

## **The Non-Punitive Society**

(Commemorative lecture given by B.F. Skinner after receiving an honorary doctorate at Keio University, Japan. September 25, 1979.)

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In my address to the Japanese Psychological Association on Sunday, I pointed to the importance of cultural practices in bringing out the best of which the individual is capable. In spite of the extraordinary genetic endowment of the human species, including the capacity to be changed very quickly by encounters with the environment, an individual alone, without the help of others, could in one lifetime acquire only a very small part of the repertoire exhibited by the average person. Exposure to other members of the species and to practices which have evolved over the centuries in permitting the individual to profit from what others have already learned makes an enormous difference. I am aware of one of those differences in discussing my subject today. Different groups of people have developed different practices - in education, religion, government, psychotherapy, economics, and daily life. The results have sometimes led to the notion of national character, as if it were the people who differed in some genetic way rather than the culture. The behavioral scientist cannot, however, make much of "character." The practices are the things we study. Different practices yield different problems, and I am not at all sure that the subject I am to speak about to this distinguished audience today will seem to be as important as in America or even as interesting. I believe it represents, however, a crucial step in the evolution of the species and of the practices of a culture.

Many things ill the world are called unpleasant or punishing. We avoid or escape from them if we can. It is part of our genetic endowment that we should do so because they are biologically harmful things and should have played an important role in natural selection. Three great historical examples to which the species has been exposed are starvation, illness, and exhausting labor. The species has made great progress in dealing with them. Through the discovery of agriculture and ways of storing and transporting food, mankind has (in part at least) escaped from the suffering of famine.

Through medicine and sanitation, it has escaped from many of the sufferings of illness and early death. Through physical technology it has escaped from the suffering of exhausting labor. The only sufferings to which many members of the human species are still exposed are those we inflict upon each other. People threaten or destroy life, liberty, and property in war, terrorism, and organized crime. Political scientists sometimes define government simply as the power to punish. The Christian religion threatens an eternity of hell-fire, and its evangelists continually remind us of this most terrible of all punishments. Education has a long punitive history. The cane and the taws (a leather strap, which, like the policeman's truncheon, leaves fewer permanent marks) are still used in British schools, and the paddle is once again in use in America. Even without corporal punishment, teachers are still so punitive that most students simply study to avoid the consequences of not studying. Industrial incentives are really punitive. We think of a weekly wage as a kind of reward, but it does not work that way. It establishes a standard of living from which a worker can be cut off by being discharged, workers do not work on Monday morning because of the pay they will receive at the end of the week; they work because a supervisor will discharge them if they do not. Under most incentive systems, workers do not work for things but to avoid losing them.

Psychotherapy is not an exception. Psychotics were once put into snake pits (certainly an aversive measure) and the so-called "behavior therapy" parodied in the movie *A Clockwork Orange*, using nausea or electric shock in Pavlovian conditioning, is little more than a scientific form of punishment. The director of a military hospital in Viet Nam once told me that he was using operant conditioning with psychotic patients, and I was pleased until I discovered that he had simply told his patients that if they did not go to work they would get electric shock therapy. Fortunately much psychotherapy is non-punitive. But even in our daily lives, we tend to fall back on mild forms of punishment – criticizing, complaining, nagging, if not the physical measures which result in the battered wife or child.

When treatment is too severe, people escape from punishment - from governments by defecting to other governments, from religions by becoming apostates, from schools and universities by becoming truants or dropouts, from industry by absenteeism or

quitting work, from the family by divorce or running away from home. If those who have been treated punitively have the power, they may counterattack – as by overthrowing a government, reforming a religion, vandalizing schools and attacking teachers, striking against or boycotting industries, and engaging in violent social action.

When those who use punishment are strong enough to prevent the escape and counterattack of those they punish, the effect may be a kind of sullen inaction, a numbness, a complete waste of potential.

No one likes any of these consequences of punishment, and certainly no one likes to be punished. Why then does punishment continue to be such an important instrument of social control? Are we perhaps genetically inclined to be aggressive toward each other?

Certainly it is easy to point to reasons why we should be. Those members of the species who were most strongly inclined to defend themselves and their property by physical force, to act aggressively as predators, and to compete aggressively in sexual competition should have been most likely to survive and transmit their tendencies.

But we also learn to punish. Quite apart from any genetic inclination, the things we do which harm others usually have reinforcing consequences for us. We learn to use aversive measures; we also learn to accept the aversive practices of the culture of which we are a part. And here we see a possible clue to the answer to our question. For those who are powerful enough to use it, punishment has rewarding consequences. The people we punish behave as we dictate, and the things we take away from them in the name of punishment are the things we ourselves get. The unwanted consequences I have mentioned are all deferred. Unfortunately, we are much more likely to be affected by things that happen quickly. The immediate rewards of using punishment are much more powerful than the deferred disadvantages and losses.

Is there a technology comparable to agriculture, medicine, and engineering to which we may turn to find alternatives to this last great source of human suffering? I believe there is. To many people it is known as "behavior modification," but the term has been widely misunderstood. I do not mean the modification of behavior with drugs or implanted electrodes, or Pavlovian conditioning with electric shock or nausea-producing drugs.

The term was invented to refer to behavior changed through what the layman calls

"reward" or what, in the experimental analysis of behavior, we call "positive reinforcement." Behavior modification in the exact sense of the application of an experimental analysis of behavior is, I believe, the first organized effort to develop alternatives to punitive practices. Many humane people have, of course, devised alternatives to punishment, but the fact remains that the principles they have employed have not prevailed in the world at large. And just as we can explain the widespread use of punishment by pointing out that the gains are immediate and the losses deferred, so the failure to use positive alternatives may be clue to the fact that losses are immediate and gains deferred. When we reward another person, we must give up something we possess or perform some service. It is only in the future that the person behaves in ways which are rewarding to us. Behavior modification is at last making inroads into cultural practices as an alternative to punishment because these various consequences of both reward and punishment have been clarified by a scientific analysis and by the emergence of a technology which will in the long run, I believe, be comparable in its effect upon human life to agriculture, medicine, and physical technology in eliminating this last great source of human suffering.

Rather than go into the details of the scientific study of positive reinforcement, I shall simply describe some examples. The classroom is a good place to start. The ordinary teacher, probably burdened by too many students and poorly designed instructional materials, is likely to fall back on punishment - on criticism or ridicule, if not a more violent corporal form. They are all the more likely to do so because, especially when busy, we all tend to deal only with those things which are brought to our attention. Students are always reminding the teacher that it is time to criticize or complain but seldom that it is time to praise or commend. Misbehavior is the signal for punishment. When students are behaving well, the teacher is tempted to "let well enough alone." But "letting well enough alone" is a fatal principle, Students should be given attention when they are behaving well, not when they are behaving badly. A great change usually takes place in the classroom when teachers learn to look for chances to use positive reinforcement.

Teachers may also contrive special reinforcing contingencies. They may create

reinforcers in the form of credits or tokens exchangeable for some of the natural reinforcers in the life of the student. A teacher in a sixth-grade class in America used token reinforcers and gave them special strength when she reinforced her students' behavior on the schedule which is responsible for the extraordinary power of gambling systems, as in lotteries or casinos. This particular teacher had had no special training as a behavior modifier, but she had read of the possibilities and decided to try an experiment. The school was in a lower economic neighborhood, and she was having some difficult problems. Families did not insist that their children do their homework, and the children worked only inefficiently in class. On a Monday morning the teacher put a small transistor radio on her desk. She told the class: that on Friday afternoon, there would be a drawing, and that the student who drew the lucky ticket would win the radio. The students were intrigued. How were they to get tickets? It would be quite simple, said the teacher. Whenever students brought in their completed homework, they were to write their names on small cards and drop them in a jar. When they completed a classroom assignment, they were to do the same thing. On Friday the jar would be shaken and a card would be drawn. The teacher reported an immediate change in the behavior of her students. They all did their homework and their assignments. The teacher's task was greatly simplified, and she was only too willing to spend the money needed for a different prize each week. Meanwhile, of course, the students were learning a great deal because they were doing their work.

Such an experiment is often criticized. It is said that the children are being "bribed" to do their work. This is not exactly true. A bribe is something paid to induce someone to do something illegal or wrong. Those who call positive reinforcement bribery are confessing to a very low opinion of school work. One could also argue that students might better work for positive reinforcers of that kind than to escape punishment. Of course we do not want students who will continue to study only when they get lottery tickets. The behaviors they acquire in school should be those which will eventually be reinforced by the natural contingencies of daily life. The natural contingencies cannot be brought into the classroom for instructional use. That was the great misunderstanding of the philosophy of education of John Dewey. We should educate for real life, but we cannot

use real life effectively in the school. Classroom contingencies must be to some extent contrived, but if contrived effectively, they will produce behavior which will work to the advantage of everyone in the natural contingencies to which the student is later exposed.

Even in the school, conspicuous reinforcers such as tokens or credit points are needed only if the classroom is badly out of control. There is a natural reinforcer available in the classroom. An important genetic feature of the human species - possibly of all species - is that being successful is itself reinforcing. One pushes, and the pushing is reinforced when the object moves. Finding the right answer to a question can be a highly reinforcing event. In traditional instructional material, the student is not often right. One of the essential points of programmed instruction is to increase the chances that the student will be successful. This is achieved by breaking material into many small steps so designed that each can be taken readily and successfully.

Another feature of a good program is that the student's progress is obvious. The student moves into material which a short time before he could not have dealt with properly.

There are learning centers in American schools which teach children to read even though they come from illiterate or non-English speaking families. Each student works at his own pace, listening to a tape recording and responding by marking chemically-treated worksheets on which the student's responses are immediately shown to be right or wrong. Children like these centers: they do not vandalize them; they do not try to escape from them. Success and progress are highly reinforcing. They are always available as an alternative to the punitive practices of the classroom.

Another field in which behavior modification (or the application of a behavioral analysis) has been effective is industry. The industrial revolution made a great change in the incentives of the worker. It destroyed many natural reinforcing contingencies. In the long run, the old craftsman was perhaps working for money or for other goods, but every step of what he did was reinforced by certain immediate consequences. When, in the industrial revolution, his work was broken up into small pieces and single pieces assigned to separate workers, there was nothing left by way of a reinforcer except money. The natural consequences of the behavior had been destroyed. That is what

Marx called the alienation of the worker from the product of his work. In addition, the system became primarily aversive. The worker did not work, as I have said before, for a wage, but to avoid discharge and the loss of a standard of living maintained by a wage. Workers work under supervision, and supervisors, like teachers, tend to respond only to opportunities to criticize or complain. When they are taught to look for chances to commend rather than criticize, workers' behavior improves, and workers report that they like their jobs better. Good industrial engineering also attempts to make clear the relation between the work and the ultimate product. Problems of absenteeism and changing jobs have been solved in some cases by adding a scheduled reinforcer similar to that employed by the teacher I mentioned. The employee who turns up for work each day receives a lottery ticket; the employee who stays home may miss his big chance. In America there have been some violent objections to the use of behavior modification in industry on the grounds that it is designed simply to get more work out of the worker and to increase the profits of management. That may often be true, and in the long run it could be self-defeating. On the other hand, most countries in the world today are suffering from a declining productivity of the worker. It is said to be one of the principal causes of inflation. Any method of control needs to be properly contained, and the exploitation of the worker should certainly be prevented, but if changes in industrial incentives will make it possible for workers to work more productively and carefully and at the same time to enjoy their work, then everyone, and particularly the workers themselves, will benefit.

One of the first fields in which the analysis of behavior was applied was the institutional care of psychotic and retarded people. Here, again, the standard practice encouraged punitive measures. Attendants who are charged with watching rooms full of psychotics, most of them sitting around doing nothing, are likely to respond only to misbehavior. As a result, misbehavior is reinforced by the attention and eventually calls for more punitive measures. When attendants are taught to look for behavior to commend, there is a great change. Psychotic and retarded people, because of their defects, are not sensitive to the normal reinforcing contingencies of daily life. They need a "prosthetic" environment. Eyeglasses, hearing aids, crutches, and wheelchairs are prosthetic

devices, which enable people to behave effectively although handicapped in one way or another. A prosthetic environment is an environment in which those who are insensitive to standard contingencies of reinforcement may nevertheless behave in productive and dignified ways. A token economy is a prosthetic measure which may permit psychotic and retarded people to lead reasonably dignified lives in spite of their disadvantages.

Prisons and schools for juvenile delinquents are other places in which behavior modification has replaced punitive measures. Not only are these institutions designed to punish people for misbehavior in the past, they are punitive during incarceration in the sense that prisoners tend to receive attention from prison authorities mainly when they have misbehaved. There are few incentives in a prison for behaving well. This need not be the case. In one experiment in a school for juvenile delinquents in America, the boys were given a choice. They could, if they liked, do nothing during the day. They could sit on a bench, eat nutritious if not very interesting meals, sleep in a dormitory at night. If they earned points, however, they could get more interesting food, have access to billiard tables and television sets, rent a private room, or even buy some time away from the institution. They earned points in part by performing janitorial services, but mostly by studying under programmed instruction. Many of these boys had been abandoned by the educational systems to which they were exposed, and they now discovered that they were able to learn to read and write and do simple arithmetic.

The boys participated in the experiment for only a few months, but the recidivism rate was greatly changed. At the end of one year after release, 25 percent of them were again in trouble, but the figure would otherwise have been 85 percent. At the end of the second year, 50 percent were in trouble, and after three years, there was little evidence of the effectiveness of the program. The boys had gone back to a world in which too many wrong contingencies prevailed. Even so, the experiment had more than paid for itself, so far as the state was concerned.

A serious question has also been raised about programs of this sort - and strangely enough in the name of civil rights. Do psychotic or retarded persons and prisoners not have a *right* to food, clothing, privacy, and a reasonable chance to enjoy life? Can these things properly be taken away so that they can be used as reinforcers? In some states,



laws have been passed to restrict the use of behavior modification on just those grounds, but the argument rests on a serious misunderstanding. What *are* the rights of a prisoner, for example? A person who has been incarcerated and then *given* the things he needs to survive is being denied a very basic right. He is being destroyed as a person by having his reinforcing contingencies stripped away. The same thing happens to those on welfare. A humane society will, of course, help those who need help and cannot help themselves, but it is a great mistake to help those who can help themselves. Psychotic or retarded people who in essence earn their own living would be happier and more dignified than those who receive their living free and are then treated punitively because in the absence of reinforcing consequences they behave badly. Those who claim to be defending human rights are overlooking the greatest right of all: the right to reinforcement.

Face-to-face psychotherapy is another field in which behavior modification is used, and it is particularly significant because that kind of therapy is usually concerned precisely with the effects of punishment. Psychoanalysis can be regarded as a systematic reversal of the effects of the punishment one has received at some earlier time, and psychotherapeutic counseling is largely a matter of finding a way of life - a new place to live, a new job, new friends--in which the client's behavior will be positively reinforced.

I wish I could say that government is another field in which there is an interest in abandoning punitive measures, but proposals to work through positive reinforcers in government are usually viewed as surprising or amusing. Jonathan Swift, in his great book, *Gulliver's Travels* described a state in which good behavior was reinforced and bad behavior not punished, but it was offered as a satire. And many people find amusing a small experiment in an American city in which motorists began to receive postcards saying, "You were observed to come to a full stop at the intersection of such-and-such a street at such-and-such a time. Congratulations." No doubt serious violators were not affected, but I am sure that many drivers receiving those cards came to a full stop at intersections for some time thereafter. The problem of punishment in dealing with criminal behavior is of long standing, and it will not easily be solved, because those who are harmed by crime tend to be vicious in suppressing it. In

America, the death penalty is being reinstated, and in a recent television presentation called "Scared Straight," potential young offenders were taken to a prison to hear prisoners describe their lives in brutal terms. The program was favorably received by critics. It was said that the potential offenders then "went straight," but the figures have been disputed. In any case, the intensification of punishment is no solution. In England in the eighteenth century, 200 crimes were punishable by death. One of them was stealing silk handkerchiefs, but the crowds who assembled to watch the executions were so intensely interested in what was happening that handkerchief thieves had a fine opportunity. Obviously they were not deterred by the spectacle of their colleagues' being hanged. In the long run, the solution to the problem of crime is not punishment but the elimination of the conditions under which people commit crimes. For example, there would be far less crime if everyone had a job.

There are those who object in a much more general way to behavior modification or the application of a behavioral analysis on the grounds that it is not right for one person to control another. We have had so much experience with punitive control that we conclude that all control is wrong. That conclusion is perhaps one of the greatest wrongs worked by punishment. We are all engaged in controlling behavior all the time. As parents we control the behavior of our children and (if less obviously) as children, the behavior of our parents. As teachers we control the behavior of our students, and as students, the behavior of our teachers. As employers we control the behavior of employees and as employees, the behavior of our employers. As governors we control the behavior of those we govern and as the governed, the behavior of governors. As acquaintances, friends, and lovers, we control the behavior of each other. We may not know we are doing so; few, if any, of us are aware of all the ways in which behavior is controlled. We may or may not control deliberately - that is, because of any particular consequence for us. Nevertheless, we do control. The fact is that too often we do it badly, and badly because, most often, punitively. The more we know about control, the more rapidly we shall move toward acceptable methods.

When we look at the world today with its war, terrorism, and violence in so many places, a non-punitive society seems "utopian" in the sense of impossible. And, indeed,

we are not likely to arrive at a peaceful world in the immediate future by applying the experimental analysis of behavior to international diplomacy. In any case, peace in the simple sense of the absence of violence is no solution to the problem. Like the permissiveness which some countries have recently explored, it offers no effective alternative to punitive measures. Perhaps our best opportunity will be to start below the level of international affairs. If, *because of positive consequences alone*, people can acquire knowledge and skills, work productively, treat each other well, and enjoy their lives, those who deal with international affairs may be able to use non-punitive measures more effectively. It is the unhappy and the frightened who resort to war. International negotiations among happy nations should be more successful.

In a sense the search for a non-punitive society is nothing more than the traditional search for happiness. The experimental analysis of behavior helps in that search by identifying the essential conditions of happiness. When we act to avoid or escape from punishment, we say that we do what we *have to* do, what we *need* to do, and what we *must* do. We are then seldom happy. When we act because the consequences have been positively reinforcing, we say that we do what we *like* to do, what we *want* to do. And we feel happy. Happiness does not lie in the possession of positive reinforcers; it lies in behaving because positive reinforcers have then followed. The rich soon discover that an abundance of good things makes them happy only if it enables them to behave in ways which are positively reinforced by other good things.

We cannot arrive at a happy world simply by foregoing punitive measures. We must solve other problems. Overpopulation, the ultimate exhaustion of the world's resources, and the pollution of the environment are the natural punitive consequences of the reckless behavior we now exhibit. If we fail to solve them we shall all be punished by the most terrible miscarriage of the evolution of the human species: a nuclear holocaust. We cannot solve these problems through any aversive means. A cooperative rather than a competitive solution is needed. Whatever the final form of that solution, we can all move toward it by turning as often as possible to positively reinforcing measures in our schools, our industries, our governments, our families, and our daily lives.