

## **Whatever became of B. F. Skinner?**

August 15, 2003

Dear Cecil:

Your recent column on Marshall McLuhan was terrific, and it led me to wonder about another darling of the 60s, in the field of psychology: Whatever became of B.F. Skinner? I recall all the fun we had torturing rats in "Skinner boxes" and thinking that we were all just messes of "operant conditioning." Like your previous questioner about McLuhan, I haven't followed the field since, so how is Skinner regarded today?

— Greg Durand, Phoenix, Oregon PS: Unabashed suck-up: When I discovered the Straight Dope last year, I had to go out and get cop

Your letter is a good example of operant conditioning: (a) Suck up to columnist; (b) columnist answers your question. Next level: (c) Accompany letter with modest donation via PayPal; (d) see columnist answer your question really fast. The best part is, you think you're conditioning me.

Although he was certainly an icon of the 60s, Burrhus Frederic Skinner (1904-1990) did some of his most provocative work long before then. *Walden Two*, the utopian novel that endeared him to a generation of undergraduates, was first published in 1948, which readers will recognize as the year George Orwell wrote the dystopian classic *Nineteen Eighty-four*. (He came up with the title by reversing the last two digits of the year of composition.) In contrast to Orwell's book, *Walden Two* offered an optimistic vision of the future, which no doubt explained its appeal to 18-year-old middle-class peace marchers. Unfortunately, like a lot of authors popular at the time (Robert Heinlein comes to mind, and don't even get me started on Hermann Hesse), Skinner was more monologist than novelist, and the book's value as literature is slight. It did, however, inspire a commune, *Twin Oaks*, which survives in rural Virginia to this day.

Skinner made a more enduring contribution as an experimenter and psychological theorist. A professor at Harvard from 1948 until his death, he built on the work of Ivan Pavlov, the reflex conditioning pioneer, and John B. Watson, the founder of behaviorism. Behaviorists rejected theories about the unconscious, defense mechanisms, and other mental constructs as untestable and ascientific. Instead they emphasized results you could reproduce in the lab. Drawing on a famous series of animal experiments involving a "Skinner box" (a cage containing a lever or button that produced a food pellet when pressed), Skinner showed that an organism's behavior can be understood as a function of its interaction with its environment. The critter learns that behavior A produces reward X and behavior B will enable it to avoid punishment Y. If you want to change behavior, you merely modify the reinforcements. That seems numbingly obvious now, of course, but Skinner discovered a great many subtleties. For example, he found that training is most effective not when behavior A always produces reward X but when it does so only intermittently--the critter won't give up so quickly when its efforts aren't immediately rewarded. Through combinations of positive and negative reinforcement, one can shape complex behaviors--at one point Skinner taught pigeons to bowl.

Skinner's ideas had obvious application to education, and he was an early proponent of programmed instruction, in which a "teaching machine" or other technique gives a student immediate feedback on his responses. Programmed instruction was a forerunner of today's computer-based training. Likewise, behavior therapy, based on the work of Pavlov as popularized and expanded on by Skinner, is still used in the treatment of phobias, alcoholism, and other conditions.

Some of Skinner's notions spooked his contemporaries. An inveterate tinkerer, in the 40s he invented the "air crib," a climate-controlled crib/playpen that some called a "baby in a box." His daughter Deborah slept in the device for her first two and a half years, leading some to claim he was using her as a guinea pig. (She apparently suffered no ill effects.) In 1971 Skinner published *Beyond Freedom and Dignity*, a controversial book in which he argued that freedom was a euphemism for the desire to escape all restraint and that humanity would derive greater benefit

from a more systematic program of behavioral technology. That seemed to confirm his critics' view that he conceived of people as lab rats. His insistence that internal mental states and processes didn't exist because they couldn't be measured was simplistic. Even if you take a purely mechanistic view of human behavior, we manifestly have some capacity for independent action. For all Skinner's insistence on science, his philosophical musings were unsupported by data. Still, he remains one of the towering figures in the field, a welcome counterweight to the quackery of Freud.

<http://www.straightdope.com/columns/read/2464/whatever-became-of-b-f-skinner>

- Cecil Adams