

FREEDOM AND COMMITMENT

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One of the deepest issues in modern life, in modern man, is the question as to whether the concept of personal freedom has any meaning whatsoever in our present day scientific world. The growing ability of the behavioral scientist to predict and to control behavior has brought the issue sharply to the fore. If we accept the logical positivism and strictly behavioristic emphases which are predominant in the American psychological scene, there is not even room for discussion. The title of this paper is then completely without meaning.

But if we step outside the narrowness of the behavioral sciences, this question is not only an issue, it is one of the primary issues which define modern man. Friedman in his recent book (1963, p.251) makes his topic "the problematic of modern man - the alienation, the divided nature, the unresolved tension between personal freedom and psychological compulsion which follow on 'the death of God.' " The issues of personal freedom and personal commitment have become very sharp in-deed in a world in which man feels unsupported by a supernatural religion, and experiences keenly the division between his awareness and those elements of his dynamic functioning of which he is unaware. If he is to wrest any meaning from a universe which for all he knows may be indifferent, he must arrive at some stance which he can hold in regard to these timeless uncertainties.

So, speaking as both a behavioral scientist and as one profoundly concerned with the human, the personal, the phenomenological and the intangible, I should like to contribute what I can to this continuing dialogue regarding the meaning of and the possibility of freedom.

Man is Unfree

Let me explain, first of all, that to most psychologists and workers in the behavioral sciences, the title of this talk would seem very strange indeed. In the minds of most behavioral scientists, man is not free, nor can he as a free man commit himself to some purpose, since he is controlled by factors outside of himself. Therefore, neither freedom nor commitment is even a possible concept in modern behavioral science as it is usually understood.

If you think I am exaggerating, let me read a statement from Dr. B. F. Skinner of Harvard, who is one of the most consistent advocates of a strictly behavioristic psychology. He says, "The hypothesis that man is not free is essential to the application of scientific method to the study of human behavior. The free inner man who is held responsible for his behavior is only a pre-scientific substitute for the kinds of causes which are discovered in the course of scientific analysis. All these alternative causes lie outside the individual" (1953, p.447). This view is shared by many psychologists and others who feel, as does Dr. Skinner, that all the effective causes of behavior lie outside of the individual and that it is only through the external stimulus that behavior takes place. The scientific description of behavior avoids anything that partakes in any way of freedom. For example, Dr. Skinner (1963) describes an experiment in which a pigeon was conditioned to turn in a clockwise direction. The behavior of the pigeon was "shaped up" by rewarding any movement that approximated a clockwise turn until, increasingly, the bird was turning round and round in a steady movement. This is what is known as operant conditioning. Students who had watched the demonstration were asked to write an account of what they had seen. Their responses included the following ideas: that the pigeon was conditioned to expect reinforcement for the right kind of behavior; that the pigeon hoped that something would bring the food back again; that the pigeon observed that a certain behavior seemed to produce a particular result; that the pigeon felt that food would be given it because of its action; that the bird

came to associate his action with the click of the food dispenser. Skinner ridicules these statements because they all go beyond the observed behavior in such phrases as expect, hope, observe, feel and associate. The whole explanation from his point of view is that the bird was reinforced when it emitted a given kind of behavior; the pigeon walked around until the food container again appeared; a certain behavior produced a given result; food was given to the pigeon when it acted in a given way, and the click of the food dispenser was related in time to the bird's action. These statements describe the pigeon's behavior from a scientific point of view.

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Skinner goes on to point out that the students were undoubtedly reporting what they would have expected, felt and hoped under similar circumstances. But he then makes the case that there is no more reality to such ideas in the human being than there is in the pigeon, that it is only because such words have been reinforced by the verbal community in which the individual has developed, that such terms are used. He discusses the fact that the verbal community which conditioned them to use such terms saw no more of their behavior than they had seen of the pigeon's. In other words the internal events, if they indeed exist, have no scientific significance.

As to the methods used for changing the behavior of the pigeon, many people besides Dr. Skinner feel that through such positive reinforcement human behavior as well as animal behavior can be "shaped up" and controlled. In his book, *Walden Two*, Skinner says, "Now that we know how positive reinforcement works and how negative doesn't, we can be more deliberate and hence more successful in our cultural design. We can achieve a sort of control under which the controlled, though they are following a code much more scrupulously than was ever the case under the old system, nevertheless feel free. They are doing what they want to do, not what they are forced to do. That's the source of the tremendous power of positive reinforcement--there is no restraint and no revolt. By a careful cultural design we control not the final behavior but the inclination to behave--the motives, the desires, the wishes. The curious thing is that in that case the question of freedom never arises" (p. 218).

Let me describe another psychological experiment done by Dr. Richard Crutchfield at California, (1955) which again illustrates a way in which behavior may be controlled in which it appears the individual is unfree. In this experiment five subjects at a time are seated side by side, each in an individual booth screened from one another. Each booth has a panel with various switches and lights. The subject can use the switches to signal his judgments on items that are projected on the wall in front of the group. The lights are signal lights which indicate what judgments the other four members are giving to the items. The subjects are told that they will be given identifying letters, A, B, C, D and E and are instructed to respond one at a time in that order. However, when they enter the cubicles, each discovers that he is letter E, They are not permitted to talk during the session.

Actually the lights in each booth are controlled by the experimenter and do not express the judgments of the other four members. Thus on those critical items where the experimenter wishes to impose group pressure, he can make it appear that all four members, A through D, agree on an answer which is clearly at variance with the correct answer. In this way each subject is confronted with a conflict between his own judgment and what he believes to be the consensus of the group. Thus, for example, the question may be, "Which of these two irregular figures is larger, X or Y?" The individual sees clearly that X is larger than Y, yet one after another the lights flash on indicating that all of the other four members regard Y as being the larger figure. Now it is his turn to decide. How will he respond?

Which switch will he press? Crutchfield has shown that given the right conditions almost everyone will desert the evidence of his senses or his own honest opinion and conform to the seeming consensus of the group. For example, some high-level mathematicians yielded to the false group consensus on some fairly easy arithmetic problems, giving wrong answers that they

would never have given under normal circumstances.

Here again there would seem to be evidence that the behavior of the individual is shaped by the outside stimulus, in this case a social stimulus, and that there is no such thing as freedom in choosing one's behavior. It helps to explain how Skinner in his book, *Walden Two*, can have his hero say, "Well, what do you say to the design of personalities? Would that interest you? The control of temperaments? Give me the specifications and I'll give you the man! What do you say to the control of motivation, building the interests which will make men most productive and most successful? Does that seem to you fantastic? Yet some of the techniques are available and more can be worked out experimentally. Think of the possibilities . . . Let us control the lives of our children and see what we can make of them" (1948 p. 243).

As another illustration of the unfreedom of man, I want to tell you of an experience I had just a short time ago in a university on the West Coast. Some psychologists are studying the ways in which individual patterns of behavior in a group can be changed. Four subjects are seated around a table. Each has in front of him a shielded light bulb invisible to the others. They are given a topic on which to talk. Notice is taken of the individual who seems least dominant in the group, who never takes a leadership role.

Then for the second part of the experiment, this individual is given a paper in which he is told that the discussion is being listened to and observed by experts, and that when these experts think he is contributing usefully to the group process his light will blink. He will have to judge for himself what he is doing that is helpful. The other more dominant three are given similar sheets of instructions, except that each is told that his light will blink when he is not contributing helpfully.

They are then given another question to discuss, with the instruction that by the end of the half hour they are to try to arrive at conclusions in regard to this problem. Now, every time that the "shrinking violet" speaks, his light blinks. And whenever the others speak their lights also blink, but with the opposite meaning, that they are not contributing. After half an hour of such conditioning, the shy member is nearly always the perceived leader of the group. Furthermore, this pattern seems to carry over through an additional half hour in which no use is made of lights.

The story is told of three mature scientists and one young graduate student who were put through this procedure. In the first session, the young student took almost no part. In the session with the blinking lights, he became so dominant that at the end when the group was asked for a summary of what had gone on, the older men turned to him and said, "Why don't you summarize it? You're the one best able to do that."

Here again it seems as though behavior is extremely manipulable, and that there is no such thing as freedom. The members of the group are behaving like puppets on a string, at the whim of the experimenters.

Let me mention one more example of the degree of control which scientists have been able to achieve. Nearly a decade ago, Dr. James Olds (1955) found that he could implant tiny electrodes in the septal area of the brain of laboratory rats. When one of these animals presses a bar in his cage it causes a minute current to pass through these electrodes. When the electrode has penetrated just the right area of brain tissue, this appears to be such a rewarding experience that the animal goes into an orgy of bar-pressing, often until he is exhausted. However, the subjective nature of the experience seems to be so satisfying that the animal prefers it to any other activity. Even after exhaustion, with a brief rest and a small bit of food and water, the rat returns to its orgy of pleasure. In one experiment, rats went on in this fashion for twenty-four hours a day for three weeks straight. Curiously enough, there seemed to be no physical or mental damage to the rats then or later. One can only speculate what this procedure might bring forth if applied fully to human beings.

As an article in *Life Magazine* made clear to the general reader, there are not only experiments

of this sort with animals but there are beginning to be situations in which such electronic stimulation of the brain is utilized for a number of medical purposes in humans. Obviously there cannot be the experimentation with human beings that there has been with animals. Yet already we know that these tiny electronic currents passing through minute portions of the brain elicit feelings of happiness, rage or terror, and even depress feelings of extreme pain.

I think it is clear from all of this that man is a machine--a complex machine, to be sure, but one which is increasingly subject to scientific control. Whether behavior will be managed through operant conditioning as in Walden or whether we will be "shaped up" by the less playful forms of conditioning implied in social pressure, or whether we will be controlled by electrodes in the brain, it seems quite clear that science is making out of man an object and that the purpose of such science is not only understanding and prediction but control. Thus it would seem to be quite clear that there could be no concept so foreign to the facts as that man is free. Man is a machine, man is unfree, man cannot commit himself in any meaningful sense; he is simply controlled by planned or unplanned forces outside of himself.

Man is Free

I am impressed by scientific advances illustrated in the examples I have given. I regard them as a great tribute to the ingenuity, insight and persistence of the individuals making the investigations. They have added enormously to our knowledge. Yet for me they leave something very important unsaid. Let me try to illustrate this, first from my experience in therapy.

I think of a young man classed as schizophrenic with whom I had been working for a long time in a state hospital. He was a very inarticulate man, and during one hour he made a few remarks about individuals who had recently left the hospital; then he remained silent for almost forty minutes. When he got up to go, he mumbled almost under his breath, "If some of them can do it, maybe I can too." That was all—not a dramatic statement, not uttered with force and vigor, yet a statement of choice by this young man to work toward his own improvement and eventual release from the hospital. It is not too surprising that about eight months after that statement he was out of the hospital. I believe this experience of responsible choice is one of the deepest aspects of psychotherapy and one of the elements which most solidly underlies personality change.

I think of another young person, this time a young woman graduate student, who was deeply disturbed and on the borderline of a psychotic break. Yet after a number of interviews in which she talked very critically about all of the people who had failed to give her what she needed, she finally concluded: "Well, with that sort of a foundation, well it's really up to me. I mean it seems to be really apparent to me that I can't depend on someone else to give me an education." And then she added very softly: "I'll really have to get it myself." She goes on to explore this experience of important and responsible choice. She finds it a frightening experience, and yet one which gives her a feeling of strength. A force seems to surge up within her which is big and strong, and yet she also feels very much alone and sort of cut off from support. She adds: "I am going to begin to do more things that I know I should do." And she did. I could add many other examples. One young fellow, talking about the way in which his whole life had been distorted and spoiled by his parents, finally comes to the conclusion that, "Maybe now that I see that, it's up to me."

Let me spell out a trifle more fully the way such choosings occur in therapy. An immature, highly religious sixteen-year-old high school girl, brought up in a very strict family, had rather obviously been patterning herself upon a masculine ideal of work and scholarly achievements which were almost certainly beyond her abilities. The previous year she had had a "nervous breakdown" which overwhelmed her. Some months after her break, she came to me for help. To take just one theme of the many which she pursued through the interviews, I will focus on her views about being a woman, as quite fully reported in my notes. During the early interviews she

made it clear that she disliked children, that she did not wish marriage, that she wished she were a man, or could act like a man. These feelings were accepted.

Later on she says, "I admire masculine qualities so much that I wish I could be a man. Maybe somebody ought to set me straight and show me that I could be a fine young woman." This more ambivalent attitude was again accepted as being her own.

Two interviews later she talks about her dislike for small children but adds thoughtfully, "Maybe my dislike has been more or less forced. Maybe I just thought I'd be that way."

In a later Interview she talks rather freely of her fear of childbirth, her fear that marriage would interfere with a career, saying that she is still mixed up on all these issues, showing very definite ambivalence. In one of the closing interviews she says, "You know I've thought about that femininity thing again and I'm going to see if I can put it into words. I'm a girl. I'm going to accept it, not as fate, not in a spirit of submission, but as meant for the best. I can probably do a lot more good by being myself and developing my own talent rather than trying to do something different. I'm going to accept it as a challenge. I feel that I've almost lost that feeling that I wanted to be masculine. I just want to be myself. Maybe before I get through I'll really be glad I'm feminine. I'm going to learn to cook and be a good cook and make an art out of it."

Here again we see a slowly growing experience of personal choice which appeared to be basic to all of the change in personality and behavior which occurred. She chose, freely, to perceive herself in a different way, and out of that different perception there flowed many changes in attitude and behavior.

Or perhaps I could somehow communicate best the significance of free and responsible choice by quoting one sentence from a confused, bitter, psychotic individual who had been in a state hospital for three admissions, the last admission having lasted two and one-half years at the time I began working with him. I think the changes which gradually took place were based on and epitomized by one sentence in one of his interviews when he was feeling particularly confused. He said, "I don't know what I'm gonna do; but I'm gonna do it." For me, that speaks volumes.

For those of you have seen the film "David and Lisa"--and I hope that if you haven't seen it you will--I can illustrate exactly what I have been discussing. David, the adolescent schizophrenic, goes into a panic if he is touched by anyone. He feels that "touching kills" and he is deathly afraid of it, and afraid of the closeness in human relationships which touching implies.

Yet toward the close of the film he makes a bold and positive choice of the kind I have been describing. He has been trying to be of help to Lisa, the girl who is out of touch with reality. He tries to help at first in an intellectually contemptuous way, then increasingly in a warmer and more personal way. Finally, in a highly dramatic moment, he says to her, "Lisa, take my hand. He chooses, with obvious conflict and fear, to leave behind the safety of his untouchableness, and to venture into the world of real human relationships where he is literally and figuratively in touch with another. You are an unusual person if the film does not grow a bit misty at this point.

Perhaps a behaviorist could try to account for the reaching out of his hand by saying that it was the result of intermittent reinforcement of partial movements. I find such an explanation both inaccurate and inadequate. It is the meaning of the decision which is essential to understanding the act.

What I am trying to suggest in all of this is that I would be at a loss to explain the positive change which can occur in psychotherapy if I had to omit the importance of the sense of free and responsible choice on the part of my clients. I believe that this experience of freedom to choose is one of the deepest elements underlying change.

The Meaning of Freedom

Considering the scientific advances which I have mentioned, how can we even speak of freedom? In what sense is a client free? In what sense are any of us free? What possible definition of freedom can there be in the modern world? Let me attempt such a definition.

In the first place, the freedom that I am talking about is essentially an inner thing, something which exists in the living person quite aside from any of the outward choices of alternatives which we so often think of as constituting freedom. I am speaking of the kind of freedom which Victor Frankl vividly describes in his experience of the concentration camp, when everything--possessions, identity, choice--was taken from the prisoners. But even months and years in such an environment showed only "that everything can be taken from a man but one thing: the last of the human freedoms--to choose one's own attitude in any given set of circumstances, to choose one's own way" (1959, p. 65). It is this inner, subjective, existential freedom which I have observed. It is the realization that "I can live myself, here and now, by my own choice." It is the quality of courage which enables a person to step into the uncertainty of the unknown as he chooses himself. It is the discovery of meaning from within oneself, meaning which comes from listening sensitively and openly to the complexities of what one is experiencing. It is the burden of being responsible for the self one chooses to be. It is the recognition of a person that he is an emerging process, not a static end product. The individual who is thus deeply and courageously thinking his own thoughts, becoming his own uniqueness, responsibly choosing himself, may be fortunate in having hundreds of objective outer alternatives from which to choose, or he may be unfortunate in having none. But his freedom exists regardless. So we are first of all speaking of something which exists within the individual, something phenomenological rather than objective, but nonetheless to be prized.

The second point in defining this experience of freedom is that it exists not as a contradiction of the picture of the psychological universe as a sequence of cause and effect, but as a complement to such a universe. Freedom rightly understood is a fulfillment by the person of the ordered sequence of his life. The free man moves out voluntarily, freely, responsibly, to play his significant part in a world whose determined events move through him and through his spontaneous choice and will.

I see this freedom of which I am speaking, then, as existing in a different dimension than the determined sequence of cause and effect. I regard it as a freedom which exists in the subjective person, a freedom which he courageously uses to live his potentialities. The fact that this type of freedom seems completely irreconcilable with the behaviorist's picture of man is something which I will discuss a bit later.

Freedom Makes a Difference

Curiously enough, there is scientific evidence of the importance of this sense of freedom. For example, in the study done by Crutchfield (1958) which I mentioned earlier, I stated that under especially extreme circumstances, nearly everyone yielded in some degree to group pressure. Yet there were sharp individual differences, and these are found to be definitely correlated with personality characteristics. For example, the individuals who tended to yield, agree, conform, the ones who could be controlled, gave general evidence of incapacity to cope effectively with stress, while the nonconformists did not tend to panic when placed under pressure of conflicting forces.

The conformist also tended to have pronounced feelings of personal inferiority and inadequacy, while the person who did not yield to pressure had a sense of competence and personal adequacy. He was more self-contained and autonomous in his thinking. He was also a better judge of the attitudes of other people.

Most important of all for our purposes is the fact that those who yielded, the conformists, tended to show a lack of openness and freedom in emotional processes. They were emotionally restricted, lacking in spontaneity, tending to repress their own impulses. The nonconformists, those who made their own choices, were, on the other hand, much more open, free and spontaneous. They were expressive and natural, free from pretense and unaffected. Where the conformist tended to lack insight into his own motives and behavior, the independent person had

a good understanding of himself.

What is the meaning of this aspect of Crutchfield's study? It seems to imply that the person who is free within himself, who is open to his experience, who has a sense of his own freedom and responsible choice, is not nearly so likely to be controlled by his environment as is the person who lacks these qualities.

Let me give another story of research in this field, one with which I was closely connected and which had a very decided impact on me in the years following the experience. A competent student doing his graduate work under my supervision many years ago chose to study the factors which would predict the behavior of adolescent delinquents. He made careful objective ratings of the psychological environment in the family, the educational experiences, the neighborhood and cultural influences, the social experiences, the health history, the hereditary background of each delinquent. These external factors were rated as to their favorableness for normal development on a continuum from elements destructive of the child's welfare and inimical to healthy development to elements highly conducive to healthy development. Almost as an afterthought, a rating was also made of the degree of self-understanding, since it was felt that although this was not one of the primary determining factors, it might play some part in predicting future behavior. This was essentially a rating of the degree to which the individual was open and realistic regarding himself and his situation, a judgment as to whether he was emotionally acceptant of the facts in himself and his environment.

These ratings on seventy-five delinquents were compared with ratings of their behavior and adjustment two to three years after the initial study. It was expected that the ratings on family environment and social experience with peers would be the best predictors of later behavior. To our amazement the degree of self—understanding was much the best predictor, correlating .84 with later behavior, while quality of social experience correlated .55 and family environment .36.

We were simply not prepared to believe these findings and laid the study on the shelf until it could be replicated. Later it was replicated on a new group of seventy-six cases and all the essential findings were confirmed, although not quite so strikingly. Furthermore, the findings

stood up even in detailed analysis. When we examined only the delinquents who came from the most unfavorable homes and who remained in those homes, it was still true that their future behavior was best predicted, not by the unfavorable conditioning they were receiving in their home environment, but by the degree of realistic understanding of themselves and their environment which they possessed (Rogers, Kell, McNeil, 1948).

The significance of this study was only slowly driven home to me. I began to see the significance of inner autonomy. The individual who sees himself and his situation clearly and who freely takes responsibility for that self and for that situation is a very different person from the one who is simply in the grip of outside circumstances. This difference shows up clearly in important aspects of his behavior.

The Emergence of Commitment

I have spoken thus far primarily about freedom. What about commitment? Certainly the disease of our age is lack of purpose, lack of meaning, lack of commitment on the part of individuals. Is there anything which I can say in regard to this?

It is clear to me that in therapy, as indicated in the examples that I have given, commitment to purpose and to meaning in life is one of the significant elements of change. It is only when the person decides, "I am someone, I am someone worth being; I am committed to being myself, that change becomes possible. At a very interesting symposium at Rice University recently, Dr. Sigmund Koch sketched the revolution which is taking place in science, literature and the arts, in which a sense of commitment is again becoming evident after a long period in which that

emphasis has been absent.

Part of what he meant by that may be illustrated by talking about Dr. Michael Polanyi, the philosopher of science, formerly a physicist, who has been presenting his notions about what science basically is. In his book, *Personal Knowledge*, Polanyi makes it clear that even scientific knowledge is personal knowledge, committed knowledge. We cannot rest comfortably on the belief that scientific knowledge is impersonal and “out there,” that it has nothing to do with the individual who has discovered it. Instead every aspect of science is pervaded by disciplined personal commitment, and Polanyi makes the case very persuasively that the whole attempt to divorce science from the person is a completely unrealistic one. I think I am stating his belief correctly when I say that in his judgment logical positivism and all the current structure of science cannot save us from the fact that all knowing is uncertain, involves risk, and is grasped and comprehended only through the deep, personal commitment of a disciplined search.

Perhaps a brief quotation will give something of the flavor of his thinking. Speaking of great scientists, he says, “So we see that both Kepler and Einstein approached nature with intellectual passions and with beliefs inherent in these passions, which led them to their triumphs and misguided them to their errors. These passions and beliefs were theirs, personally, even though they held them in the conviction that they were valid, universally. I believe that they were competent to follow these impulses, even though they risked being misled by them. And again, what I accept of their work today, I accept personally, guided by passions and beliefs similar to theirs, holding in my turn that my impulses are valid, universally, even though I must admit the possibility that they may be mistaken” (1958, p. 145).

Thus we see that a modern philosopher of science believes that deep personal commitment is the only possible basis on which science can firmly stand. This is a far cry indeed from the logical positivism of twenty or thirty years ago, which placed knowledge far out in impersonal space.

Let me say a bit more about what I mean by commitment in the psychological sense. I think it is easy to give this word a much too shallow meaning, indicating that the individual has, simply by conscious choice, committed himself to one course of action or another. I think the meaning goes far deeper than that. Commitment is a total organismic direction involving not only the conscious mind but the whole direction of the organism as well.

In my judgment, commitment is something that one discovers within oneself. It is a trust of one's total reaction rather than of one's mind only. It has much to do with creativity. Einstein's explanation of how he moved toward his formulation of relativity without any clear knowledge of his goal is an excellent example of what I mean by the sense of commitment based on a total organismic reaction. He says, “During all those years there was a feeling of direction, of going straight toward something concrete. It is, of course, very hard to express that feeling in words but it was decidedly the case and clearly to be distinguished from later considerations about the rational form of the solution” (quoted in Wertheimer, 1945, p. 183—184)

Thus commitment is more than a decision. It is the functioning of an individual who is searching for the directions which are emerging within himself. Kierkegaard has said, “The truth exists only in the process of becoming, in the process of appropriation” (1941, p. 72). It is this individual creation of a tentative personal truth through action which is the essence of commitment.

Man is most successful in such a commitment when he is functioning as an integrated, whole, unified individual. The more that he is: functioning in this total manner the more confidence he has in the directions which he unconsciously chooses. He has a trust in his experiencing, of which, even if he is fortunate, he has only partial glimpses in his awareness.

Thought of in the sense in which I am describing it, it is clear that commitment is an

achievement. It is the kind of purposeful and meaningful direction which is only gradually achieved by the individual who has come increasingly to live closely in relationship with his own experiencing--a relationship in which his unconscious tendencies are as much respected as are his conscious choices. This is the kind of commitment toward which I believe individuals can move. It is an important aspect of living in a fully functioning way.

The Irreconcilable Contradiction

I trust it will be very clear that I have given two sharply divergent and irreconcilably contradictory points of view. On the one hand, modern psychological science and many other forces in modern life as well hold the view that man is unfree, that he is controlled, that words such as purpose, choice, commitment have no significant meaning, that man is nothing but an object which we can more fully understand and more fully control. Enormous strides have been and are being made in implementing this view. It would seem heretical indeed to question this view.

Yet, as Polanyi has pointed out in another of his writings (1957), the dogmas of science can be in error. He says: "In the days when an idea could be silenced by showing that it was contrary to religion, theology was the greatest single source of fallacies. Today, when any human thought can be discredited by branding it as unscientific, the power previously exercised by theology has passed over to science; hence science has become in its turn the greatest single source of error."

So I am emboldened to say that over against this view of man as unfree, as an object, is the evidence from therapy, from subjective living, and from objective research as well, that personal freedom and responsibility have a crucial significance, that one cannot live a complete life without such personal freedom and responsibility, and that self-understanding and responsible choice make a sharp and measurable difference in the behavior of the individual. In this context, commitment does have meaning.

Commitment is the emerging and changing total direction of the individual, based on a close and acceptant relationship between the individual and all, of the trends in his life, conscious and unconscious. Unless, as individuals and as a society, we can make constructive use of this capacity for freedom and commitment, mankind, it seems to me, is set on a collision course with fate.

What is the answer to the contradiction I have described? For myself, I am content to think of it as one of the deep and lasting paradoxes with which we must live. While paradoxes are often frustrating, they can still be very fruitful. In physics, there is the paradox that light is a form of wave motion and that it is also explained as existing in quanta, the contradiction between the wave theory and the corpuscular theory of light. This paradox has been irreconcilable, and yet on the basis of it, physics has made important advances.

Friedman, the philosopher, believes that much the same point of view is necessary when man faces the philosophical issue of meaning. He says: "Today, meaning can be found, if at all, only through the attitude of the man who is willing to live with the absurd, to remain open to the mystery which he can never hope to pin down" (1963, p. 468).

I share this conviction that we must live openly with mystery, with the absurd. Let me put the whole theme of my remarks in the form of a contradiction. I have been saying that a part of modern living is to face the paradox that, viewed from one perspective, man is a complex machine. We are every day moving toward a more precise understanding and a more precise answer is, "This is a deep control of this objective mechanism which we call man. On the other hand, in another significant dimension of his existence, man is subjectively free; his personal choice and responsibility account for the shape of his life; he is in fact the architect of himself. A truly crucial part of his existence is the discovery of his own meaningful commitment to life with all of his being.

If in response to this you say, "But these views cannot both be true," my answer is, "This is a

deep paradox with which we must learn to live.”

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