ABSTRACTS

From the British Journal for the Philosophy of Science

November Number, 1956; Vol. VII, No. 27

"The Study of the Philosophy of Science", by G. J. WHITROW: Arguments for and against the study of the subject are discussed. Scientists who study it are often accused of wasting their time. Against this it is argued that: (i) every scientist has a philosophy of science—conscious or unconscious; (ii) the classics of the subject have a perennial interest; (iii) only in discussions pertaining to this subject is serious consideration given to the nature and tendencies of science as a whole; (iv) a more widespread training in the subject could promote higher critical standards for the manner of presentation of the results of scientific research; (v) the subject can be, and often has been, of great help in the clarification of concepts and theories and the general advancement of science itself.

"Some Aspects of Probability and Induction", by JONATHAN BENNETT: A discussion of three topics treated in Kneale's *Probability and Induction*. It is argued that Kneale's treatment of the consilience of inductions is faulty and, in particular, that he fails in his attempt to show that two or more scientific hypotheses must automatically gain in probability if they are shown to be consequences of some single, wider hypothesis. Arguments are advanced to show that the range theory of probability is unworkable, and Kneale's attack on the frequency theory is criticised. A defence is offered, against Kneale's criticisms, of Keynes' theory of eliminative induction.

February Number, 1957; Vol. VII, No. 28

"On the Difference Between Men and Machines," by T. R. MILES: Let us assume an object capable of displaying any characteristically human responses that anyone chooses to name. On what grounds could this object be labelled either "man" or "machine"?

It might be suggested (i) that the presence of *mind* or *consciousness* is a sufficient condition for calling the object a man, or (ii) that, if all behavioural criteria for distinguishing men from machines are removed, then ex hypothesi there is no difference between the two. (i) appears to involve an unverifiable and therefore senseless hypothesis; (ii) involves the questionable procedure of treating the notion of "consciousness" behaviouristically.

A better solution can be found by making use of Head's notion of "body-schema". The distinguishing characteristic of a man as opposed to a machine is the possession of awareness in relation to a body-schema. This solution can be shown to avoid the difficulties of both (i) and (ii).

"Explanation, Prediction and Abstraction," by ISRAEL SCHEFFLER: In contradistinction to widely held opinion concerning scientific *explanation* and *prediction*, it is argued that (1) they differ not only in pragmatic characteristics but in logical structure, (2) they ought neither be taken as representing the central purpose of science, nor as epistemologically basic, and (3) their abstractive function does not imply that they take abstract, intensional entities (e.g. phenomena, facts, states-of-affairs) as objects.

"Determinism and Predictability," by D. J. O'CONNOR: Many analyses of the notion of determinism have been made in terms of the allied notion of predictability. This paper tries to show that such attempts must fail because the two concepts differ in an important way. The imprecision of all procedures of measurement of continuous quantities and the vagueness of all descriptive words makes it impossible for any prediction to identify an event uniquely. Thus though there is a one-one relationship between antecedent and consequent states of affairs if we assume determinism to be true, there must always be a one-many relationship between a given prediction and the possible events which would satisfy it.