

*BEHAVIORISM: PART OF THE PROBLEM
OR PART OF THE SOLUTION?*¹

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The form frequently taken by behavior-modification programs is analyzed in terms of the parent science, Behaviorism. Whereas Behaviorism assumes that behavior is the result of contingencies, and that lasting behavior change involves changing the contingencies that give rise to and support the behavior, most behavior-modification programs merely arrange special contingencies in a special environment to eliminate the "problem" behavior. Even when the problem behavior is as widespread as alcoholism and crime, behavior modifiers focus on "fixing" the alcoholic and the criminal, not on changing the societal contingencies that prevail outside the therapeutic environment and continue to produce alcoholics and criminals. The contingencies that shape this method of dealing with behavioral problems are also analyzed, and this analysis leads to a criticism of the current social structure as a behavior control system. Although applied behaviorists have frequently focused on fixing individuals, the science of Behaviorism provides the means to analyze the structures, the system, and the forms of societal control that produce the "problems".

DESCRIPTORS: behavior principles, behavior analysis, social control, political psychology, community psychology, ethics

EDITOR'S NOTE

The manuscript by Holland is clearly a controversial one. Nonetheless, the manuscript raises interesting issues that deserve attention. In accord with JABA policy for discussion articles, the manuscript is largely unedited, as are the reviewers' comments. Each manuscript or critique represents the author's opinion and should not be interpreted as representing JABA policy or the opinion of the editors or editorial board.

—Editor

During the struggles of the 1960s, Eldridge Cleaver proclaimed: "If you are not a part of the solution, you are part of the problem." And now

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the question is past due for us: "Is Behaviorism part of the solution or part of the problem?" There are many people ready with answers to this question; many who object to what they see as an oppressive political system and who see stratified control by corporate leaders. For these people, Behaviorism is often seen as the problem and the behaviorist as another instrument in their manipulation and in their exploitation. But the charge arises from too limited a view of behaviorism. I will suggest to you that the analysis of behavior provides the means to analyze the structures, the system, the forms of societal control against which these very critics are rebelling. I will suggest that the view of humanity held by the social reformer is supported, not refuted, by the analysis of behavior. It is true that applied behavior analysts have, in overwhelming numbers, been hired to do jobs in the service of those in power and, even though the science, Behaviorism, stands ready to be part of the solution, the applied behaviorist has too often been part of the problem. But tomorrow, if we are true to our sci-

ence, we can be part of the solution. For the science of the analysis of behavior is based on a view of people compatible with social reform.

BEHAVIOR-MODIFICATION SYSTEMS AND ESTABLISHED POWER STRUCTURES

The cases against the present systems of behavior modification are certainly by now well known. In an earlier paper (Holland, 1975), I suggested that the fears about a behaviorally controlled society could be evaluated by examining the miniature planned societies that exist today—namely the token reinforcement systems found in prisons, mental hospitals, schools, the army, and industry. When the prospects of a planned behavioral society are so evaluated, the dire predictions of the civil libertarian and the social reformer are amply confirmed. The concerns of “who controls the controller” express a plea of manipulative or exploitive control in which people from one stratum (the controllers) set the goals, define contingencies, and dispense reinforcers to people on a lower, subjugated stratum (the controlled). I concluded my earlier analysis as follows:

Guards reinforce prisoners; nurses reinforce patients, and teachers reinforce students. The fear of manipulative control is well founded when a professional-client relationship is lacking. Subjects of these behavior control systems are not clients. Behavior modifiers in prisons are fundamentally and inescapably responsible to the warden or Bureau of Correction, not the prisoner; in the classroom, they are responsible to the principal or Board of Education, not to the students. Put simply, today’s token economies support established power structures. (Holland, 1975, p. 90)

Those in authority who hire the behavior analysts and the analysts themselves may see their control as benevolent. Surely rulers usually do.

But the surprising thing about the role of behavior modifiers is the frequency with which they accept the inner traits seen by their employers as the causes of the to-be-corrected behavior. William Ryan refers to this as “blaming the victim” (Ryan, 1971). The people whose behavior is to be modified are called “sociopaths” or “unmotivated” workers or “defective delinquents” or, if very young, “predelinquents” or “hyperactive” school kids. The behavior modifier then proceeds to arrange special reinforcement contingencies in special institutional environments. And the subjects whose behavior is so corrected are expected to continue this new behavior regardless of the contingencies that prevail outside the institution. However, our basic science, the Experimental Analysis of Behavior, tells us that behavior adapts to contingencies—any contingency—not just those arranged by the psychologist. The behavior that bothers the employer of the behavior analyst is itself the result of contingencies. If real, lasting changes are to be made, it is these contingencies that must be changed. Lasting behavior change requires the modification of the contingencies that produce and maintain the original behavior.

In this context I would like briefly to consider three victims: the alcoholic, the criminal, and the behavioral analyst, and discuss how behaviorists have contributed to their problems, while behaviorism points toward a solution.

The Alcoholic

First the drunk—often the object of behavior therapy—surely an unfortunate in need of help. For the jailed or hospitalized alcoholic, aversion therapy is common (Miller and Barlow, 1973). In classical conditioning procedures, the various stimuli associated with drinking, such as the taste of alcoholic beverages, visual stimuli, and even “imagining” drinking, are paired with a strong aversive stimulus, such as electric shock or drug-induced nausea. This conditioning procedure is expected to establish the various stimuli that accompany drinking as conditioned aversive stimuli.

Advocates of aversion therapy base confidence in their techniques on their understanding of laboratory findings. However, the facts of discrimination learning are neglected. The home, the bar, or streets in which the problem drinking normally takes place are easily discriminated from the contrived conditions of the clinic, or even the simulated bars used to promote transfer of training. Differences between these contrived settings and the real-life situations are still far greater than those found in laboratory discrimination learning studies where responding regularly comes under stimulus control. Behavior is adaptable. It adjusts to the contingencies of reinforcement or punishment. Oddly, the behavior therapist very often seems to miss this point. The therapist attempts a technical fix for special defects in the drunk by applying aversive stimuli in the clinic, but outside the clinic all those conditions prevail that maintain the behavior in the first place, and behavior adjusts to these conditions. One of the adjustments is drinking itself. And so the problem, as defined by the employer of the behavior modifier, returns—hence recidivism or the lack of transfer.

Perhaps given the way the problem is defined, the punishing aspects of the technique might actually contribute to its use. Although the therapist may be well-intentioned, a society that views the "skid row" alcoholic as worthy of scorn and retribution may encourage such abusive treatment. It is interesting that aversive therapy is used almost exclusively for behaviors that in nontherapeutic settings are the object of severe sanction and retaliation. Many condone, or demand, the punishment of the homosexual, the child molester, the violent person, the drug addict, and the drunk. These victims are the object of scorn and retribution; they are also the object of aversion therapy. At the same time, aversion therapy is notably absent in the treatment of a number of problems that do not generally repulse others. The phobic is not shocked when he shows fear; nor is the under-assertive person shocked for passivity, unlike the over-assertive, aggressive prisoner. A homosexual may be

shocked for having an erection when shown a photograph, but the patient in therapy for impotence is not shocked for failure to attain an erection in similar circumstances. If aversive therapy is at all effective, why is it reserved for acts viewed as despicable? Is there an element of social retaliation in its use?

I assume that therapists are motivated by humanitarian concerns to help the patient. But the problems of the individual have been defined by others in such a way that aversive means of behavior change are justified. This can be illustrated in a study by Gallant (1970), who evaluated a compulsory treatment program for "revolving door" alcoholics. The "revolving door" alcoholic is one who is regularly arrested for drunkenness (at least in New Orleans, where the study was conducted). Over 52% of the 210 patients in the study had been arrested more than 50 times and had averaged 14 convictions within the year of their forced participation in the study. A cooperative judge sentenced these people either to serve a 90-day jail term or to "volunteer" to participate in Gallant's experiment. Antabuse was used as a component of therapy. Antabuse is a drug that induces severe nausea when alcohol is ingested. Hence, it is a form of aversion therapy. You may judge whether the therapist's scorn for revolving door alcoholics might have eased his decision to use a tortuous procedure. In support of coerced participation, Gallant says of these patients:

It was decided to undertake the present compulsory treatment project, which attempts to provide the "revolving door" alcoholic with "something to lose" if he returns to his former habits. To have "something to lose" is essential to the apathetic, depressed, mistrusting and dependent alcoholic patient with a severe lack of essential anxiety or concern. (Gallant, 1970, p. 734)

The alcoholics' problem is defined as drinking and it is assumed that subjecting them to some temporary aversive conditioning might "cure" their drinking habits.

However, Gallant's description of the demographic characteristics of the patient population might suggest some other definitions of the problem. Of the 210 patients, only four lived with a wife, 24 with relatives, and three with friends. Most lived alone and over half had no permanent residence. They were poor, unemployed, and the medical work-up revealed a host of severe physical problems. In general, the patients would seem to be an unhappy and lonely lot with more than enough problems. But the therapist views alcohol to be *the* problem and treats it directly. Even when police harassment is recognized, the concern is with the problem it poses for the evaluation data, not the problem it presents to the alcoholic. According to Gallant:

It was not unusual for some of these "revolving-door" alcoholics, who loitered in the "skid-row" areas, to be arrested when they were not creating a disturbance . . . the officers were cognizant of the past history of the loiterer and would have little hesitation in arresting the person if he appeared to be intoxicated. This unhealthy cycle had to be broken. Otherwise, two of the important criteria of efficacy, which are arrest rate and conviction rate, would present confusing and unreliable results. (Gallant, 1970, p. 737)

So cards were issued to subjects in the experiment, which they could show to a police officer attempting to pick them up. Police officers were instructed not to arrest a cardholder "unless of course, he has committed an illegal offense".

If the very theory on which behavior therapy is based is correct, then the solution to a behavioral problem cannot rest in the specially arranged contingencies in the special environment of the clinic. The contingencies of the natural environment must be modified if the problem is to be corrected. The abject misery and loneliness of Gallant's skid-row alcoholics could provide a solid operant basis for drinking as a means of escape into unconsciousness. That the long-term effect adds to the poverty and loneliness simply

makes moderation more difficult by deepening the problems and establishing a vicious cycle. The short-term escape leads to wretched long-term effects, which in turn lead to another short-term escape as the cycle continues.

The very arrest record that so concerns Gallant raises questions about the nature of these reinforcement contingencies. When behavior occurs in high frequency, it is likely that the behavior is being reinforced. Gallant fails to recognize the significance of an anecdote he reports showing the functioning of natural contingencies in maintaining alcoholism. One of his "revolving door" alcoholics called the police to report that a drunk was lying unconscious by the phone booth. After hanging up, this alcoholic left the booth and lay down beside it to await his own arrest. For the poor, the homeless, and the lonely, the jail may contain many important reinforcers. Borrowing jargon from the animal psychologist, the jail may be the alcoholic's goal box.

Other behavior analysts have shown that drinking is modifiable by direct reinforcement procedures. Cohen, Liebson, and Faillace (1970) used a token reinforcement system to manipulate frequency of imbibing alcohol by hospitalized alcoholics, and thereby demonstrated the operant nature of drinking. It is, they showed, governed by its consequences. Quite properly, they suggest that drinking problems seen by the professional are a result of contingencies in the drinker's environment. They particularly point out the role of the professional in actually providing contingencies that may maintain drinking—in their words:

Some of the reinforcers which may be relevant to alcoholism in the outside world include hospitals' and physicians' care, and welfare, and rehabilitative programs. They often provide powerful reinforcers, such as money, attention, drugs, medical and psychiatric care, guidance, and counseling to the alcoholic. These services . . . are often dispensed during or following excessive

drinking. Although these reinforcers may not have initiated excessive drinking, they may make substantial contribution towards its maintenance. Perhaps some of these reinforcers might be dispensed systematically contingent on moderation. (Cohen *et al.*, 1970, pp. 764-765)

Gallant failed to find any advantage for his compulsory aversive-therapy program. I hope he will cease to use coercive procedures and I hope he has learned that special clinic procedures cannot solve behavioral problems that are maintained by conditions in the natural environment. Alcoholism is not like appendicitis, in which removal of the malfunctioning part is the cure. Rather, alcoholism is *adaptive* behavior. Gallant might instead try in his New Orleans skid-row a special community center with a free kitchen, a television, games, and furniture arranged for conversation. Then, his ex-patients should be granted admission contingent on being sober.

What of the common environmental contingencies that establish and maintain drinking? It would seem obvious that the taste and immediate pharmacological effects are reinforcing. Also, the withdrawal symptoms of the addict are important in maintaining drinking. But in our society, drinking plays such a prominent social role that contingent reinforcement for drinking is widespread. To arrange for social contacts in a light, friendly spirit we hold a cocktail party. When a difficult problem is to be discussed in a less threatening or more leisurely manner, we arrange to get together over a beer. The camaraderie of the neighborhood bar at the end of the work day is full of reinforcing social contacts over a drink. A boy approaches a girl with an offer to buy her a drink. In fact, the path to the bedroom may include cocktails, wine with dinner, and after-dinner drinks. The nondrinker misses many of these reinforcers; in fact, the nondrinking businessman who forgoes the mid-day cocktail and official business cocktail parties might be occupationally handicapped. In all of these instances, alcohol serves as an S^D for

reinforcement of social behavior which one's peers would otherwise treat as frivolous, inappropriate, sentimental, or otherwise punishable.

Drinking receives additional impetus from a large industry. "Response cost" is minimized by good merchandising with ample, conveniently located bars and liquor stores. The industry spends 200 million dollars a year advertising hardy, masculine men "going around only once" to "grab all the gusto" they can get in the form of a beer.

A serious effort to solve the social problems involved in drinking is not made by focusing on the so-called "flawed personality" of the unsightly drunk. It is not to be solved by victim blaming. It requires, as every behaviorist should know, a change in the environmental contingencies that constitute daily business and cultural practices. Such change is not likely in the normal functioning of the grand corporate syndicate that is America. Can you imagine the consequences of a sudden 50% reduction in alcohol consumption? We had a small taste of a comparable problem when the Arab oil embargo pressed us to solve our many problems associated with the overuse of the automobile. But normalcy prevailed as techniques to keep profits up at any social cost were developed.

The Criminal

The criminal, like the alcoholic, suffers from victim blaming. The prison system has as one aim the correction of alleged personality flaws viewed as the cause of criminal behavior. The professional is hired to correct these traits and to rehabilitate the prisoner. The vocabulary of the prison establishment reflects this approach. Prisons are called "correctional" institutions, guards are called "correctional officers", and the "hole" or solitary confinement is called the "behavioral adjustment unit". When the behavior analyst is hired he goes along with the system's definition of the problem and sets up token economies and behavior therapy programs to "correct" the individual, even though the behaviorists' knowledge of the principles of behavior control should

inspire a search for the controlling variables in the world of the criminal. It should then be of no great surprise that a thorough survey of followup research on prison rehabilitation programs (including some behavioral ones) failed to find credible evidence for the effectiveness of any in reducing recidivism (Martinson, 1974).

It is time, then, that the behaviorist stop tinkering with what he or she knows are fictional mental causes and look to the contingencies that produce the "criminal" behavior. This is a large order, but I would like to suggest a few tentative relationships in the hope of getting the analysis started. First, it is necessary to recognize the scope and variety of the problem called crime. Although a special subset—the lower class—is disproportionately represented in the prison population, studies of anonymous self-reports (Dolleschal and Klapmuts, 1973) show that over 90% of the adult male population has committed criminal acts.

As behaviorists, we might correctly suppose that legal and illegal behavior are similarly controlled. Most crime is for economic gain and so direct reinforcement is at its base. For example, according to the 1970's FBI's *Uniform Crime Reports*, 87% of the crimes were classified as property crimes (which includes larceny over \$50.00, automobile theft, burglary, and so on). Of the remaining "crimes against persons", half were robbery which, while involving personal confrontation, are at base also economic. Thus, 93% were crimes resulting in economic gain. The sensational ritual killer and child molester so prominent in law-and-order discussions and yellow journalism reports are a very small portion of the imprisoned, and even there they are usually outcasts among the prisoners.

But the vast bulk of crime is not included in the FBI statistics, which exclude much of white collar crime. Estimates made by the *President's Commission on Law Enforcement* (1967) suggested that white-collar crimes of embezzlement, fraud, tax cheating, and forgery amount to \$1.73 billion, while crimes of the poor—robbery, burglary, auto theft, and larceny—amount

to a little more than one-third of that amount (or \$608 million). Poor and rich alike commit illegal acts for economic gain. Our society is highly stratified, and at any level there is a struggle to increase status and happiness through individualistic competitive efforts (legal or illegal). Status is defined by wealth and levels of consumption. The competitive system praises those who acquire even at the expense of others.

There are differences in deprivation and access that explain the class differences in crimes. The poor and unemployed have no opportunity to cheat on taxes or embezzle funds. Their level of basic needs forces them into the dangerous, but available street crimes that are public, and hence more frequently result in arrest. The better-off need not be involved in burglary. Their crimes are safer and can occur in the privacy of their homes or offices. In fact, their public stance may be to defend truth and righteousness. To borrow a thought from Kurt Vonnegut, you may establish a reputation for truthfulness so as to be believed when you lie.

Economic wealth, nature of deprivation, and response opportunity explain only part of the pattern of crime. Criminal justice is itself designed to deter crime, and as such involves avoidance contingencies. While this deterrent effect does not stop the crimes from occurring, it plays an important role in shaping the nature and the magnitude of the crime. The act that occurs, given the opportunity, depends on its probability and probable magnitude of punishment. Therefore, street crimes occur in safe areas, which, ironically, also tend to be among the poor. Law enforcement is better in better neighborhoods and the poor, black prowler more conspicuous. Similarly, the tax cheat avoids outrageous deductions that invite audit, and we have all been victimized by small consumer frauds that leave us defenseless, because the cost of recovering the loss is larger than the loss itself.

The Behavior Analyst

How is it that behavior analysts fail to focus on the maintaining contingencies in the behavior

of the criminal or the drunk? Surely our behavior is the result of natural contingencies also. Hence, my third victim—ourselves and our academic colleagues. In the layered stratified hierarchies of control, we are high enough that it is particularly important to look at sources of control and contingencies designed to shape our behavior. Over the past decade, social scientist William Domhoff has carried out research that has given us a number of insights. I will present a broad outline of his conclusions and encourage you to read his books for their rather impressive array of supporting data. Domhoff (1967) has operationally defined membership in a social upper-class (which comprises less than one-half of 1% of the population). He finds evidence that this hereditary social upper-class is also a governing class by examining the social backgrounds of policymakers in business and government. Members of the social upper-class, along with some nonhereditary wealthy school chums and club-mates who hold top executive positions in their major corporations, govern first through the direct control of major corporations both by ownership (they hold 75% of corporate stock) and by direct representation in sizable numbers on corporate boards. These boards interlock extensively, with some persons holding seats across several corporations. In addition, the ruling class control the major foundations which are so important in defining public policy and problems. These foundations, of course, are themselves products of the wealthy and serve as mattresses under which the wealthy hide their money. The universities that hire us are similarly dominated by this ruling class, through individual and corporate contributions and through heavy representation on university board of trustees. The media, television, large-circulation magazines, and major metropolitan newspapers are almost all owned by ruling-class members and further influenced by the wishes of their major advertisers who (need I say it?) are the major corporations. The executive branch of the federal government is likewise controlled by this power elite. The presidential nominee of either party

must, by the time of the convention, command sufficient campaign funds to secure the nomination. I trust recent events made clear where these funds come from. After the election, the rich are amply rewarded with cabinet positions and special advisory roles. Much public policy adopted by the executive branch is not formed within the government at all, but by special groups and commissions that are dominated by the ruling class. For example, the Council on Foreign Affairs has been *the* important formulator of foreign policy (Domhoff, 1970).

From these lofty heights the objectives of our society are formulated, the aims and values are set in conformity with the perspective of the upper-class who, let me hasten to add, are benevolent rulers. But what of *our* reinforcement on meeting these designated objectives? In general, our lot in life is good. We are paid very well indeed, relative to those whose behavior we target for change. Once we are within the system, we have a high degree of security and can painlessly pass through periods during which newspapers report 10% unemployment. We have a high degree of prestige and could easily believe we deserve this because of superior intelligence, merit, motivation, and the rights of passage suffered during graduate comps, orals, and defense. It is tempting for even the behaviorist to ignore his science and accept victim-praising inner causes.

Wrapped in our security and benefits—low-cost home mortgages, group insurance rates, tuition benefits for our families, retirement funds—we lead a worry-free life as long as we can avoid losing it. Technically, you will recognize this contingency as an avoidance schedule, but unlike aversion therapy programs this is avoidance of withdrawal of positive reinforcement. If you sometimes feel hassled by this control regimen, you no doubt appreciate the line from a song sung by Janis Joplin: "Freedom's just another word for nothing left to lose". But as long as we can avoid losing our reinforcement system, we climb a neatly arranged set of job classifications in the university from instructor to professor. The various review processes tend to reinforce

orthodoxy—political, professional, and social. Our young colleagues should have no fear, since if they manage to prove for six years that their academic freedom needs no defense, they will be granted tenure to assure their academic freedom.

But our aspiring young colleagues must also publish, and so must we. We generally proceed as though we believe that a productive line of research requires funds. To obtain these funds, we go to organizations that define problems they wish to see solved. We have seen already that the major source of funds is dominated by a small ruling class. The problems, then, are defined and policies set by those who gain the most from our current economic, social, and political systems.

The myth of inner causes is fostered because of the reinforcement provided to the elite and because of the myth's role in maintaining the current system. Those high in the hierarchy of power are said to have ascended through great personal merit. The rich were free to use their inner resources, their will, their determination, their motivation, their intelligence to reach their high level. Inner causes serve as justification for those who profit from inequality.

A special set of inner causes is reserved for the poor. They are said to be lazy, to lack ambition, to be untalented. Those who get the most from the social system might find it punishing to view their own good fortune as the result of a system that exploits those below and creates poverty and unhappiness. If so, verbal statements that attribute each person's position in society to personal traits, either innate or the result of a "disadvantaged" subculture, would be reinforced.

And it is especially important for those on top to convince those on the bottom that their plight is their own fault. So *Time* and *Atlantic Monthly* provide instant fame for the latest version of Social Darwinism, even when these views are considered faulty by many scientists. Sadly, even those who sell their talents as behavior modifiers sometimes accept the victim-blaming definitions on which funding policies rest; and they attempt to fix, not environments, but the inner nature of

the individuals. Though behavior modifiers know better, they often treat prisoners as though they are maladapted and can be "fixed" in a behavior-modification system, returned to the reinforcement system from which they reached prison, and somehow expect that those contingencies that shaped the criminal behavior originally will not now exert control.

Analyzing the System, Not the Victim

But clearly, behaviorists (and radical reformers) know that credit or blame rests with the system. In operant conditioning laboratories, behavior of individual organisms is shaped in precise and replicable ways, using simple and complex contingencies of reinforcement, avoidance, or punishment. When the apparatus is changed from one schedule to another, the behavior changes from one stable pattern through a transition phase to the new pattern appropriate for the new set of contingencies. Automated equipment controls these experiments and defines the controlling contingencies. To the pigeon, the contingencies programmed by the equipment are its societal system, and the pigeon behaves appropriately to that system. Our contingencies are largely programmed in our social institutions and it is these systems of contingencies that determine our behavior. If the people of a society are unhappy, if they are poor, if they are deprived, then it is the contingencies embodied in institutions, in the economic system, and in the government which must change. It takes changed contingencies to change behavior. If social equality is a goal, then all the institutional forms that maintain stratification must be replaced with forms that assure equality of power and equality of status. If exploitation is to cease, institutional forms that assure cooperation must be developed. Thus, experimental analysis provides a supporting rationale for the reformer who sets out to change systems.

Behavior analysis also provides some basis for optimism. A contingency analysis shows inherent flaws in a stratified control system which should, in time, bring about its change, and a wider un-

derstanding of Behaviorism should accelerate this process. Behaviorism will be part of the solution.

While meeting the stratified system's goals, our behavior-change programs also follow the form of power relationships characteristic of our society (Holland, 1975). Thus, ironically, even as we serve power, our behavior-modification systems are beginning to give the social reformer an advantage. Behavior modification models the normal societal control process and makes the process explicit and clearer. Reinforcement contingencies are clearly stated. Objectives are spelled out. Responsibility for dispensing reinforcement is made explicit. As a model of the parent society, it gives us a chance for a behavior analysis of control in that society.

There are several problems intrinsic to a stratified control system. First, when the interest of the controller and the controllee are different, controllers should find it exceedingly difficult to design any contingency management system so well that the controllee will not find alternative routes to reinforcement which are subversive to the aim of the controller. To a prisoner, success in a behavior-modification system can be a means of early parole. The prisoner can fake attitude change to obtain his tokens. Prisoners call this practice shamming, and written instructions for shamming circulate in an underground communication network in some prisons. Other prisoners resist behavior modification by hiring lawyers and fighting in the courts; others refuse to accept reinforcement even when it includes promotion from solitary confinement.

With stratification of power between controller and controllee, there is a reinforcement basis for struggle and resistance by the controllee. When goals are set from above to adapt the subjugated to standards imposed from above, there is a clear behavioral basis for counter control. It is not in the prisoners' interest to be shaped into obedience to authority; there have been, and continue to be, good reasons for their resistance to authority. Authorities have repeatedly exploited them, giving privilege and wealth to those

with authority over them. Prisoners may gain more in reinforcement through devising unprogrammed alternatives than through carefully programmed contingencies leading to small reinforcers.

Second, exploitative systems using only positive reinforcement are exceedingly difficult to design. If wealth is to accumulate at the top, it must be sparingly distributed among the controllees at the bottom. When a behavior-modification program seems entirely positive, usually coercion or restraint is required at the boundaries to keep the controllee in the system. A prison token economy still requires prison walls and armed guards to keep the prisoners from leaving before they earn graduation from the program. In the token-economy program for Army basic training (Datel and Legters, Note 1) it is unlikely that the recruit would diligently work for points toward a weekend pass if it were not for the well-known aversive consequences of desertion.

Similarly, the effective use of minimal reinforcement requires prior deprivation states. The working poor can be made to work for limited gain only if they are kept poor. It is not likely that people could be kept hungry in a wealthy country without armed forces and a prison system. And, indeed, in the prison token economy, the prisoner begins in solitary confinement, an extreme state of deprivation, and works to earn *positive* reinforcement in the form of points. A behavior-modification system itself may use only positive reinforcement, but if the higher strata are to keep the greater share of the wealth and privileges, restraint and coercion must be used to keep the controllee within the rules of the system.

Aversive control generates counter control; although the carrot and the stick may generate less counter control than the stick alone, in time the aversive conditions required to keep the controllee in contact with the limited reinforcement system should generate counter control. Unequal wealth and power require protection by coercive forces. This generates counter control, class

struggle, and the eventual replacement of the system. Here is a basis of natural selection for cultural practices which could favor an egalitarian system.

BEHAVIORISM AND A FUTURE SOCIETY

How does our science, Behaviorism, and its application move on to furthering the solution? It would seem we need to move toward collective forms—forms based on cooperation, forms that maximize reinforcement for helping others, instead of reinforcement at the expense of others. Interesting efforts in doing such work are based on what I call the "Frazier" model. The Frazier model draws from *Walden II* (Skinner, 1948), itself an extremely interesting example of behavioral community that I think practical, egalitarian, and socially radical. It came into being because Frazier benevolently created it and was himself somehow removed from the specific contingencies of *Walden II*. There are numerous real-life attempts at egalitarian behavioral societies in the form of communes, notably Twin Oaks in Virginia (Kinkade, 1973), and a profoundly impressive one in which Keith Miller (1976) at the University of Kansas plays Frazier to a communal student-housing project. Miller's efforts are impressive because they are complete with data collection, specification of job descriptions and procedures that evolved from the project. I have taken to playing Frazier in an undergraduate course I teach in behavioral control in society. The class is formed into collectives of about 10 to 15 students. Members of each collective work together and prepare each other behaviorally to analyze social systems for a collective project. They are tested individually, but the assigned grade is the average for all individuals in a collective. I have simply stopped giving competitive, individual grades and the results are most exciting. Attempts in total institutions have been made as well. Fairweather (1964) experimented with group reinforcement systems on a ward in a mental hospital. Here, the patients

take part in defining criterion behavior and assessment of performances for both themselves and their peers. A group at Mendocino State in California (Rozytko, Swift, Swift, and Boggs, 1973) has created communities of hospitalized alcoholics who work together in behaviorally analyzing their problems. All of these examples are limited in two important ways: they exist in special isolated environments and they have within them the contradiction of a Frazier—an elite designer.

What we need today is an extensive and vigorous analysis of the controlling conditions in our society. What are the contingencies in the work place? What are the various means by which people are kept segmented and compartmentalized and exploited by such pigeon-holding? Now, from all I have said, it should be clear that we cannot expect funding for this activity. Promotion even within the academic world will be difficult, since to be part of the solution the audience for our findings must include people other than academicians. I can hardly expect that the third of my trio of victims, the behavior analyst, should suddenly be free of controls and be propelled toward this work in system-blaming. But unexpected help may lay ahead. With the liberal attack on behavior modification, the establishment may simply throw us away. The liberal reformer will have won a great victory and the ruling elite will laugh over cocktails in their clubs because they know behavior control will continue in much the same form. Then, with our freedom, with nothing left to lose, the analysis may proceed toward solutions.

Our old practices, useful when we embraced victim-blaming and victim-praising must be modified. Some new methodology is called for. I suggest that we need to work with people in all our social institutions in analyzing the contingencies that oppress them. We bring to this enterprise certain specialized knowledge and skills in the use of data; they bring direct specialized experience with those day-to-day contingencies. They are also the audience for the results of the analysis; we and they, as collaborators, can

evolve experimental solutions to society's problems.

There is a precedent for the effort to listen carefully to what people say and analyze the controlling contingencies of this behavior. Skinner's *Verbal Behavior* (Skinner, 1957) is rich in just such examples. It has long been a laboratory axiom that the organism knows best. We must adopt this with a new seriousness. The person is a mirror for his or her response contingencies. Behavior is adaptive. It has a close integrity with the controlling contingencies. The behaviorist should listen carefully as partner and colleague in social reform. Our role in the change process will be as a catalyst—to assist in the design of solutions.

I cannot overly emphasize the importance of always understanding the adaptive nature of behavior, since the problem-definers traditionally consider so much behavior maladaptive. We usually marvel at the intricate biological forms that evolve through natural selection. These astounding variations reflect generations of shifting environmental conditions. Similarly, a person's behavior reflects response contingencies. We should be as respectful and awed by these adaptations as we are of evolutionary adaptations.

What direction might this collective exploration of controlling contingencies take? I realize it is presumptuous to hazard a guess in advance of a series of necessary experiments. However, I think it probable that the analysis of controlling contingencies will reveal deep contradictions in our stratified system, and will reveal profound problems in our ideology of "doing your own thing" and maximizing personal gain. I think the analysis will naturally draw us toward a community of equality, with service to others and responsibilities for others as guiding principles. One reason for my expectation is that superior behavior control is possible in a community of peers. When all the day-to-day acts of each individual are evaluated communally in terms of the criteria of "service to others", small beginnings of elitism or personal gain at the expense

of others can be immediately assessed. Should group members display elitist behavior, such as gaining special individual advantage at the expense of others, the group would criticize the behavior. The smallest beginning signs of such a "social disease" would be dealt with in the group. Unlike today's society, behaviors that can get someone into trouble would not go through a natural shaping process in which small examples of unacceptable behaviors are reinforced and allowed to grow in size until suddenly an individual is in trouble with the legal system.

Monitoring of contingencies in peer groups could be precise and detailed. A group of peers who work and live together and discuss the significance of their work and life together, can detect the smallest progress toward fulfilling a goal or the earliest sign of incorrect thought and provide the appropriate feedback promptly. There is no need for a separate, distant elite attempting to evaluate performance. Peers evaluate each other's movement toward shared goals. Because goals are shared, there is little to be gained by deliberate deception or subversion. Because of the closeness among group members and coworkers, fine subtleties can be analyzed for positive or negative comment. Moreover, this peer approval is likely to be much more powerful than the tokens dispensed by a disaffected elite.

In summary, fundamental truths adduced from an empirical laboratory and politically neutral science have laid the basis for this analysis of social systems. I have tried to show that in a stratified system there are built-in contingencies for struggle by the oppressed. The standard use of victim-blaming and inner causes itself has a behavioral basis, in that it reinforces the status quo; this is so even though the science of behavior has made such inner causes unsatisfactory as explanations of behavior. A wider dissemination of the methods for analyzing controlling contingencies can accelerate the creation of a nonoppressive society and the passing away of the social problems for which victims are themselves so often blamed.

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