourally explained or neurophysiologically explained pain is still a pain. Phenomenally presented sunset appearance is presupposed in any optical explanation of it; similarly phenomenal presentation of pain is presupposed in any behavioural explanation of it.

Skinner's translation-strategy resembles Smart's (1959) topic-neutral translation strategy. Ordinarily, translations presuppose mutual equivalence of meanings. So if the mentalistic sentences are translated into behavioural sentences, equivalence of meaning has to be preserved. But if mentalistic concepts are empty, has is
it that their behavioural translations are richer?

'Translation' therefore is not the appropriate word for linguistic changes. 'Refinement' or 'revision' would be more apt for such linguistic devices. I agree that precise operational (i.e. behavioural) descriptions are methodologically superior to vague phenomenal reporting as far as scientific purposes are concerned. Scientific purposes are however not the only purposes for communication. Some dimensions of total pain-behaviour are better articulated by behavioural language and some by phenomenal language. Revisions might be required for scientific purposes but this does not imply the denial of the phenomenal events. "Non-scientific" is not necessarily "un-scientific".

It is necessary to distinguish between scientific facts and facts as such. e.g. it is a fact that my friend died of lung-cancer. He was also a heavy smoker. Such facts alone are not statistically significant for validating the hypothesis regarding the relationship between smoking and lung-cancer. It may turn out that the relation between smoking and lung-cancer is not valid at a statistically significance level ($P = .05$). Thus, explaining lung-cancer by attributing it to heavy smoking might be proved statistically rash and off the mark.
This however does not mean that there are no smoking events and no lung cancer events. Similarly, the explanatory power of certain postulated mental events might be statistically and experimentally non-significant and yet mental events as facts can be accepted. Explanation is concerned with interrelations of variables but when variables are not functionally interrelated it does not mean that nothing ever is instantiated by them.

For example, my feeling of pain may be a part of my total pain behaviour. It may be that from the dentist's point of view it forms an insignificant part of my total pain behaviour. Dentist secures my verbal behaviour and manipulated my pain behaviour by some stimulation inconvenient to me. He need not be concerned with any other dimensions of my feeling of pain. As a scientist or as a practitioner, he is only concerned with certain conditions which are invariably associated with my observable pain behaviour. All this does not mean that I never felt anything else except that which was observed by a dentist. I maintain that there are private mental facts in the sense that they do not form a significant part of the observation undertaken from the standpoint of a scientist or a research worker.
The principle of scientific exclusion of fictional explanatory entities is welcome and if this is the WHOLE point of Ryle's and Skinner's analysis, it is also acceptable. Psychology has been benefited by operationalizing its concepts and linking of its concepts with observable behavioural dimensions. Cartesian dualism which conceives of the mental as totally distinct from all that is physical is irrelevant for psychological research. But a rejection of Cartesian dualism is not a rejection of dualism as such. If by dualism is meant an acceptance of two different KINDS of variables, then such a dualism is welcome for research purposes also. It is an empirical question as to whether an acceptance of mental as distinct from behavioural variables can benefit research in psychology.

Identity theorists were ontological antimentalists primarily and explanatory antimentalist secondarily. Behaviourists like Skinner and Ryle are primarily explanatory antimentalists; and ambiguously ontological antimentalists. Identity theorists object to the ontological antimentalism of behaviourists, and behaviourists like Skinner and Ryle object to the explanatory antimentalism of identity theory. It is
therefore found that both the groups have missed the main points of each other's theories.

I maintain that explanatory inadequacy of behaviourism is an empirical question to be settled among psychologists but if behaviourism is to be ontologically adequate, it should include a mentalistic component in a more articulate way. If a behaviouristic theory is pushed towards O U M, then it will be congruent without being adequate. Both, neurophysiological and behavioural antimentalist face the same type of objection the source of which lies in the criteria of congruence and adequacy formulated in chapter I part I.

Early behaviourism was analysed in terms of metaphysical behaviourism and methodological behaviourism. Skinner's behaviourism, if confined to methodological domain is not relevant for the philosophical standpoint on mind-brain problem. Skinner has extended it beyond laboratory and this by itself is also not debatable; but philosophers have entered the picture only when Skinner offered a "philosophy of human nature" (Wrightsman, 1979). Some may challenge a philosopher's competence to discuss Skinner at all; it can also be argued that any discussion of Skinner totally irrelevant
for philosophy of mind. It is the view endorsed in this study that if philosophers ever discuss mind-body problem, they cannot engage in their pursuits as if no psychologists ever existed. Such an attitude is academic narcissism. Philosophers who are not the victims of such narcissism have taken keen interest in Freud's psychoanalysis. (e.g. Miri Mrinal 1977)

Miri (1977) has discussed philosophy of psychoanalysis. Sunder Reyen has also discussed philosophy of psychoanalysis (1974). Indian philosophers today have not ignored psychoanalysis. This chapter claims to be a contribution to philosophy of behaviourism in relation to mind-body problem. There is not much by way of Indian philosophers' response to Skinner. In part II we discussed mind-brain identity theory. No attempt so far has been made to assess, neurophysiological as well as behavioural antimentalism by contemporary Indian philosophers. This study is such an attempt.

We can now conclude by saying that in so far as Skinner's operant analysis operates on methodological assumptions, it can be discussed technically by psychologists but, in so far as it implies or indicates ontologically unidimensional materialism, it is either inadequate or incongruent. The objection that unsettles
neurophysiological antimentalism also unsettles behavioural antimentalism if its ontological dimensions are articulated. We have found Skinner occasionally giving concession, to the existence of mental events. His operant analysis then has epiphenomenal metaphysics. It has not so far been noticed or commented upon that any epiphenomenal approach is DOUBLY epiphenomenal; i.e., firstly it conceives of the mental state as ineffective causally; secondly it renders dualistic metaphysics itself epiphenomenal for science, because science can then proceed on purely mechanical assumptions about human nature. But if Skinner is an epiphenomenalist, he is a mentalist and hence his theory ceases to be a congruent ontological materialism; if his theory does not conceive of the mental even as epiphenomenal, then his theory is inadequate. It is thus found that Ryle's or Skinner's ambivalence about the mental states is itself an evidence that an OUM is inadequate.

If a behaviourist defends himself by saying that his theory is only a methodological behaviourism, then the reason for his methodological clarification would be that he accepts mental states for non-scientific purposes. Thus a methodological behaviourist also is a
mentalism. It is very necessary to clarify here that whatever is relevant for scientific purposes is not the only thing relevant for ontology. One can encounter what there is in the world without ever scientifically understanding it. My pains or my colour perceptions have a subjectively felt dimension which might not be relevant for scientific purposes, but that does not mean that, I do not experience my pain in that particular dimension. This argument appears obvious to the point of being unmentionable in sophisticated philosophical discourse, but what is not obvious is the overlooking of the obvious by philosophers of eminence.

Identity philosophers have stated their ontological materialism so clearly that if they are wrong they are found to be clearly wrong. Behaviourist philosophers and psychologists have not done so, excepting in Camap's ontological and Skinner's methodological behaviourism.