PIGEONS AND PIGEON TRAINERS

Behavioral Psychology In A Capitalist World

Behavioral psychology, like nuclear physics, is a science that could help us a lot. Experiments like that of Dr. O. K. Moore at Hamden Country Day School in New Haven, Connecticut, for example, have shown us that through behavioral methods, children five and six years old, can be taught to write with the vocabulary of a college freshman and mimeograph their own newspaper. * But, again, like nuclear physics, behavioral science has already been ghoulishly misused by the "power structure" of capitalist society.

The science of behavior attempts to study, classify, and account for human behavior. There is nothing wrong with this activity in itself. The "wrong" of the matter lies in the fact that the science is being misused. It is unfortunate, but inevitable under capitalism, that the ability to control behavior through scientific methods is falling into the hands of those who represent the interests of the capitalist class: the military machine, the government, and industrial management. What this science is presently used for is not primarily the building of an educational system that will develop all the latent capacities of human beings; not to contribute to the development of a better, non-punitive, co-operative social system. Capitalism has other "priority" uses for behavioral science, just as it has for atomic power. The grants which support research in behavioral science at Harvard and elsewhere do not come from working-class wage envelopes, and it is not working-class interests which will first be served by the results. Let us look at three typical examples of the uses of this new science under capitalism.

INDUSTRY

A time-study expert has been given the job of squeezing more production out of the work-force for less money. Even without the help of behaviorists, the company already has considerable control over the worker because of the wages system itself; more control, in fact, than it is possible to acquire over the behavior of a chattel slave. When a pigeon in an experimental box pecks a key, and is "rewarded" every ten minutes for this behavior with a pellet of food, he is said to be on a *fixed-interval reinforcement schedule;* his response of pecking is reinforced on a fixed interval of ten minutes. Similarly, when a worker produces goods and is rewarded every week with a wage, his response of work is reinforced on a fixed-interval of one week. Granted that pigeons are not men, that pigeons can be isolated for experimental purposes, and that they are not influenced by "culture," "tradition," or class divisions; but the fact is that reinforcement is a potent method of control over almost any species.

Now what the time-study expert may attempt to do, if he is a good behaviorist as well as a good reporter, is to provide "encouragement" to a worker who can convey part A to part B in two hand-motions instead of his usual three or four. Since approval is a generalized reward, or reinforcer, in our society, and most of us respond to it under the right conditions, the worker will probably refine his hand movements in the desired direction. But at this point the behaviorist raises the ante: he gives the approval only when part A reaches part B in one motion. Technically he is shaping behavior through *successive approximation and differential reinforcement.* It is actually more complex than it is described here, but good trainers have been known to teach pigeons how to bowl in this manner. The worker may be producing more parts per hour than ever before. As an added and more tangible reinforcement, his wage may be raised from $2.25 to $2.30 an hour. This is a nice arrangement for the owner of the parts. And, if he can get away with it, the owner shifts his men to piece-work, that is, he will make the reinforcement depend on the number of responses emitted rather than the interval of time between reinforcements. Technically, piece-work is described by the term *fixed-ratio reinforcement;* and any good behaviorist knows that a pigeon on a fixed-ratio schedule will peck far longer and harder than a pigeon on a fixed-interval schedule. When the human being that they are treating like a pigeon goes home at night wrung out like a dried lemon peel, and when he has to spend most of his new five-cent raise on tranquillizers to relax his *activation syndrome* (technical term for the physiological reaction under anxiety), he may not feel so reinforced. In fact he may need a new television set to keep him from spending his leisure in disquieting thought.

Time-study activity, ideally, would seem to tend toward such goals. Practically, however, behaviorist efficiency experts must continually be confronted with frustrating difficulties in achieving their ends. Labor unions, for example, frown on such methods, and even though they are powerless to prevent timestudy activity they do manage to have a great deal to say in how these studies are conducted. Even where unions are not present, resentments arise among the workers when individuals within their ranks contribute toward raising work norms or lowering rates on piece-work as a result of increased efficiency. Nevertheless, psychology is coming more and more into use throughout capitalism today, and such methods as piping in of appropriate music, suggestion boxes, company picnics, parties, and ball teams, keys to the boss's restroom, and every other conceivable kind of reinforcer to "identify" workers with management and make them completely dependent on their company are coming more and more into practice.

ADVERTISING

The following simple basic principle of behavioral science has become almost the mainstay of the advertising industry. It was a Russian, Pavlov, who discovered that when you sound a bell just before feeding a dog, after a while the dog will salivate at the mere sound of the bell without the food. In the technical language of the behaviorist, the food is an *unconditional stimulus.* The bell, originally a *neutral stimulus,* acquires the power to elicit the response of salivation by being paired with the food, and thus becomes a conditioned *stimulus.* Technically of course, salivation is an example of reflex behavior, and what the advertiser wants to control is operant behavior; but the principles are not so very different.

And how do you like *your* new Mustang this year? Do you, too, get that unexplainable sexual kick when you sit behind the wheel and step on the gas? The car has been paired repeatedly with several different stimuli for sexual responses. Note the galloping horse on the grill design, the sleek curves and lines, the suggestive slits and openings just behind the cab, the smooth blonde that slithers into the front seat during the television commercial. Nobody actually thinks that he gets the girl when he buys the car; that isn't the point. The point is to make the car a conditioned stimulus for sexual feelings. The pairing of the car with sex may not actually take effect until you watch the commercial for the fiftieth time; but if the company can pay for fifty commercials, they've got you. If you don't buy it by that time, the reason is probably that every other company does the same thing.

THE MILITARY

A great deal of control is required to get a man to hunt down and shoot human beings, disembowel them with bayonets, sizzle their children into

* Cf. "Pied Piper of Hamden" by James Canniff (*Columbia* magazine, July 1964)