

CHARLES B. FERSTER 1922-1981

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Charles B. Ferster died on February 3, 1981, two days after suffering a severe heart attack. He was only 58 years old, active, and apparently in excellent health, so his death came as a shock as well as a personal loss to his friends. Because he was a dedicated behaviorist who placed a high value on his professional contributions, some of us thought it would be appropriate to write a statement about his contributions to the field, rather than an obituary. Since Charlie published 92 articles and books on topics ranging from basic behavioral research to education to clinical and applied issues; it is not feasible to describe all his contributions nor easy to decide which were not most significant. Informally, I have asked several of his colleagues to state what they considered his most important contributions, and I have heard a variety of answers, often depending upon the interests of the person answering. The fact that knowledgeable colleagues gave different answers is a tribute, I think, to Charlie's remarkable ability to contribute in very substantial ways to most of the areas in which he worked. Let me describe some of the contributions which my informants and I considered important.

First, basic researchers find it hard to overvalue Charlie's work on schedules of reinforcement. Immediately after completing his graduate work at Columbia, where Fred S. Keller and W. N. Schoenfeld were his mentors, Charlie went to Harvard to work with B. F. Skinner. Seven years later one of the classic books of the field, *Schedules of Reinforcement*, was published in collaboration with Skinner. Within these and the next

four years, Ferster had published six major research articles on schedules plus 13 articles using schedule-controlled performances to study other variables. Why was the work important? Partly because it was an in-depth program of research demonstrating a thoroughgoing control by reinforcement schedules of his subject matter, the frequency of behavior. There was another reason. If one believes that positive reinforcement is a frequent and powerful determinant of animal and human behavior (and many of us do), and if one recognizes that the reinforcement schedule is one of the most effective variables in determining the frequency of behavior (which the book and the papers amply demonstrated), then it is hard to escape the conclusion that the major contributions of Charles Ferster to our knowledge of reinforcement schedules were indeed important. Furthermore, he saw the implications of schedules for human affairs, as illustrated in his textbook, *Behavior Principles*, by his treatment of the prolonged pausing and weakened behavior generated by large fixed-ratio schedules. All of us who procrastinate understand the phenomenon better now.

Other colleagues of Charles Ferster see his major contribution in the applied and clinical areas—and with good reason. In 1961 he began publishing his experimental work with autistic children. Those were the days when people thought that operant conditioning was useful only for studying the lever-pressing behavior of rats in small boxes. It was not that the behavior he studied in autistic children was so remarkable; rather it was that he could show that, if conditions were right (and powerful), the behavior of even autistic children was subject to the same principles that we had known before. In later work with a skilled therapist, he was

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able to describe the details of effective therapy in the behavioral language of a functional analysis even though the therapist could not. In the course of observing therapy with autistic children and some of his work in education, Charles noticed the importance of natural (versus arbitrary) reinforcement. He believed, for example, that the long-term effectiveness of token reinforcement procedures in the classroom was likely to be due to the student discriminating his/her progress, being reinforced by increases in competence, and being reinforced by the effects of the new repertoire outside the classroom. Although a food reinforcer may be adequate to maintain the behavior of a food-deprived animal in a small box, he found the situation quite different when a child's behavior was to be maintained in the outside world. For the long-term maintenance of a person's repertoire, the requirement is for reinforcement effects to occur reliably and stably in that person's normal environment—the natural reinforcer. It was largely because he associated behavior modification with arbitrary reinforcement that he preferred not to be identified as a "behavior modifier." He believed that the distinction between arbitrary and natural reinforcement was important for education and for therapy and that the distinction would eventually be recognized as one of his more important conceptual contributions.

Charles made a lasting contribution in yet another area, quite apart from his laboratory work and his applied-clinical interests. I am thinking of his role in establishing a journal where researchers in

the experimental analysis of behavior could find a receptive editor and a receptive readership for their papers. The early operant conditioners encountered a problem when they tried to publish their studies. This was a time when statistics and a large N were somehow associated with "good" science, and single-subject research designs were suspect. Furthermore, the operant conditioners were working on different problems, had a different terminology, and paid little deference to other theoretical positions. For these (and probably other) reasons it was an ordeal to get a paper accepted and published in the standard experimental journals. Charlie saw a solution to the problem. Why not start a new journal? Although a number of others were involved, Charlie was in the forefront, working long and hard to establish a new journal. It seemed natural that he should be selected the editor. The copy for the first papers were edited and set into type by his wife in his lab on a rented typewriter. The result became the first issue of the *Journal of the Experimental Analysis of Behavior*.

Although behaviorists are not known for their reverence for the past, Charles Ferster was, I think, a leading figure in an important historical development. He was in the forefront of the wave of modern behaviorists who emerged from Columbia and Harvard in the early 50's, who researched, who published, who taught students, who applied their principles to the world of human affairs, and who thereby changed the course of psychology and human affairs.