## B.F. Skinner

## Beyond Freedom and Dignity (1971)

(excerpt)

Of all the behaviorists, Skinner probably has been the most important. Following the leads of Pavlov and Watson, he constructed a science of behavior based on operant conditioning. Although much of his work was based on laboratory experiments, he took considerable pains to discuss the social and political consequences of his theory. In the following selections, Skinner argues against traditional nations of the freedom and dignity of the human being, views that are often supported by serious philosophies. His claim is that such notions can be socially harmful, particularly the notions of permissiveness championed by some philosophical and educational schools of thought. At the same time, his rejection of permissiveness does not imply a resort to punishment; instead, he argues for control based on the principles of a technology of behavior.

Those who champion freedom and dignity do not, of course, confine themselves to punitive measures, but they turn to alternatives with diffidence and timidity. Their concern for autonomous man commits them to only ineffective measures, several of which we may now examine.

## BEHAVIORISM AND EDUCATION

A method of modifying behavior without appearing to exert control is represented by Socrates's metaphor of the midwife: One person helps another give birth to behavior. Since the midwife plays no part in conception and only a small parturition, the person who gives birth to the behavior may take full credit for it. Socrates demonstrated the art of midwifery, or maieutics, in education. He pretended to show how an uneducated slave boy could be led to prove Pythagoras's theorem for doubling the square. The boy assented to the steps in the proof, and Socrates claimed that he did so without being told—in other words, that he "knew" the theorem in some sense all along. Socrates contended that even ordinary knowledge could be drawn out in the same way once the soul knew the truth and needed only to be shown that it knew it. The episode is often cited as if it were relevant to modern educational practice . . .

Intellectual, therapeutic, and moral midwifery is scarcely easier than punitive control, because it demands rather subtle skills and concentrated attention, but it has is advantages. It seems to confer a strange power on the practitioner. Like the cabalistic use of hints and allusions, it achieves results seemingly out of proportion to the measures employed. The apparent contribution of the

individual is not reduced, however. He is given full credit for knowing before he learns, for having within him the seeds of good mental health, and for being able to enter into direct communication with God. An important advantage is that the practitioner avoids responsibility. Just as it is not the midwife's fault if the baby is still-born or deformed, so the teacher is exonerated when the student fails, the psychotherapist when the patient does not solve his problem, and the mystical religious leader when his disciples behave badly.

Maieutic practices have their place. Just how much help the teacher should give the student as he acquires new forms of behavior is a delicate question. The teacher should wait for the student to respond rather than rush o tell him what he is to do or say. As Comenius put it, the more the teacher teaches, the less the student learns. The student gains in other ways. In general, we do not like to be told either what we already know or what we are unlikely ever to know well or to good effect. We do not read books if we are already thoroughly familiar with the material or if it is so completely unfamiliar it is likely to remain so. We read books which help us say things we are on the verge of saying anyway but cannot quite say without help. We understood the author, although we could not have formulated what we understand before he put it into words. There are similar advantages for the patient in psychotherapy. Maieutic practices are helpful, too, because they exert more control than is usually acknowledged and some of it may be valuable.

These advantages, however, are far short of the claims made. Socrates' slave boy learned nothing; there was no evidence whatever that he could have gone through the theorem by himself afterward. And it is as true of maieutics as of permissiveness that positive results must be credited to unacknowledged controls of other sorts. If the patient finds a solution without the help of his therapist, it is because he has been exposed to a helpful environment elsewhere..

Another metaphor associated with weak practices is horticultural. The behavior to which a person has given birth grows, and it may be guided or trained, as a growing plant is trained. Behavior may be 'cultivated.'

The metaphor is particularly at home in education. A school for small children is a child-garden, or kindergarten. The behavior of the child 'develops' until he reaches 'maturity.' A teacher may accelerate the process or turn it in slightly different directions, but—in the classical phrase—he cannot teach, he can only help the student learn. The metaphor of guidance is also common in psychotherapy. Freud argued that a person must pass through several developmental stages, and that if the patient has become 'fixated' at a given stage, the therapist must help him break loose and move forward. Governments engage in guidance—for example, when they encourage the 'development' of

industry through tax exemptions or provide a 'climate' that is favorable to the improvement of race relations.

Guidance is not as easy as permissiveness, but it is usually easier than midwifery, and it has some of the advantages. One who merely guides a natural development cannot easily be accused of trying to control it. Growth remains an achievement of the individual, testifying to his freedom and worth, his 'hidden propensities,' and as the gardener is not responsible for the ultimate forms of what he grows, so one who merely guides is exonerated when things go wrong.

Guidance is effective, however, only to the extent that control is exerted. To guide is either to open new opportunities or to block growth in particular directions. To arrange an opportunity is not a very positive act, but it is nevertheless a form of control if it increases the likelihood that behavior will be emitted. The teacher who merely selects the material the student is to study or the therapist who merely suggests a different job or change of scene has exerted control, though it may be hard to detect.

Control is more obvious when growth or development is *prevented*. Censorship blocks access to material needed for development in a given direction; it closes opportunities. De Tocqueville saw this in the America of his day: "The will of man is not shattered, but softened, bent, and guided. Men are seldom forced . . . to act, but they are constantly restrained from acting." As Ralph Barton Perry put it, "Whoever determines what alternatives shall be made known to man controls what that man shall choose *from*. He is deprived of freedom in proportion as he is denied access to *any* ideas, or is relevant possibilities." For "deprived of freedom" read "controlled."

It is no doubt valuable to create an environment in which a person acquires effective behavior rapidly and continues to behave effectively. In constructing such an environment we may eliminate distractions and open opportunities, and these are key points in the metaphor of guidance or growth or development; but it is the contingencies we arrange, rather than the unfolding of some predetermined pattern, which are responsible for the changes observed.

Jean-Jacques Rousseau was alert to the dangers of social control, and he thought it might be possible to avoid them by making a person dependent not on people but on things. In he showed how a child could learn about things from the things themselves rather than from books. The practices he described are still common, largely because of John Dewey's emphasis on real life in the classroom.

One of the advantages in being dependent on things rather than on other people is that the time and energy of other people are saved. The child who must be reminded that it is time to go to school is dependent upon his parents, but the child who has learned to respond to clocks and other temporal properties of the world around him (not to a "sense of time") is dependent upon things, and he makes fewer demands on his parents.

Another important advantage of being dependent on things is that the contingencies which involve things are more precise and shape more useful behavior than contingencies arranged by other people. The temporal properties of the environment are more pervasive and more subtle than any series of reminders. A person whose behavior in driving a car is shaped by the response of the car behaves more skill fully than one who is following instructions . . .

But things do not easily take control. The procedures Rousseau described were not simple, and they do not often work. The complex contingencies involving things (including people who are behaving "unintentionally") can, unaided, have very little effect on an individual in his lifetime—a fact of great importance for reasons we shall not later. We must also remember that the control exercised by things may be destructive. The world of things can be tyrannical. Natural contingencies induce people to behave superstitiously, to risk greater and greater dangers, to work uselessly to exhaustion, and so on. Only the counter control exerted by a social environment offers any protection against these consequences.

Dependence on things is not independence. He child who does not need to be told that it is time to go to school has come under the control of more subtle, and more useful, stimuli. The child who has learned what to say and how to behave in getting along with other people is under the control of social contingencies. People who get along together well under the mild contingencies of approval and disapproval are controlled as effectively as (and in many ways more effectively than) the citizens of a police state. Orthodoxy controls through the establishment of rules, but the mystic is no freer because the contingencies which have shaped his behavior are more personal or idiosyncratic. Those who work productively because of the reinforcing value of what they produce are under the sensitive and powerful control of the products. Those who learn in the natural environment are under a form of control as powerful as any control exerted by a teacher.

A person never becomes truly self-reliant. Even though he deals effectively with things, he is necessarily dependent upon those who have taught him to do so. They have selected the things he is dependent upon and determined the kinds and degrees of dependencies. (They cannot, therefore, disclaim responsibility for the results).

It is a surprising fact that that those who object most violently to the manipulation of behavior nevertheless make the most vigorous efforts to manipulate minds. Evidently freedom and dignity are threatened only when behavior is changed by physically changing the environment. There appears to

be no threat when the states of mind said to be responsible for behavior are changed, presumably because autonomous man possesses miraculous powers which enable him to yield or resist . . .

Beliefs, preferences, perceptions, needs, purposes, and opinions are other possessions of autonomous man which are said to change when we change minds. What is changed in each case is a probability of action. A person's belief that a floor will hold him as he walks across it depends upon his past experience. If he has walked across it without incident many times, he will do so again readily, and his behavior will not create any of the aversive stimuli felt as anxiety. He may report that he has "faith" in the solidity of the floor or "confidence" that it will hold him, but the kinds of things which are felt as faith or confidence are not states of mind; they are at best by-products of the behavior in its relation to antecedent events, and they do not explain why a person walks as he does.

We build "belief" when we increase the probability of action by reinforcing behavior. When we build a person's confidence that a floor will hold him by inducing him to walk on it, we might not be said to be changing a belief, but we do so in the traditional sense when we give him verbal assurances that the floor is solid, demonstrate its solidity by walking on it ourselves, or describe its structure or state. The only difference is in the conspicuousness of the measures. The change which occurs as a person "learns to trust a floor" by walking on it is the characteristic effect of reinforcement; the change which occurs when he is told that the floor is solid, when he sees someone else walking on it, or when he is "convinced" by assurances that the floor will hold him depends upon past experiences which no longer make a conspicuous contribution. For example, a person who walks on surfaces which are likely to vary in their solidity (for example, a frozen lake) quickly forms a discrimination between surfaces on which no one is walking, or between surfaces called safe and surfaces called dangerous. He learns to walk confidently on the first and cautiously on the second. The sight of someone walking on a surface or an assurance that it is safe converts it from the second class into the first. The history during which the discrimination was formed may be forgotten, and the effect then seems to involve that inner event called a change of mind.

Changes in preference, perceptions, needs, purposes, attitudes, opinions, and other attributes of mind may be analyzed in the same way. We change the way a person looks at something, as well as what he sees when he looks, by changing the contingencies; we do not change something called perception. We change the relative strengths of responses by differential reinforcement of alternative courses of action; we do not change something called a preference. We change the probability of an act by changing a condition of deprivation or aversive

stimulation; we do not change a need. We reinforce behavior in particular ways; we do not give a person a purpose or an intention. We sample and change verbal behavior, not opinions.

Another way to change a mind is to point to reasons why a person should behave in a given way, and the reasons are almost always consequences which are likely to be contingent on behavior. Let us say that a child is using a knife in a dangerous way. We may avoid trouble by making the environment safer—by taking the knife away or giving him a safer kind—but that will not prepare him for a world with unsafe knives. Left alone, he may learn to use the knife properly by cutting himself whenever he uses it improperly. We may help by substituting a less dangerous form of punishment—spanking him, for example, or perhaps merely shaming him when we find him using a knife in a dangerous way. We may tell him that some uses are bad and others good if "Bad!" and "Good!" have already been conditioned as positive and negative reinforcers. Suppose, however, that all these methods have unwanted by-products, such as a change in his relation to us, and that we therefore decide to appeal to "reason." (This is possible, of course, only if he has reached the "age of reason.") We explain the contingencies, demonstrating what happens when one uses a knife in one way and not another. We may show him how rules may be extracted from the contingencies. ("You should never cut toward yourself"). As a result we may induce the child to use the knife properly and will be likely to say that we have imparted a knowledge of its proper use. But we have had to take advantage of a great deal of prior conditioning with respect to instructions, directions, and other verbal stimuli, which are easily overlooked, and their contribution may then be attributed to autonomous man. A still more complex form of Argument has to do with deriving new reasons from old, the process of deduction which depends upon a much longer verbal history and is particularly likely to be called changing a mind.

Ways of changing behavior by changing minds are seldom condoned when they are clearly effective, even though it is still a mind which is apparently being changed. We do not condone the changing of minds when the contestants are unevenly matched; that is "undue influence." Nor do we condone changing minds surreptitiously. If a person cannot see what the would-be changer of minds is doing, he cannot escape or counterattack; he is being exposed to "propaganda." "Brainwashing" is proscribed by those who otherwise condone the changing of minds simply because the control is obvious. A common technique is to build up a strong aversive condition, such as hunger or lack of sleep and, by alleviating it, to reinforce any behavior which "shows a positive attitude" toward a political or religious system. A favorable "opinion" is built up simply by reinforcing favorable statements. The procedure may not be obvious

to those upon whom it is used, but it is too obvious to others to be accepted as an allowable way of changing minds.

The illusion that freedom and dignity are respected when control seems incomplete arises in part from the probabilistic nature of operant behavior. Seldom does any environmental condition "elicit" behavior in the all-or-nothing fashion of a reflex; it simply makes a bit of behavior more likely to occur. A hint will not itself suffice to evoke a response, but it adds strength to a weak response which may then appear. The hint is conspicuous, but the other events responsible for the appearance of the response are not.

Like permissiveness, maieutics, guidance, and building a dependence on things, changing a mind is condoned by the defenders of freedom and dignity because it is an ineffective way of changing behavior, and the changer of minds can therefore escape from the charge that he is controlling people. He is also exonerated when things go wrong. Autonomous man survives to be credited with his achievements and blamed for his mistakes . . .

The freedom and dignity of autonomous man seem to be preserved when only weak forms of non-aversive control are used. Those who use them seem o defend themselves against the charge that they are attempting to control behavior, and they are exonerated when things go wrong. Permissiveness is the absence of control, and if it appears to lead to desirable results, it is only because of other contingencies. Maieutics, or the art of midwifery, seems to leave behavior to be credited to those who give birth to it, and the guidance of development to those who develop. Human intervention seems to be minimized when a person is made dependent upon things rather than upon other people. Various ways of changing behavior by changing minds are not only condoned but vigorously practiced by the defenders of freedom and dignity. There is a good deal to be said for minimizing current control by other people, but other measures still operate. A person who responds in acceptable ways to weak forms of control may have been changed by contingencies which are no longer operative. By refusing to recognize them the defenders of freedom and dignity encourage the misuse of controlling practices and block progress toward a more effective technology of behavior.

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