Rewards and fairies

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Upon Further Reflection. By B.F. Skinner. Prentice-Hall: 1987. Pp.214. \$24.95, £21.70.

ONE OF the many American admirers of Burrhus Frederic Skinner has written: "Virtually every institution in the United States has been touched by behavior modification, if only in feeling a need to erect defenses against it". Behaviour modification here stands for the application, in schools, factories and clinics, of Skinner's neobehaviourism, in which all human conduct, intelligent, moral and aesthetic, is reduced to the consequences of previous rewards and punishments. The actions of a human being reading Plato, learning to play the piano or writing a book on psychology are interpreted in the same terms as those used for a rat in a "Skinner box" pressing a lever to release a pellet of food. In such experiments, movement of the lever, called the operant, is usually the only event recorded.

The book under review consists of 14 essays, published in the 1980s, each of which could evoke a lengthy comment. The title suggests a change of mind or at least a response to criticism; and Skinner does declare, on good grounds, that "psychology as a science is . . . in a shambles" (p.160)—a state of affairs for which he might accept some responsibility. His remedy, however, is to return to the analysis of behaviour and the external circumstances, or contingencies, that influence it—the research programme that deminated American psychology for

that dominated American psychology for several decades. His principal enemy is "cognitive" psychology, about which he is amiably rude. This discipline, he says, has abandoned natural science and "rejoined the philosophers in the study of mind, language, values, and perception" (p.160).

Self-knowledge, we are told, is of the same kind as the knowledge others have of ourselves, "about stimuli, responses, and consequences" (p.105). If so, presumably when one says one is hungry or in love, one is making an inference from one's behaviour, observed as if from outside.

The objections to neobehaviourism do not, however, depend on introspection. Among the major phenomena that fall outside Skinner's system are spontaneous exploring and innovation. An animal or human being may move around an unfamiliar region, with no incentive other than that of experiencing novelty. Such movement promotes learning which can be used later to improvise a new, adaptive route or detour. Yet Skinner writes:

"Early man . . . did not look at pictures or listen to music When he had nothing to do, if we may judge from related species, early man simply slept or did nothing" (p.26). This passage fits the author's presumptions, but not the facts. When their primary needs are satisfied, both human beings and other mammals commonly display a restless curiosity;

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B. F. Skinner — a bleak portrait of *Homo operans*.

and the ill effects of depriving people of stimulation are well known. The longing for Nirvana is not a universal human instinct.

Among the leading examples of improvisation are those of speech. Almost every long sentence we utter is new. Young children devise their own neologisms and ungrammatical but intelligible sentences. To state that such achievements are the result of "contingencies of reinforcement" does not provide even a useful description, let alone a causal analysis. Skinner's comments on language reveal his unstated metaphysical presumptions with unusual clarity. "As I have argued in Verbal Behavior, thinking can be adequately formulated simply as behaving. A sentence is not the expression of a thought; it is the thought" (p.87). Here Skinner brushes aside the independent human being who creates new sentences and ideas. Only study of external stimuli and the responses to them, he declares, can provide authentic knowledge of human action; only they are proper material for a scientific psychology; and above all, the external stimuli determine what we do.

In these essays, however, the determinism is reinforced by evolutionary theory. "Human behavior", he writes, "is the product of (1) the contingencies of survival responsible for the natural selection of the species and (2) the contingencies of reinforcement responsible for the repertoires acquired by its members" (p.55). The evolution of culture is a by-product: "A culture may be defined as the contingencies of social reinforcement maintained by a group" (p.74). Natural selection is presented as an axiom: the absorbing question of defining it, and the problems of relating the evolution of

Homo sapiens to current theory, make no appearance.

Skinner's bleak portrait of *Homo* operans — a puppet controlled by genes and rewards - seems to give him and us no scope for trying to improve the human condition. Yet the first essay is entitled "Why We Are Not Acting to Save the World". If this is anything more than Skinner responding to contingencies of reinforcement, then it is a statement of what we ought to be doing. Indeed, Skinner asks: "Rather than wait for further variation and selection to solve our problem, can we not design a way of life that will have a better chance of a future?" (p.8). We are perhaps entitled to wonder whether our difficulties are partly because of our liking for over-simple stories about complex issues, or because for decades we have been forcefully told that we are mindless creatures, without wills of our own, whose actions are biologically pre-programmed. Pos-

sibly, as a result, some of us are reduced to a state of inert resignation or despair.

Not that Skinner intends to depress us. But he advocates, as always, only "improving the strengthening contingencies of behavior" (p.27), especially in education, therapy and industry. "Classical remedies, such as letting the worker have a greater share in decision making, do not attack the central problem, which lies in the contingencies" (p.29). The massive evidence in favour of such remedies is not rebutted or even mentioned. We see again that the autonomous person does not exist in the neobehaviourist's cosmos.

The author, as many of these essays show, is a person of marked good will, even though his doctrine disallows his will as an influence on his actions. His benignity, the simple lucidity of his message, the charm of his writing and the fame of his teaching will ensure that he has many readers. I wish I could say confidently that they will find the book rewarding.

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