

CHARLES BOHRIS FERSTER (1922-1981)
AN APPRECIATION

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Charles Bohris Ferster was born on November 1, 1922 and died on February 3, 1981. Measured in years, his life was short; measured in achievement, it was long. Within this period he received his formal education, served his country in the Army Air Force, and had a distinguished career as a behavior analyst within such diverse fields as those of animal research, behavior therapy, psychopharmacology, and pedagogical reform. First and last a laboratory man, he was also a clinician, an educational innovator, and a teacher. His principal aim was to relate behavior science to practical affairs. The list of publications for which he was responsible, wholly or in part, numbers more than 90, including the second revision of a well-known textbook, work on which he completed only weeks before his death.

Charles was born in Freehold, New Jersey, the second son of Julius B. and Molly Madwin Ferster. Life was not easy for the Fersters in the Depression years, but he completed high school (he was President of the Science Club) and, with the help of an uncle, Samuel Ferster, entered Rutgers University in 1940.

The Rutgers years were interrupted by his military service from 1943 to 1946. He did not intend to return to college but was persuaded to do so by a G.I. friend (Gilbert Harrison, who was later to revive the *New Republic*). In 1947, on receiving his B. S. at Rutgers, Charles went on to Columbia University to get his M.A. (1948) and his Ph.D. (1950). By the time of his doctoral examination, he was studying at Harvard on a Research Fellowship under B. F. Skinner.

His Columbia dissertation was in animal behavior, specifically concerned with the reinforcing effect of stimuli that had been continuously present while laboratory rats were intermittently given food for operant responding. His work at Harvard, recently described

by Skinner (1981) resulted in the monumental Ferster-Skinner tome, *Schedules of Reinforcement* (1957), a landmark in the history of behavior science.

The five years at Harvard were followed by two at the Yerkes Laboratories (1955-57), where Charles became acquainted with chimpanzees and their great potential as subjects of research—one that he tried later to exploit. Four years more, in Indianapolis (he liked to call it India-no-place), at the Indiana University Medical Center, gave him a chance to work with human subjects, especially autistic children; to construct some new research equipment (he loved the shop); and to collaborate with two psychiatrists (John I. Nurnberger and John Paul Brady) in writing *An Introduction to the Science of Human Behavior* (1963)—a text described by David McK. Rioch, then Head of Psychiatry at Walter Reed, as “a major step in bridging the conceptual gap between the laboratory and the clinic.”

Young behaviorists of Charles's day often had a difficult row to hoe. The doctoral candidate who offered individual-organism data from a Skinner Box, unaccompanied by hypotheses or reference to distinguished predecessors, could expect an inquisition from his examining committee. Even when that ordeal was over, the newly hooded Ph.D. had to get a job and find a journal that would publish his research. Charles himself was able to do both, but he was sensitive to the problem faced by others and decided, typically, “to behave.” In 1958, the *Journal of the Experimental Analysis of Behavior* was established, “primarily for the original publication of experiments relevant to the behavior of individual organisms.” Only three members of the editorial board were university professors; the remainder came from research institutes (6), medical schools (4), and drug companies (3).

This journal is today a symbol of the vision and the enterprise of Charles B. Ferster, its first Executive Editor, but its editorial board is now primarily professorial.

In the middle fifties, as the practical extension of behavior science came to be appreciated, there were dreams of setting up an institute wherein basic research might be funded through its useful applications. At first there was no thought of outside aid, but the advantages of agency support were soon apparent. In 1961, the Institute for Behavioral Research came into being and, in June of 1962, Charles gave up his Indiana post and, with a five-year Research Career Development Award, came East to Silver Spring, Maryland, to play a leading role in its establishment.

Charles was active at IBR in many spheres. In 1962-63, he was Executive Director; in 1963-65, he was Associate Director; and he was a Senior Research Associate from then until 1968. In this period there were grants to be secured, contracts to be made, and negotiations to be carried out for obtaining accreditation as an educational institution and getting tax exemption. Shops and laboratories had to be constructed and personnel to be employed and trained. There were animal-behavior studies to be made, including some with chimpanzees within a naturalistic setting (on a farm in Howard County, Maryland) and in the laboratory (a course in binary notation). There were experiments on drug effects, and there was a German language program, constructed with the aid of Maria Inéz Rocha e Silva, a visitor from Brazil. And, especially, there were studies of autistic children at the Linwood Children's Center, in Ellicott City, Maryland. The relationship established with Jeanne Simons, Director of the Center, and the psychiatrist John L. Cameron, his Co-Director of Research, lasted throughout Charles' life.

In 1962 it was suggested that IBR, by virtue of its structure and its many areas of research, was well prepared to offer an educational program in the analysis of behavior and the fields of competence represented in the Institute's researches. The suggestion was accepted and, in 1963, with the aid of Israel Goldiamond (who also had a Career Development Award) Charles set up a laboratory course for "teaching principles of behavioral control to psychiatrists, physiologists, educators, and the like."

From that time on, Charles was clearly "into" education. Within the next few years, this IBR procedure was to lead, by way of a nonlaboratory course for staff members at the Linwood Center and a classroom try-out at the University of Maryland School of Education, to the teaching method known today as the "Interview Technique," which Charles later introduced at Georgetown University, where he accepted a professorship in 1967. The method was a self-paced, mastery-oriented procedure in which students interviewed, and were interviewed by, one another on successive course assignments.

The Georgetown tenure was a short one. In 1969 the American University, also in D.C., offered Charles a professorship which he accepted and which he held for the remainder of his life. The tenure had been marked, however, by a teaching innovation and the publication of a text, *Behavior Principles* (1968) with Mary Carol Perrott, his former assistant on the Linwood Project. (A second edition added the name of Stuart A. Culbertson, a colleague at American, as an author.)

The climate at American encouraged Charles to be productive. In his 12 years there, he served as Chairman of his Department (1970-73); explored the field of "group dynamics," with Professor Margaret J. Rioch as his guide; continued his efforts to improve the teaching process (see below); engaged in joint research with three psychoanalysts at the Chestnut Lodge Research Institute in Rockland, Maryland, where John Cameron was Research Director; began a voluntary psychotherapeutic practice at the D. C. Institute of Mental Hygiene; reviewed research proposals for NIMH and NSF; served on several editorial boards; sponsored dissertations in verbal behavior and in reinforcement schedules; invented a piece of apparatus (the added-counter); and wrote, or helped to write, 20-odd papers or textbook chapters on a variety of topics.

To all this, add the University Learning Center, which Charles established at American in 1972 "to enable a student to become a self-propelled individual, capable of independent learning [and] weaned from formal instructional support." The Center occupied a special building and was furnished (with the help of Charles' wife, Elyce) in a special, club-like way, with areas for reading, writing, quiet

conversation, and group discussions. There was a voluntary "student body" of perhaps 100 members, and the faculty equivalent of four professors, representing anthropology, history, philosophy, physics, political science, and psychology.

There were no courses at the Center, no standard textbooks with routine assignments, no compulsory attendance, no examinations. Instead, there were 12-member "home-base" groups that generally got together once a week; occasional meetings of smaller, special-interest groups; student-teacher consultations; and interactions of each student with his home-base group "leader" by means of written entries in student "journals" and faculty "logs." The program was problem-oriented and interdisciplinary.

The Center is no more. Politics, finances, and the basic structure of the University itself conspired against it. There were internal problems, too. The weaning process was not easy for some students; there were questions of evaluating progress; and the future of the teaching staff was insecure. Its graduates, however, counted it a great success; and the vision of higher education it provided may come closer to the reality of tomorrow than will the practices of today.

"If you don't behave, you won't be reinforced," was Charles' dictum, and he followed it throughout his academic life; but he also found the time for an absorbing love affair with motorcycles, with the plays of Shakespeare, and with Elyce—a law professor who managed to raise four active children, run a complicated household, act the charming hostess, and join the family at tennis whenever

the weather permitted. Their holidays together were a source of special joy.

As a person, Charles embodied many contradictions. He was an unobtrusive man who made things happen; a shy man who could speak his mind; a kindly man who could be hard; a sober man with a twinkling eye and a bag of little quips. A friend described him as "the most skillful-insightful awkward man I've ever known." He was "the behaviorists' behaviorist," as another friend (and pupil) put it, and he saw the world through special lenses; but he could hear the voices of those with different views and he tried to profit therefrom. He worshipped skill in any sphere and he took each criticism of his own work as a cue for self-examination. He often saw himself at odds with those he most desired to please, even rejected by them, but he continued on his course and bore no grudges.

Charles started his career within a laboratory setting, and he came back to the laboratory in his final and happiest year. In the interim, he won an honored place in the history of our science, as well as in the hearts of all of us who knew him.

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