

Beyond  
Freedom  
and Dignity

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## Freedom

ALMOST ALL LIVING THINGS act to free themselves from harmful contacts. A kind of freedom is achieved by the relatively simple forms of behavior called reflexes. A person sneezes and frees his respiratory passages from irritating substances. He vomits and frees his stomach from indigestible or poisonous food. He pulls back his hand and frees it from a sharp or hot object. More elaborate forms of behavior have similar effects. When confined, people struggle ("in rage") and break free. When in danger they flee from or attack its source. Behavior of this kind presumably evolved because of its survival value; it is as much a part of what we call the human genetic endowment as breathing, sweating, or digesting food. And through conditioning similar behavior may be acquired with respect to novel objects which could have played no role in evolution. These are no doubt minor instances of the struggle to be free, but they are significant. We do not attribute them to any love of freedom; they are simply forms of behavior which have proved useful in reducing various threats to the individual and hence to the species in the course of evolution.]

A much more important role is played by behavior which weakens harmful stimuli in another way. It is not acquired in the form of conditioned reflexes, but as the product of a different process called operant conditioning. When a bit of behavior is followed by a certain kind of consequence, it is more likely to occur again, and a consequence having this effect is called a reinforcer. Food, for example, is a reinforcer to a hungry organism; anything the organism does that is followed by the receipt of food is more likely to be done again whenever the organism is hungry. Some stimuli are called negative reinforcers; any response which reduces the intensity of such a stimulus—or ends it—is more likely to be emitted when the stimulus recurs. Thus, if a person escapes from a hot sun when he moves under cover, he is more likely to move under cover when the sun is again hot. The reduction in temperature reinforces the behavior it is "contingent upon"—that is, the behavior it follows. Operant conditioning also occurs when a person simply avoids a hot sun—when, roughly speaking, he escapes from the threat of a hot sun.

Negative reinforcers are called aversive in the sense that they are the things organisms "turn away from." The term suggests a spatial separation—moving or running away from something—but the essential relation is temporal. In a standard apparatus used to study the process in the laboratory, an arbitrary response simply weakens an aversive stimulus or brings it to an end. A great deal of physical technology is the result of this kind of struggle for freedom. Over the centuries, in erratic ways, men have constructed a world in which they are relatively free of many kinds of threatening or harmful stimuli—extremes of tem-

perature, sources of infection, hard labor, danger, and even those minor aversive stimuli called discomfort.

Escape and avoidance play a much more important role in the struggle for freedom when the aversive conditions are generated by other people. Other people can be aversive without, so to speak, trying: they can be rude, dangerous, contagious, or annoying, and one escapes from them or avoids them accordingly. They may also be "intentionally" aversive—that is, they may treat other people aversively because of what follows. Thus, a slave driver induces a slave to work by whipping him when he stops; by resuming work the slave escapes from the whipping (and incidentally reinforces the slave driver's behavior in using the whip). A parent nags a child until the child performs a task; by performing the task the child escapes nagging (and reinforces the parent's behavior). The blackmailer threatens exposure unless the victim pays; by paying, the victim escapes from the threat (and reinforces the practice). A teacher threatens corporal punishment or failure until his students pay attention; by paying attention the students escape from the threat of punishment (and reinforce the teacher for threatening it). In one form or another intentional aversive control is the pattern of most social coordination—in ethics, religion, government, economics, education, psychotherapy, and family life.

A person escapes from or avoids aversive treatment by behaving in ways which reinforce those who treated him aversively until he did so, but he may escape in other ways. For example, he may simply move out of range. A person may escape from slavery, emigrate or defect from a government, desert from an army, become an apostate from a religion, play truant, leave home, or drop out of a culture as

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*don't get respect if contingencies operating on behavior are obvious*

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a hobo, hermit, or hippie. Such behavior is as much a product of the aversive conditions as the behavior the conditions were designed to evoke. The latter can be guaranteed only by sharpening the contingencies or by using stronger aversive stimuli.

Another anomalous mode of escape is to attack those who arrange aversive conditions and weaken or destroy their power. We may attack those who crowd us or annoy us, as we attack the weeds in our garden, but again the struggle for freedom is mainly directed toward intentional controllers—toward those who treat others aversively in order to induce them to behave in particular ways. Thus, a child may stand up to his parents, a citizen may overthrow a government, a communicant may reform a religion, a student may attack a teacher or vandalize a school, and a dropout may work to destroy a culture.

It is possible that man's genetic endowment supports this kind of struggle for freedom: when treated aversively people tend to act aggressively or to be reinforced by signs of having worked aggressive damage. Both tendencies should have had evolutionary advantages, and they can easily be demonstrated. If two organisms which have been coexisting peacefully receive painful shocks, they immediately exhibit characteristic patterns of aggression toward each other. The aggressive behavior is not necessarily directed toward the actual source of stimulation; it may be "displaced" toward any convenient person or object. Vandalism and riots are often forms of undirected or misdirected aggression. An organism which has received a painful shock will also, if possible, act to gain access to another organism toward which it can act aggressively. The extent to which human aggression exemplifies innate tendencies is not clear, and many of the ways in which

people attack and thus weaken or destroy the power of intentional controllers are quite obviously learned.

What we may call the "literature of freedom" has been designed to induce people to escape from or attack those who act to control them aversively. The content of the literature is the philosophy of freedom, but philosophies are among those inner causes which need to be scrutinized. We say that a person behaves in a given way because he possesses a philosophy, but we infer the philosophy from the behavior and therefore cannot use it in any satisfactory way as an explanation, at least until it is in turn explained. The literature of freedom, on the other hand, has a simple objective status. It consists of books, pamphlets, manifestoes, speeches, and other verbal products, designed to induce people to act to free themselves from various kinds of intentional control. It does not impart a philosophy of freedom; it induces people to act.

The literature often emphasizes the aversive conditions under which people live, perhaps by contrasting them with conditions in a freer world. It thus makes the conditions more aversive, "increasing the misery" of those it is trying to rescue. It also identifies those from whom one is to escape or those whose power is to be weakened through attack. Characteristic villains of the literature are tyrants, priests, generals, capitalists, martinet teachers, and domineering parents.

The literature also prescribes modes of action. It has not been much concerned with escape, possibly because advice has not been needed; instead, it has emphasized how controlling power may be weakened or destroyed. Tyrants are to be overthrown, ostracized, or assassinated. The legitimacy of a government is to be questioned. The

ability of a religious agency to mediate supernatural sanctions is to be challenged. Strikes and boycotts are to be organized to weaken the economic power which supports aversive practices. The argument is strengthened by exhorting people to act, describing likely results, reviewing successful instances on the model of the advertising testimonial, and so on.

The would-be controllers do not, of course, remain inactive. Governments make escape impossible by banning travel or severely punishing or incarcerating defectors. They keep weapons and other sources of power out of the hands of revolutionaries. They destroy the written literature of freedom and imprison or kill those who carry it orally. If the struggle for freedom is to succeed, it must then be intensified.

The importance of the literature of freedom can scarcely be questioned. Without help or guidance people submit to aversive conditions in the most surprising way. This is true even when the aversive conditions are part of the natural environment. Darwin observed, for example, that the Fuegians seemed to make no effort to protect themselves from the cold; they wore only scant clothing and made little use of it against the weather. And one of the most striking things about the struggle for freedom from intentional control is how often it has been lacking. Many people have submitted to the most obvious religious, governmental, and economic controls for centuries, striking for freedom only sporadically, if at all. [The literature of freedom has made an essential contribution to the elimination of many aversive practices in government, religion, education, family life, and the production of goods.]

The contributions of the literature of freedom, however, are not usually described in these terms. Some tradi-

tional theories could conceivably be said to define freedom as the absence of aversive control, but the emphasis has been on how that condition *feels*. [Other traditional theories could conceivably be said to define freedom as a person's condition when he is behaving under nonaversive control, but the emphasis has been upon a state of mind associated with doing what one wants.] According to John Stuart Mill, "Liberty consists in doing what one desires." The literature of freedom has been important in changing practice (it has changed practices whenever it has had any effect whatsoever), but it has nevertheless defined its task as the changing of states of mind and feelings. Freedom is a "possession." A person escapes from or destroys the power of a controller in order to feel free, and once he feels free and can do what he desires, no further action is recommended and none is prescribed by the literature of freedom, except perhaps eternal vigilance lest control be resumed.

The feeling of freedom becomes an unreliable guide to action as soon as would-be controllers turn to nonaversive measures, as they are likely to do to avoid the problems raised when the controllee escapes or attacks. Nonaversive measures are not as conspicuous as aversive and are likely to be acquired more slowly, but they have obvious advantages which promote their use. Productive labor, for example, was once the result of punishment: the slave worked to avoid the consequences of not working. Wages exemplify a different principle; a person is paid when he behaves in a given way so that he will continue to behave in that way. Although it has long been recognized that rewards have useful effects, wage systems have evolved slowly. In the nineteenth century it was believed that an

industrial society required a hungry labor force; wages would be effective only if the hungry worker could exchange them for food. By making labor less aversive—for instance, by shortening hours and improving conditions—it has been possible to get men to work for lesser rewards. Until recently teaching was almost entirely aversive: the student studied to escape the consequences of not studying, but nonaversive techniques are gradually being discovered and used. [The skillful parent learns to reward a child for good behavior rather than punish him for bad. Religious agencies move from the threat of hellfire to an emphasis on God's love, and governments turn from aversive sanctions to various kinds of inducements, as we shall note again shortly.] What the layman calls a reward is a "positive reinforcer," the effects of which have been exhaustively studied in the experimental analysis of operant behavior. The effects are not as easily recognized as those of aversive contingencies because they tend to be deferred, and applications have therefore been delayed, but techniques as powerful as the older aversive techniques are now available.

A problem arises for the defender of freedom when the behavior generated by positive reinforcement has deferred aversive consequences. This is particularly likely to be the case when the process is used in intentional control, where the gain to the controller usually means a loss to the controllee. What are called conditioned positive reinforcers can often be used with deferred aversive results. Money is an example. It is reinforcing only after it has been exchanged for reinforcing things, but it can be used as a reinforcer when exchange is impossible. A counterfeit bill, a bad check, a stopped check, or an unkept promise are conditioned reinforcers, although aversive conse-

quences are usually quickly discovered. The archetypal pattern is the gold brick. Countercontrol quickly follows: we escape from or attack those who misuse conditioned reinforcers in this way. But the misuse of many social reinforcers often goes unnoticed. Personal attention, approval, and affection are usually reinforcing only if there has been some connection with already effective reinforcers, but they can be used when a connection is lacking. The simulated approval and affection with which parents and teachers are often urged to solve behavior problems are counterfeit. So are flattery, backslapping, and many other ways of "winning friends."

Genuine reinforcers can be used in ways which have aversive consequences. A government may prevent defection by making life more interesting—by providing bread and circuses and by encouraging sports, gambling, the use of alcohol and other drugs, and various kinds of sexual behavior, where the effect is to keep people within reach of aversive sanctions. The Goncourt brothers noted the rise of pornography in the France of their day: "Pornographic literature," they wrote, "serves a Bas-Empire . . . one tames a people as one tames lions, by masturbation."

Genuine positive reinforcement can also be misused because the sheer quantity of reinforcers is not proportional to the effect on behavior. Reinforcement is usually only intermittent, and the schedule of reinforcement is more important than the amount received. Certain schedules generate a great deal of behavior in return for very little reinforcement, and the possibility has naturally not been overlooked by would-be controllers. Two examples of schedules which are easily used to the disadvantage of those reinforced may be noted.

In the incentive system known as piece-work pay, the

worker is paid a given amount for each unit of work performed. The system seems to guarantee a balance between the goods produced and the money received. The schedule is attractive to management, which can calculate labor costs in advance, and also to the worker, who can control the amount he earns. This so-called "fixed-ratio" schedule of reinforcement can, however, be used to generate a great deal of behavior for very little return. It induces the worker to work fast, and the ratio can then be "stretched"—that is, more work can be demanded for each unit of pay without running the risk that the worker will stop working. His ultimate condition—hard work with very little pay—may be acutely aversive.

A related schedule, called variable-ratio, is at the heart of all gambling systems. A gambling enterprise pays people for giving it money—that is, it pays them when they make bets. But it pays on a kind of schedule which sustains betting even though, in the long run, the amount paid is less than the amount wagered. At first the mean ratio may be favorable to the bettor; he "wins." But the ratio can be stretched in such a way that he continues to play even when he begins to lose. The stretching may be accidental (an early run of good luck which grows steadily worse may create a dedicated gambler), or the ratio may be deliberately stretched by someone who controls the odds. In the long run the "utility" is negative: the gambler loses all.

It is difficult to deal effectively with deferred aversive consequences because they do not occur at a time when escape or attack is feasible—when, for example, the controller can be identified or is within reach. But the immediate reinforcement is positive and goes unchallenged. The problem to be solved by those who are concerned with freedom is to create immediate aversive consequences. A

classical problem concerns "self-control." A person eats too much and gets sick but survives to eat too much again. Delicious food or the behavior evoked by it must be made sufficiently aversive so that a person will "escape from it" by not eating it. (It might be thought that he can escape from it only before eating it, but the Romans escaped afterward through the use of a vomitorium.) Current aversive stimuli may be conditioned. Something of the sort is done when eating too much is called wrong, gluttonous, or sinful. Other kinds of behavior to be suppressed may be declared illegal and punished accordingly. The more deferred the aversive consequences the greater the problem. It has taken a great deal of "engineering" to bring the ultimate consequences of smoking cigarettes to bear on the behavior. A fascinating hobby, a sport, a love affair, or a large salary may compete with activities which would be more reinforcing in the long run, but the run is too long to make countercontrol possible. That is why countercontrol is exerted, if at all, only by those who suffer aversive consequences but are not subject to positive reinforcement. Laws are passed against gambling; unions oppose piece-work pay, and no one is allowed to pay young children to work for them or to pay anyone for engaging in immoral behavior, but these measures may be strongly opposed by those whom they are designed to protect. The gambler objects to antigambling laws and the alcoholic to any kind of prohibition; and a child or prostitute may be willing to work for what is offered.

The literature of freedom has never come to grips with techniques of control which do not generate escape or counterattack because it has dealt with the problem in

terms of states of mind and feelings. In his book *Sovereignty*, Bertrand de Jouvenel quotes two important figures in that literature. According to Leibnitz, "Liberty consists in the power to do what one wants to do," and according to Voltaire, "When I can do what I want to do, there is my liberty for me." But both writers add a concluding phrase: Leibnitz, "... or in the power to want what can be got," and Voltaire, more candidly, "... but I can't help wanting what I do want." Jouvenel relegates these comments to a footnote, saying that the power to want is a matter of "interior liberty" (the freedom of the inner man!) which falls outside the "gambit of freedom."

A person wants something if he acts to get it when the occasion arises. A person who says "I want something to eat" will presumably eat when something becomes available. If he says "I want to get warm," he will presumably move into a warm place when he can. These acts have been reinforced in the past by whatever was wanted. What a person feels when he feels himself wanting something depends upon the circumstances. Food is reinforcing only in a state of deprivation, and a person who wants something to eat may feel parts of that state—for example, hunger pangs. A person who wants to get warm presumably feels cold. Conditions associated with a high probability of responding may also be felt, together with aspects of the present occasion which are similar to those of past occasions upon which behavior has been reinforced. Wanting is not, however, a feeling, nor is a feeling the reason a person acts to get what he wants. Certain contingencies have raised the probability of behavior and at the same time have created conditions which may be felt. Freedom is a matter of contingencies of reinforcement, not of the

feelings the contingencies generate. The distinction is particularly important when the contingencies do not generate escape or counterattack.]

"The uncertainty which surrounds the countercontrol of nonaversive measures is easily exemplified. In the 1930's it seemed necessary to cut agricultural production. The Agricultural Adjustment Act authorized the Secretary of Agriculture to make "rental or benefit payments" to farmers who agreed to produce less—to pay the farmers, in fact, what they would have made on the food they agreed not to produce. It would have been unconstitutional to *compel* them to reduce production, but the government argued that it was merely inviting them to do so. But the Supreme Court recognized that positive inducement can be as irresistible as aversive measures when it ruled that "the power to confer or withhold unlimited benefit is the power to coerce or destroy." The decision was later reversed, however, when the Court ruled that "to hold that motive or temptation is equivalent to coercion is to plunge the law into endless difficulties." We are considering some of these difficulties.

The same issue arises when a government runs a lottery in order to raise revenue to reduce taxes. The government takes the same amount of money from its citizens in both cases, though not necessarily from the same citizens. By running a lottery it avoids certain unwanted consequences: people escape from heavy taxation by moving away or they counterattack by throwing a government which imposes new taxes out of office. A lottery, taking advantage of a stretched variable-ratio schedule of reinforcement, has neither of these effects. The only opposition comes from those who in general oppose gambling enterprises and who are themselves seldom gamblers.

\* A third example is the practice of inviting prisoners to volunteer for possibly dangerous experiments—for example, on new drugs—in return for better living conditions or shortened sentences. Everyone would protest if the prisoners were forced to participate, but are they really free when positively reinforced, particularly when the condition to be improved or the sentence to be shortened has been imposed by the state? \*

Follows the point  
The issue often arises in more subtle forms. It has been argued, for example, that uncontrolled contraceptive services and abortion do not "confer unrestricted freedom to reproduce or not to reproduce because they cost time and money." Impoverished members of society should be given compensation if they are to have a truly "free choice." If the just compensation exactly offsets the time and money needed to practice birth control, then people will indeed be free of the control exerted by the loss of time and money, but whether or not they then have children will still depend upon other conditions which have not been specified. If a nation generously reinforces the practices of contraception and abortion, to what extent are its citizens free to have or not to have children?

Uncertainty about positive control is evident in two remarks which often appear in the literature of freedom. It is said that even though behavior is completely determined, it is better that a man "feel free" or "believe that he is free." If this means that it is better to be controlled in ways which have no aversive consequences, we may agree, but if it means that it is better to be controlled in ways against which no one revolts, it fails to take account of the possibility of deferred aversive consequences. A second comment seems more appropriate: "It is better to be a conscious slave than a happy one." The word "slave" clar-



fes the nature of the ultimate consequences being considered: they are exploitative and hence aversive. What the slave is to be conscious of is his misery; and a system of slavery so well designed that it does not breed revolt is the real threat. The literature of freedom has been designed to make men "conscious" of aversive control, but in its choice of methods it has failed to rescue the happy slave.

One of the great figures in the literature of freedom, Jean-Jacques Rousseau, did not fear the power of positive reinforcement. In his remarkable book *Emile* he gave the following advice to teachers:

Let [the child] believe that he is always in control, though it is always you [the teacher] who really controls. There is no subjugation so perfect as that which keeps the appearance of freedom, for in that way one captures volition itself. The poor baby, knowing nothing, able to do nothing, having learned nothing, is he not at your mercy? Can you not arrange everything in the world which surrounds him? Can you not influence him as you wish? His work, his play, his pleasures, his pains, are not all these in your hands and without his knowing? Doubtless he ought to do only what he wants; but he ought to want to do only what you want him to do; he ought not to take a step which you have not foreseen; he ought not to open his mouth without your knowing what he will say.

Rousseau could take this line because he had unlimited faith in the benevolence of teachers, who would use their

ALL CONTROL IS AVERSIVE REINFORCEMENT

absolute control for the good of their students. But, as we shall see later, benevolence is no guarantee against the misuse of power, and very few figures in the history of the struggle for freedom have shown Rousseau's lack of concern. On the contrary, they have taken the extreme position that all control is wrong. In so doing they exemplify a behavioral process called generalization. Many instances of control are aversive, in either their nature or their consequences, and hence all instances are to be avoided. The Puritans carried the generalization a step further by arguing that most positive reinforcement was wrong, whether or not it was intentionally arranged, just because it occasionally got people into trouble.

The literature of freedom has encouraged escape from or attack upon all controllers. It has done so by making any indication of control aversive. Those who manipulate human behavior are said to be evil men, necessarily bent on exploitation. Control is clearly the opposite of freedom, and if freedom is good, control must be bad. What is overlooked is control which does not have aversive consequences at any time. Many social practices essential to the welfare of the species involve the control of one person by another, and no one can suppress them who has any concern for human achievements. We shall see later that in order to maintain the position that all control is wrong, it has been necessary to disguise or conceal the nature of useful practices, to prefer weak practices just because they can be disguised or concealed, and—a most extraordinary result indeed!—to perpetuate punitive measures.

The problem is to free men, not from control, but from certain kinds of control, and it can be solved only if our analysis takes all consequences into account. How people

feel about control, before or after the literature of freedom has worked on their feelings, does not lead to useful distinctions.

We're it not for the unwarranted generalization that all control is wrong, we should deal with the social environment as simply as we deal with the nonsocial. Although technology has freed men from certain aversive features of the environment, it has not freed them from the environment. We accept the fact that we depend upon the world around us, and we simply change the nature of the dependency. In the same way, to make the social environment as free as possible of aversive stimuli we do not need to destroy that environment or escape from it: we need to redesign it.

Man's struggle for freedom is not due to a will to be free, but to certain behavioral processes characteristic of the human organism, the chief effect of which is the avoidance of or escape from so-called "aversive" features of the environment. Physical and biological technologies have been mainly concerned with natural aversive stimuli; the struggle for freedom is concerned with stimuli intentionally arranged by other people. The literature of freedom has identified the other people and has proposed ways of escaping from them or weakening or destroying their power. It has been successful in reducing the aversive stimuli used in intentional control, but it has made the mistake of defining freedom in terms of states of mind or feelings, and it has therefore not been able to deal effectively with techniques of control which do not breed escape or revolt but nevertheless have aversive conse-

quences. It has been forced to brand all control as wrong and to misrepresent many of the advantages to be gained from a social environment. It is unprepared for the next step, which is not to free men from control but to analyze and change the kinds of control to which they are exposed.

## Dignity

ANY EVIDENCE that a person's behavior may be attributed to external circumstances seems to threaten his dignity or worth. We are not inclined to give a person credit for achievements which are in fact due to forces over which he has no control. We tolerate a certain amount of such evidence, as we accept without alarm some evidence that a man is not free. No one is greatly disturbed when important details of works of art and literature, political careers, and scientific discoveries are attributed to "influences" in the lives of artists, writers, statesmen, and scientists respectively. But as an analysis of behavior adds further evidence, the achievements for which a person himself is to be given credit seem to approach zero, and both the evidence and the science which produces it are then challenged.

Freedom is an issue raised by the aversive consequences of behavior, but dignity concerns positive reinforcement. When someone behaves in a way we find reinforcing, we make him more likely to do so again by praising or commending him. We applaud a performer precisely to induce him to repeat his performance, as the

expressions "Again!" "Encore!" and "Bis!" indicate. We attest to the value of a person's behavior by patting him on the back, or saying "Good!" or "Right!" or giving him a "token of our esteem" such as a prize, honor, or award. Some of these things are reinforcing in their own right—a pat on the back may be a kind of caress, and prizes include established reinforcers—but others are conditioned—that is, they reinforce only because they have been accompanied by or exchanged for established reinforcers.

Praise and approval are generally reinforcing because anyone who praises a person or approves what he has done is inclined to reinforce him in other ways. (The reinforcement may be the reduction of a threat: to approve a draft of a resolution is often simply to cease to object to it.)

There may be a natural inclination to be reinforcing to those who reinforce us, as there seems to be to attack those who attack us, but similar behavior is generated by many social contingencies. We commend those who work for our good because we are reinforced when they continue to do so. When we give a person credit for something we identify an additional reinforcing consequence. To give a person credit for winning a game is to emphasize the fact that the victory was contingent on something he did, and the victory may then become more reinforcing to him.

The amount of credit a person receives is related in a curious way to the visibility of the causes of his behavior. We withhold credit when the causes are conspicuous. We do not, for example, ordinarily commend a person for responding reflexly: we do not give him credit for coughing, sneezing, or vomiting even though the result may be valuable. For the same reason we do not give much credit for behavior which is under conspicuous aversive control even though it may be useful. As Montaigne observed,

"Whatever is enforced by command is more imputed to him who exacts than to him who performs." We do not commend the groveler even though he may be serving an important function.

Nor do we praise behavior which is traceable to conspicuous positive reinforcement. We share Iago's contempt for the

... duteous and knee-crooking knave

That, dotting on his own obsequious bondage,

Wears out his time, much like his master's ass,

For nought but provender . . .

To be excessively controlled by sexual reinforcement is to be "infatuated," and the etymology of the word was memorialized by Kipling in two famous lines: "A fool there was and he made his prayer . . . / To a rag, a bone, and a hank of hair . . ." Members of the leisure classes have generally lost status when they submitted to pecuniary reinforcement by "going into trade." Among those reinforced with money, credit usually varies with the conspicuousness of the reinforcement: it is less commendable to work for a weekly wage than a monthly salary, even though the total income is the same: The loss in status may explain why most professions have come only slowly under economic control. For a long time teachers were not paid, presumably because pay would have been beneath their dignity; and lending money at interest was stigmatized for centuries and even punished as usury. We do not give a writer much credit for a potboiler, or an artist for a picture obviously painted to sell in the current fashion. Above all we do not give credit to those who are conspicuously working for credit.

We give credit generously when there are no obvious reasons for the behavior. Love is somewhat more commendable when unrequited, and art, music, and literature when unappreciated. We give maximal credit when there are quite visible reasons for behaving differently—for example, when the lover is mistreated or the art, music, or literature suppressed. If we commend a person who puts duty before love, it is because the control exercised by love is easily identified. It has been customary to commend those who live celibate lives, give away their fortunes, or remain loyal to a cause when persecuted, because there are clear reasons for behaving differently. The extent of the credit varies with the magnitude of the opposing conditions. We commend loyalty in proportion to the intensity of the persecution, generosity in proportion to the sacrifices entailed, and celibacy in proportion to a person's inclination to engage in sexual behavior. As La Rochefoucauld observed, "No man deserves to be praised for his goodness unless he has strength of character to be wicked. All other goodness is generally nothing but indolence or impotence of will."

An inverse relation between credit and the conspicuousness of causes is particularly obvious when behavior is explicitly controlled by stimuli. The extent to which we commend someone for operating a complex piece of equipment depends on the circumstances. If it is obvious that he is simply imitating another operator, that someone is "showing him what to do," we give him very little credit—at most only for being able to imitate and execute the behavior. If he is following oral instructions, if someone is "telling him what to do," we give him slightly more credit—at least for understanding the language well enough to follow directions. If he is following written in-

structions, we give him additional credit for knowing how to read. But we give him credit for "knowing how to operate the equipment" only if he does so without current direction, though he may have learned through imitation or by following oral or written instructions. We give him maximal credit if he has discovered how to operate it without help, since he then owes nothing to any instructor at any time; his behavior has been shaped wholly by the relatively inconspicuous contingencies arranged by the equipment, and these are now past history.

Similar examples are to be found in verbal behavior. We reinforce people when they behave verbally—we pay them to read to us, to lecture, or to act in movies and plays—but we use credit to reinforce what is said rather than the act of speaking. Suppose someone makes an important statement. We give him minimal credit if he is simply repeating what another speaker has just said. If he is reading from a text, we give him a little more credit, in part for "knowing how to read." If he is "speaking from memory," no current stimulus is in evidence, and we give him credit for "knowing the statement." If it is clear that the observation is original, that no part of it is derived from the verbal behavior of anyone else, we give maximal credit.

We commend a prompt child more than one who must be reminded of his appointments because the reminder is a particularly visible feature of temporal contingencies. We give more credit to a person for "mental" arithmetic than for arithmetic done on paper because the stimuli controlling successive steps are conspicuous on the paper. <sup>A</sup> The theoretical physicist gets more credit than the experimental because the behavior of the latter clearly depends on laboratory practice and observation. We com-

mend those who behave well without supervision more than those who need to be watched, and those who naturally speak a language more than those who must consult grammatical rules.

We acknowledge this curious relation between credit and the inconspicuousness of controlling conditions when we conceal control to avoid losing credit or to claim credit not really due us. The general does his best to maintain his dignity while riding in a jeep over rough terrain, and the flute player continues to play although a fly crawls over his face. We try not to sneeze or laugh on solemn occasions, and after making an embarrassing mistake we try to act as if we had not done so. We submit to pain without flinching, we eat daintily through ravenous, we reach casually for our winnings at cards, and we risk a burn by slowly putting down a hot plate. (Dr. Johnson questioned the value of this: spewing out a mouthful of hot potato, he exclaimed to his astonished companions, "A fool would have swallowed it!") In other words we resist any condition in which we behave in undignified ways.

We attempt to gain credit by disguising or concealing control. The television speaker uses a prompter which is out of sight, and the lecturer glances only surreptitiously at his notes, and both then appear to be speaking either from memory or extemporaneously, when they are in fact—and less commendably—reading. We try to gain credit by inventing less compelling reasons for our conduct. We "save face" by attributing our behavior to less visible or less powerful causes—by behaving, for example, as if we were not under threat. Following Saint Jerome, we make a virtue of necessity, acting as we are forced to act but as if we were not forced. We conceal coercion by doing more than is required: "If anyone forces you to go one mile, go with

him two miles." We try to avoid discredit for objectionable behavior by claiming irresistible reasons; as Choderlos de Laclos observed in *Les liaisons dangereuses*, "A woman must have a pretext in giving herself to a man. What better than to appear to be yielding to force?"

We magnify the credit due us by exposing ourselves to conditions which ordinarily generate unworthy behavior while refraining from acting in unworthy ways. We seek out conditions under which behavior has been positively reinforced and then refuse to engage in the behavior; we court temptation, as the saint in the desert maximized the virtues of an austere life by arranging to have beautiful women or delicious food nearby. We continue to punish ourselves, as flagellants do, when we could readily stop, or submit to the fate of the martyr when we could escape.

When we are concerned with the credit to be given to others, we minimize the conspicuousness of the causes of their behavior. We resort to gentle admonition rather than punishment because conditioned reinforcers are less conspicuous than unconditioned, and avoidance more commendable than escape. We give the student a hint rather than tell him the whole answer, which he will get credit for knowing if the hint suffices. We merely suggest or advise rather than give orders. We give permission to those who are going to behave in objectionable ways anyway, like the bishop who, when presiding at a dinner, exclaimed, "Those who must smoke, may." We make it easy for people to save face by accepting their explanations of their conduct, no matter how unlikely. We test commendability by giving people reasons for behaving uncommendably. Chaucer's patient Griselda proved her fidelity to her husband by resisting the prodigious reasons he gave her for being unfaithful.

Giving credit in inverse proportion to the conspicuousness of the causes of behavior may be simply a matter of good husbandry. We make a judicious use of our resources. There is no point in commending a person for doing what he is going to do anyway, and we estimate the chances from the visible evidence. We are particularly likely to commend a person when we know of no other way of getting results, when there are no other reasons why he should behave in other ways. We do not give credit if it will work no change. We do not waste credit on reflexes, because they can be strengthened only with great difficulty, if at all, through operant reinforcement. We do not give credit for what has been done by accident. We also withhold credit if it is going to be supplied by others; for example, we do not commend people for giving alms if they sound trumpets before doing so, since "they have their reward." (A judicious use of resources is often clearer with respect to punishment. We do not waste punishments when they will work no change—when, for example, the behavior was accidental or emitted by a retarded or psychotic person.)

Good husbandry may also explain why we do not commend people who are obviously working simply for commendation. Behavior is to be commended only if it is more than merely commendable. If those who work for commendation are productive in no other way, the commendation is wasted. It may also interfere with the effects of other consequences; the player who works for applause, who "plays to the grandstand," responds less sensitively to the contingencies of the game.

We seem to be interested in judicious use when we call rewards and punishments just or unjust and fair or unfair. We are concerned with what a person "deserves," or, as

the dictionary puts it, what he is "rightfully worthy of, or fairly entitled to, or able to claim rightfully by virtue of action done or qualities displayed." Too generous a reward is more than is needed to maintain the behavior. It is particularly unfair when nothing at all has been done to deserve it or when, in fact, what has been done deserves punishment. Too great a punishment is also unjust, especially when nothing has been done to deserve it or when a person has behaved well. Incommensurate consequences may cause trouble; good fortune often reinforces indolence, for example, and bad fortune often punishes industry. (The reinforcers at issue are not necessarily administered by other people. Good or bad luck causes trouble when it is not deserved.)

We try to correct defective contingencies when we say that a man should "appreciate" his good fortune. We mean that he should henceforth act in ways which would be fairly reinforced by what he has already received. We may hold, in fact, that a man *can* appreciate things only if he has worked for them. (The etymology of "appreciate" is significant: to appreciate the behavior of a man is to put a price on it. "Esteem" and "respect" are related terms. We esteem behavior in the sense of estimating the appropriateness of reinforcement. We respect simply by noticing. Thus, we respect a worthy opponent in the sense that we are alert to his strength. A man wins respect by gaining notice, and we have no respect for those who are "beneath our notice." We no doubt particularly notice the things we esteem or appreciate, but in doing so we do not necessarily place a value on them.)

There is something more than good husbandry or the appropriate evaluation of reinforcers in our concern for dig-

nity or worth. We not only praise, commend, approve, or applaud a person, we "admire" him, and the word is close to "marvel at" or "wonder at." We stand in awe of the inexplicable, and it is therefore not surprising that we are likely to admire behavior more as we understand it less. And, of course, what we do not understand we attribute to autonomous man. The early troubadour reciting a long poem must have seemed possessed (and he himself called upon a muse to inspire him), as the actor reciting memorized lines today seems to be possessed by the character he plays. The gods spoke through oracles and through the priests who recited holy script. Ideas appear miraculously in the unconscious thought processes of intuitive mathematicians, who are therefore admired beyond mathematicians who proceed through reasoned steps. The creative genius of artist, composer, or writer is a kind of genie.

We seem to appeal to the miraculous when we admire behavior because we cannot strengthen it in any other way. We may coerce soldiers into risking their lives, or pay them generously for doing so, and we may not admire them in either case, but to induce a man to risk his life when he does not "have to" and when there are no obvious rewards, nothing seems available but admiration. A difference between expressing admiration and giving credit is clear when we admire behavior which admiration will not affect. We may call a scientific achievement, a work of art, a piece of music, or a book admirable but at such a time or in such a way that we cannot affect the scientist, artist, composer, or writer, even though we should give credit and offer other kinds of support if we could. We admire genetic endowment—the physical beauty, skill, or prowess of a race, family, or individual—but not in order to change it. (The admiration may eventually change genetic

endowment by changing selective breeding, but on a very different time scale.)

What we may call the struggle for dignity has many features in common with the struggle for freedom. The removal of a positive reinforcer is aversive, and when people are deprived of credit or admiration or the chance to be commended or admired, they respond in appropriate ways.

They escape from those who deprive them or attack in order to weaken their effectiveness. The literature of dignity identifies those who infringe a person's worth, it describes the practices they use, and it suggests measures to be taken. Like the literature of freedom it is not much concerned with simple escape, presumably because instruction is not needed. Instead it concentrates on weakening those who deprive others of credit. The measures are self-freedom as violent as those recommended by the literature of freedom, probably because loss of credit is in general less aversive than pain or death. They are often in fact merely verbal; we react to those who deprive us of due credit by protesting, opposing, or condemning them and their practices. (What is felt when a person protests is usually called resentment, significantly defined as "the expression of indignatant displeasure," but we do not protest because we feel resentful. We both protest and feel resentful because we have been deprived of the chance to be admired or to receive credit.)

A large part of the literature of dignity is concerned with justice, with the appropriateness of rewards and punishment. Both freedom and dignity are at stake when the appropriateness of a punishment is being considered. Economic practices come into the literature in determining a fair price or a fair wage. The child's first protest, "That's

"not fair," is usually a matter of the magnitude of a reward or punishment. We are concerned here with that part of the literature of dignity which protests encroachment on personal worth. A person protests (and incidentally feels indignant) when he is unnecessarily jostled, tripped, or pushed around, forced to work with the wrong tools, tricked into behaving foolishly with joke-shop novelties, or forced to behave in demeaning ways, as in a jail or concentration camp. He protests and resents the addition of any unnecessary control. We offend him by offering to pay for services he has performed as a favor, because we imply a lesser generosity or good will on his part. A student protests when we tell him an answer he already knows, because we destroy the credit he would have been given for knowing it. <sup>D</sup> give a devout person proof of the existence of God is to destroy his claim to pure faith. The mystic resents orthodoxy; antinomianism took the position that to behave well by following rules was not a sign of true goodness. Civic virtue is not easily demonstrated in the presence of the police. To require a citizen to sign a loyalty oath is to destroy some of the loyalty he could otherwise claim, since any subsequent loyal behavior may then be attributed to the oath.

The artist objects to (and resents) being told that he is painting the kind of picture that sells well, or the author that he is writing potboilers, or the legislator that he is supporting a measure to get votes. We are likely to object to (and resent) being told that we are imitating an admired person, or repeating merely what we have heard someone say or have read in books. We oppose (and resent) any suggestion that the aversive consequences in spite of which we are behaving well are not important. Thus, we object to being told that the mountain we are

9/22/61  
Example

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about to climb is not really difficult, that the enemy we are about to attack is not really formidable, that the work we are doing is not really very hard, or, following La Rochefoucauld, that we are behaving well because we do not have the strength of character to behave badly. When P. W. Bridgman argued that scientists are particularly inclined to admit and correct their mistakes because in science a mistake will soon be discovered by someone, he was felt to be challenging the virtue of scientists.

From time to time, advances in physical and biological technology have seemed to threaten worth or dignity when they have reduced chances to earn credit or be admired. Medical science has reduced the need to suffer in silence and the chance to be admired for doing so. Fireproof buildings leave no room for brave firemen, or safe ships for brave sailors, or safe airplanes for brave pilots. The modern dairy barn has no place for a Hercules. When exhausting and dangerous work is no longer required, those who are hard-working and brave seem merely foolish.

The literature of dignity conflicts here with the literature of freedom, which favors a reduction in aversive features of daily life, as by making behavior less arduous, dangerous, or painful, but a concern for personal worth sometimes triumphs over freedom from aversive stimulation—for example, when, quite apart from medical issues, painless childbirth is not as readily accepted as painless dentistry. A military expert, J. F. C. Fuller, has written: "The highest military rewards are given for bravery and not for intelligence, and the introduction of any novel weapon which detracts from individual prowess is met with opposition." Some labor-saving devices are still opposed on the grounds that they reduce the value of the product. Hand sawyers presumably opposed the introduc-

tion of sawmills and destroyed them because their jobs were threatened, but it is also significant that the mills reduced the value of their labor by reducing the value of sawed planks. In this conflict, however, freedom usually wins out over dignity. People have been admired for submitting to danger, hard labor, and pain, but almost everyone is willing to forgo the acclaim for doing so.

~~Behavioral~~ Behavioral technology does not escape as easily as physical and biological technology because it threatens too many occult qualities. The alphabet was a great invention, which enabled men to store and transmit records of their verbal behavior and to learn with little effort what others had learned the hard way—that is, to learn from books rather than from direct, possibly painful, contact with the real world. But until men understood the extraordinary advantages of being able to learn from the experience of others, the apparent destruction of personal merit was objectionable. In Plato's *Phaedrus*, Thamus, the Egyptian king, protests that those who learn from books have only the show of wisdom, not wisdom itself. Merely reading what someone has written is less commendable than saying the same thing for arcane reasons. A person who reads a book appears to be omniscient, yet, according to Thamus, he "knows nothing." And when a text is used to aid memory, Thamus contended that memory would fall into disuse. To read is less commendable than to recite what one has learned. And there are many other ways in which, by reducing the need for exhausting, painful, and dangerous work, a behavioral technology reduces the chance to be admired. The slide rule, the calculating machine, and the computer are the enemies of the arithmetic mind. But here again the gain in freedom from aversive stimulation may compensate for any loss of admiration.

There may seem to be no compensating gain when dignity or worth seems lessened by a basic scientific analysis, apart from technological applications. It is in the nature of scientific progress that the functions of autonomous man be taken over one by one as the role of the environment is better understood. A scientific conception seems demeaning because nothing is eventually left for which autonomous man can take credit. And as for admiration in the sense of wonderment, the behavior we admire is the behavior we cannot yet explain. Science naturally seeks a fuller explanation of that behavior; its goal is the destruction of mystery. The defenders of dignity will protest, but in doing so they postpone an achievement for which, in traditional terms, man would receive the greatest credit and for which he would be most admired.

We recognize a person's dignity or worth when we give him credit for what he has done. The amount we give is inversely proportional to the conspicuousness of the causes of his behavior. If we do not know why a person acts as he does, we attribute his behavior to him. We try to gain additional credit for ourselves by concealing the reasons why we behave in given ways or by claiming to have acted for less powerful reasons. We avoid infringing on the credit due to others by controlling them inconspicuously. We admire people to the extent that we cannot explain what they do, and the word "admire" then means "marvel at." What we may call the literature of dignity is concerned with preserving due credit. It may oppose advances in technology, including a technology of behavior, because they destroy chances to be admired and a basic analysis because it

Offers an alternative explanation of behavior for which the individual himself has previously been given credit. The literature thus stands in the way of further human achievements.

Chp 1 - determinism, but person still unique

Chp 2 - control of behavior is just as strong through positive as well as negative reinforcement. She has no freedom env. sets up contingencies of reinforcement

Chp 3 - don't get respect if contingencies operating on behavior are obvious

Dignity is not humanity  
the same