More behaviourism

About Behaviourism. By B. F. Skinner. Pp. 256+viii. (Jonathan Cape: London, February 1975.) £3.50.

PROFESSOR Skinner is unrepentant. Assailed by the liberal and radical establishment as a reactionary witch-doctor intent on subjecting human freedom to blind conditioning, attacked by the new school of linguistics and cognitive epistemology as an ignorant primitivist, Skinner not only maintains his position but makes it more dogmatic.

The concept of mind is an obscurantist 'invention' largely attributable to Plato. The only distinctive characteristic of verbal behaviour is the fact that "it is reinforced by its effects on people". Dreams, fantasies, déjà-vu are merely re-cognitions of "what we have once cognised", in some of which certain controlling features of self-knowledge are defective. Human thought equals human behaviour: sum ergo cogito. Faith is just "a matter of the strength of behaviour resulting from contingencies which have not been analysed". Mentalist explanations "explain nothing". Behaviourism, on the contrary, puts us in a position to alter and improve the condition of mankind if only we will apply its commanding insights into the role of the environment and into the agency of such cardinal notions as reinforcement and operant behaviour.

Neither the strategy of the argument nor the tone of mildly outraged common sense are at all new. If there is innovation it can be found in the tactics of Professor Skinner's case, particularly in his increasing resort to a Darwinian idiom. In an important sense, we are told, "all behaviour is inherited, since the organism that behaves is the product of natural selection. Operant conditioning is as much a part of the genetic endowment as digestion or gestation". The origin of behaviour "is not unlike the origin of species. New combinations of stimuli appear in new settings, and responses which describe them may never have been made by the speaker before, or heard or read by him in the speech of others. There are many behavioural processes generating 'mutations', which are then subject to the selective action of contingencies of reinforcement."

What is going on here is plain. Darwinian and post-Darwinian terminology is being used in an attempt to refute the drastic onslaught on behaviourism by Chomsky (whom Skinner, either in coyness or contempt refuses even to mention by name). Dismissing the entire basis of innateness in transformational—generative theories of speech and consciousness, Skinner

declares that "grammatical behaviour" has always been shaped by the reinforcing practices of given verbal communities in which some behaviours were more effective, more provocative of useful response, than others. Sentences are not generated by imaginary 'deep structures' but, like all other human proceedings, by "the joint action of past reinforcements and current settings".

As one follows this controversy, a sense of exasperation mounts. It is so utterly clear that both sides simplify, distort, and finally trivialise reality. Skinner is perfectly right when he observes that Chomsky's model is full of logical and evidential loopholes, that it absurdly neglects environmentalhistorical factors, that it is dogmatic and even 'mystical' in its presupposition of deep structures and mental 'presettings'. Chomsky, on the other hand, has shown beyond doubt that a stimulus-response paradigm along Skinnerian lines is totally inadequate to explain either the process of language acquisition and innovation or the prevalence (or what looks like the prevalence) of rule-governed similarities across the field of all known grammars. But, surely, there is no need here of a doctrinal either/or. The evolution of human speech and cognition is neither Skinnerian nor Chomskyan, but represents a constant dynamic reciprocity between universal neurophysiological features on the one hand and the contingencies of the environment on the other, between predisposition and reinforcement, between mimesis and discovery. Indeed, using a Darwinian analogue, one would want to argue. with far more attention to the facts than is shown by either behaviourism

or transformational-generative linguistics, that man's language capacity is uniquely adaptive. Through words he constructs worlds more bearable than that of his organic surrounding. Through the future tense he does something to circumvent the totality of biological death.

Skinner's contributions to experimental psychology, to learning theory and the understanding of conditioning and reinforcements stand secure. It is a pity that they should be overshadowed by an embattled dogmatism the political add philosophical consequences of which are not necessarily sinister, but are certainly naive. George Steiner

Animal Nature and Human Nature. By W. H. Thorpe. Pp. xviii+435. (Methuen: London, January 1975.) £7.20.

It is of interest to compare Animal Nature and Human Nature with Skinner's new book, About Behaviourism. Although Thorpe thinks human behaviour cannot be explained solely by genetic and experiental factors whereas Skinner adopts a strictly deterministic position, the similarities between the two books are more striking than the differences. Both authors believe that if human behaviour were so determined, our freedom of will would be constrained; both rely heavily on assertion and on appeals to authority rather than on argument, though naturally the quoted authorities differ; both dogmatically reject computer programs as possible models of the mind without examining any such programs; both put forward Utopian views of man's future without taking the trouble to think out what sort of Utopia they want; neither gives evidence of having read, let alone



All slots open, flaps down, and undercarriage lowered, the barn owl approaches home. From *Natural History Photography*. Edited by D. M. Turner Ettlinger. Pp. xxvii+ 395. (Academic: London, 1974.) £8.80; \$23.25.