## THE NATURE OF PERSONAL FREEDOM

# by Dwight J. Ingle

For there is a struggle for human freedom to be waged not only against external centers of irresponsible power but against those equally irresponsible internal forces which in varying degrees dominate the mind and heart of every man. Because of them, man may be free politically and economically, yet deeply enslaved. He can be free of all arbitrary external controls, yet live under the power of internal compulsions which make of him an automaton: insatiable in his needs, inflexible in his methods, and incapable of learning intellectually or of maturing emotionally through experience. Because of these inner processes, man may be an absolute monarch or a constitutionally elected president, an abstract artist or a precise scientist, a criminal or a clergyman, yet not possess the greatest of all freedoms—the freedom to change.<sup>1</sup>

This is an attempt to define man's freedom of will in a deterministic world. I shall focus attention on this personal freedom and say little of other meanings of "freedom." The problem is in part semantic. "Freedom" is an abstraction. "Will" is almost as abstract although it commonly connotes a concrete faculty of mind, a discredited idea. Definitions of each word require some circularity. None of the following ideas is original, and there may be no novel outcomes of this discussion. But there are ideas more insightful than those currently in fashion which have been expressed<sup>2</sup> and need repeating. There are some important gaps in our understanding of freedom of the will. I shall try to identify them.

The basic rationalizations involve five points:

1. The Indian concept of "Athman-Brahman" (the personal self equals the omnipresent, all-comprehending external self). The information coded in the genes of man and in his brain, the pattern of internal and external stimuli present at any moment, the programmed goals (purpose), the scanning of information, the flow of ideas and images, the recall and manipulation of knowledge about the results of actions, and all conscious and unconscious processes leading to an action or a decision—all this constitutes living man. He is identical with the

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total final causes of his behavior at any moment; he is a dynamic goal-seeking system, not mere flotsam buffeted by external forces. The word "self-determination" partially resolves the supposed conflict between determinism and personal freedom, and we do not object, therefore, to saying, "I caused the action," or "I determined the choice."

- 2. Personal freedom lies in being free from obstacles to an action rather than being free from determinants of the action or preference. Could a will exist without determinants, it would be irresponsible and merely random.
- 3. Man's sense of personal freedom is the subjective experience of harmony between a goal and the action and its consequences. There may or may not be a choice of action.
- 4. There is a sense of freedom in the flow of ideas and images when they are seemingly either "spontaneous" or self-determined fancy. The brain is never quiet until it dies.
- 5. The sense of freedom tends to expand according to the number of choices offered.

Lesions of the brain can selectively affect mental processes including volition. As evidence that the will represents neural structure and function, some patients with brain tumors become completely unresponsive, although remaining fully receptive to stimuli and physiologically capable of response. Volition can be suppressed by certain drugs which act upon the central nervous system. One may postulate a brain substrate which provides the psychological tension needed for every initiative to action.

Mystery remains. First, it is commonly assumed that there is capriciousness of nature at the level of fine particles which averts predestination. Do new forms of capriciousness arise at molecular, organismic, psychological, and social levels of organization? Capriciousness in nature permits the generation of novelty, but were this its only basis, the outcome would be nonsense. A computer can generate novelty and monitor it to report meaningful newness. Second, how does the human brain sometimes produce great new insights, seemingly fullblown, without trial and error? Flights of fancy, novel ideas, insights, and images give man a sense of inner freedom from a hostile world, but it is not known how they are generated. Third, do the determinants of a choice exclude the possibility of other choices that could have been made? We cannot know because of the many sources of uncertainty<sup>3</sup> and because each causal pattern is unique and cannot be retested. A fourth gap in our knowledge of self-determination is that we know little of the nature of consciousness, the most intimate part of our nature. We do not know how the nervous system generates consciousness or how thoughts lead to action.

## Some Limits on Freedom to Act or Think

There are many limitations on personal freedom. If all forces which are necessary for motion, form, and change were abolished, all of nature would come unglued and systems would cease to exist. A nondeterministic world would either be chaotic or could not exist. No system, living or nonliving, exists independently of internal and external forces. Most of them are in balance with other forces and permit orderly existence and change. Living systems have evolved homeostatic or compensating forces at physiological, psychological, and social levels. Of the limitations on personal freedom, some are insuperable. On earth, unaided, man cannot jump as much as ten feet off the ground, cannot lift a house, live without oxygen or food and water, at extremes of temperature-to name only a few of the innumerable physical limitations on his freedoms. Man commonly accepts the universe and is serene about insuperable physical barriers to actions, although he may seek means of harnessing and controlling the forces of nature so as to extend his freedoms. Similarly, there are inborn and acquired barriers to freedoms at the psychological level, such as aversion to the bitter and painful. The burned child has an acquired barrier to touching the flame. Here again, man does not commonly weep at the existence of such barriers or evolve goals which conflict with them. At the social level, man has learned that his wants and actions may conflict with those of others and has developed laws, taboos, customs, systems of ethics, and attitudes which govern conduct and limit personal and group freedoms. The rights of man to be free to achieve certain goals are linked by ethics and customs to responsibilities. However, man is less prone to accept social barriers to the satisfaction of his wants and may seek to reject, evade, or oppose them by various means, including conflict. A primitive rationalization of man was: "Give to me according to my wants or I will take it by force." It was once a barrier to the rise of civilization and has again become a threat to the continuation of civilization.

Until recent times, man was not likely to aspire to possessions and power which were outside his knowledge or which he had been taught to believe as being beyond his grasp. But vastly improved means of communication bring knowledge of most possible goals, and conventional wisdom teaches that all men are equally deserving of possessions and power. The number of possible goals has been greatly expanded, and

barriers to their achievement, even when personal, are rationalized as social injustices. Some are and some are not.

The will to act does not always involve a choice to act or not to act, nor a decision on alternatives if there are no barriers to a goal. The making of a response or a choice need not be a conscious act. A computer can be programmed to make a choice. The autonomic nervous system and even much of the central nervous system can achieve vegetative goals without generating awareness. Habitual responses may occur, seemingly automatically, without a focus of attention or associated with nothing more than vague awareness. The automatized routine frees mindful behavior for an expansion of goals and a greater variety of alternate strategic choices. It is commonly believed, especially by psychoanalysts, that some important drives to social actions are hidden in the unconscious. But our concept of freedom of the will usually includes consciousness of goals or a conflict of goals, a consideration of alternatives, a scanning of memory stores, and a selfdebate on the consequences of actions and of the decision. Gains in knowledge permit more possible choices for self-review and self-determination. As noted above, we do not know how consciousness is generated or how thoughts lead to action and should admit that this gap in our understanding of freedom is unexplained.

I assume that consciousness is a natural phenomenon based on activity of the nervous system, some parts of it being more important than others. I shall not discuss dualism beyond saying that we cannot be certain that consciousness is not a ghost, for we have no direct access to the consciousness of another person, and there are only meager means of probing its nature. There is no convincing evidence that consciousness or any other quality of mind can exist independently of a living nervous system. There is a mass of probably spurious but not fully explained evidence for extrasensory perception, psychokinesis, etc., which some interpret as signs of a ghost in the machine. If there is such, it seems unlikely that it would fade away in response to physical blows to the head. Unconsciousness can be induced by trauma, drugs, hypothermia, anesthesia, anoxia, sleep, hypnosis, and epileptic seizures. Some kinds of mental experiences, especially sensory, can be selectively abolished or modified by lesions in the brain. There may be clouding of consciousness and diminution of mental experiences as the result of diseases of the brain, such as cerebral arteriosclerosis and general paresis. Drugs, hormones, and fever can affect mental experiences, and changes in electroencephalograms correlate with the level of consciousness. A readiness potential—discovered by Kornhuber

—can be registered above the brain surface before willed movements occur in man. However, it has been claimed that a similar change in potential precedes involuntary responses. A negative potential occurs in conditioning experiments during expectation by the subject of a second sensory stimulus. The so-called Walter's expectancy wave is facilitated by emotional tension. Electrical stimulation of the human brain can induce complex mental experiences. The patient is likely to recognize them as artifacts, although hallucinations induced by stimulation of the temporal cortex may exhibit the characteristics of ordinary sensory phenomena. Studies on patients with split brains show that the two cerebral hemispheres can function independently in respect to conscious experiences and responses. Not all parts of the human brain or even all regions of the cerebral cortex respond to faradic stimulation by arousing conscious experiences. Some nervous centers of conscious processes may be subcortical.

A great deal is known about the electrochemistry of the nervous system, especially the transmission of the nerve impulse and the arousal of sensory cells. There are plausible theories, with some supporting evidence, as to how information is coded into neural DNA. But nothing is known as to how biochemical processes generate consciousness, if they are responsible at all. It remains among the great mysteries of biology. Even the origin and nature of life and the question of planned order in the universe seem less mysterious. The unanswered questions about the universe and life should keep man wondering and humble; for some it does.

### SOCIAL IMPLICATIONS

I have given a simplistic rationalization of the commonsense view of human freedom. Man, the embodiment of the causes of his actions, is commonly equipped with an exquisitely complex system for storing, recalling, and manipulating information into goals and possible means of achieving them when there are no insuperable barriers.

This view differs significantly from the concept of man as flotsam whose behavior is determined by society rather than by self, which is alleged to be always innocent. It is commonly linked to the inconsistency that individual misbehavior is determined totally by the environment imposed by society, which has the freedom to behave differently but does not because it is evil and perverse, although being made up of individuals. I have never heard professors of this belief extol society as responsible for the good done by individuals and groups. There is a related flaw in the assumption that those who have

been compelled to failure by society have the personal freedom and wisdom to judge best how to change society. It is sometimes claimed that antisocietal behavior by the individual represents efforts at self-fulfillment which should have freedom of expression and that value judgments are not to be made against them; these are value judgments against value judgments. Many individuals who seek anarchistic modes of life do not innovate new goals and actions but merely conform to the faiths and behavior which are currently in fashion among their antisocial peers.

Man can be free from barriers to an action without being free from the consequences of his action. When man makes a choice, it sometimes leads to injury of the self or others. A decision or judgment is not self-certifying in respect to validity or wisdom, but man's nervous system functions so that achievement of a goal commonly generates awareness of self-righteousness, verbal rationalizations, and sometimes euphoria. Consciousness of guilt or error can lead to self-correction, but this does not happen with sufficient frequency to guarantee either protection of the individual or social order. A moth is free to fly into the flame that destroys it; a sheep is free to follow the leader; and a youth is free to take narcotics, although it leads to enslavement by awereness of self-righteousness, verbal rationalizations, and sometimes euphoria. Consciousness of guilt or error can lead to self-correction, to lead to injury and/or loss of more vital freedoms. Self-determination embraces man's foibles and errors as well as successes.

On the ward of an institution for the mentally retarded lies a child with a small body and an enormous head filled with fluid which has compressed the brain into a thin sheet. Nearby is an ambulatory young adult with a tiny head. In a nursing home, an old man lies in restraint. He has lived a useful and exemplary life but now has a senile psychosis and tries to kill. Each is an object of pity, but no one claims that their rights and freedoms are violated, for enslavement is clearly internal.

At the beginning of this essay I quoted from Kubie on enslavement by internal compulsions. In addition to those which are irrational there are rigid beliefs and attitudes shaped by dogma and propagandism, culture, and even university courses. Kubie regards the neurotic distortion of development as embracing the tendency to credulity. Behavior is neurotic if the processes which set it into motion predetermine its automatic repetition independently of the situation, values, or consequences of the act.

Within a university an intelligent young scientist has the training, funds, and facilities to do research. He begins projects but never com-

pletes them. He behaves according to his nature and in this sense is free. But at a different level of meaning, he is enslaved by an unanalyzed neurosis and is not free to change. Within a country two religious groups are in conflict. Each of the groups has embraced a different religious dogma involving attitudes taught from early child-hood. Each group freely exhibits hostile behavior toward the other, but neither is free to change. A healthy young girl has freely accepted the teachings, attitudes, and modes of behavior of her peers and has become an anarchist in the belief that she can thereby maximize her freedoms; but she becomes addicted to ways of life that destroy her health and happiness. All such individuals live under the power of internal compulsion and are not free to change.

There are aids to escape enslavement by ideas. Education for citizenship should include an account of the sources of uncertainty, the nature of suggestion and propagandism, common fallacies, requirements for proof, and ethical guides to the use of knowledge and technology. This will not insure freedom from internal compulsions and logic-tight rationalizations, but it should facilitate the growth of personal freedoms.

If a child is handicapped by inherited or acquired biological bases of incompetence, low drives, or ill health, these are all barriers to the expansion of freedoms. When there is lack of opportunity to learn or the individual makes a choice not to learn, there is restriction of the expansion of freedoms. All of this creates individual differences in freedoms. The enslavement of man by environmental and genetic handicaps is real; but instead of making vague attacks on society in general, the identification of specific causes and patterns of causes is a more likely path to remedy.

The barriers to expansion of freedoms may be more subtle whenever acquired attitudes against schooling, inquiry, reason, rules of conduct, etc., result in delinquency and irresponsibility. When the causes of inequality are of this sort, the chances are that it will be claimed that rights and freedoms are violated.

What is the nature of the segment of society that impedes the development of freedoms? I emphasize "segment" for it is not society as a whole that is responsible. It can include the father who abandons the mother and children or, if he does not, may be generally irresponsible and dependent. It is the culture of the alley which denigrates books, the law, and job responsibility. It is the person or the group that introduces the child to alcohol, narcotics, the policy wheel, sex, and theft, and that teaches hatred of others as well as illegal means to power.

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There are innumerable patterns of bad culture each of which can enslave the child and, hence, the adult; contagion of social ills insures transmission from one generation to the next and sometimes an ingravescence of social illness unless there is outside intervention.

The concerned young, instead of generalizing about all of society as being willfully evil, have more properly focused their accusations on the "power structure" or "establishment," holding them responsible for neglecting the causes of social problems, while at the same time holding them as having the capacity and resources to bring about salubrious changes. Education does multiply goals, and, when wealth and power are added to knowledge, there is expansion of freedom from obstacles to many goals. What the young and even mature scientists and scholars fail to do is to seek tolerantly and patiently an understanding of why many individuals who have maximized for themselves personal freedoms, resources, and power are seemingly indifferent to the misery and enslavement of others. Such behavior, too, is determined. Even some psychologists and other social scientists-at least those who talk in headlines-limit themselves to pharisaical attacks upon the establishment instead of quietly and objectively researching the causes and nature of prejudice, indifference, and selfinterest. As Kubie has written, "Most men grow old without reaching maturity, however we characterize it."4

It is the nature of the genetic structuring of the nervous system, which evolved for competitive survival in a hostile environment, that gives man his drives that are more for himself than for the goals of others. Sorrow and concern, especially for others, tend to be ephemeral. There would be no joy in living if self-pleasures were constantly displaced by knowledge of the ever-present misfortunes of others. Altruism has a biological basis; altruism can be taught but has not evolved very far, especially among those whose capacities, environment, and id have led to their becoming a part of the establishment. Again, I am being simplistic. Neither those who are quietly nor those who are violently concerned with the welfare and freedom of others know all that needs to be known of how to prevent and cure social problems. When such attempts fail, frustration behavior is likely to result, and some individuals and groups aiming to abolish social problems create some instead.

Knowledge and technology can greatly expand freedoms, but commonly at the expense of restricting others, either because of misuse or because some harmful outcomes are inherent in use. Ethics can sometimes offer guides to decisions in the face of uncertainty by making estimates of risk or judgments on actions in which both gains and losses of freedoms are inexorably linked together. Man has an inherent tendency to apply the law of the excluded middle and to judge the outcomes of any decision as either "good" or "bad" according to whether or not they facilitate or impede his achieving personal goals.

Human goals easily come into conflict. These become obstacles to the achievement of individual and group goals and thereby restrict some freedoms. When rules are rational and just, they may enhance other freedoms and more equally distribute them. But some are based on faiths and dogma and have evolved from mysticisms and privileged power. Not even systems of ethics and jurisprudence have developed internal logical consistency. All have failed to define rights, freedoms, and responsibility in such a way that conflicts in human conduct can be avoided.

There are reasons in abundance to guide social change so that freedom from war, fear, hunger, disease, and crime, as well as from barriers to self-expression, self-fulfillment, and change can be maximized. The means to this end will require attention to both the biological and social bases of peace, health, and competence. Attitudes and beliefs can be taught. We need to specify by inquiry and debate those which are truthful and wise in order to guide man to a salubrious balance among personal freedoms, responsibility, and order.

#### NOTES

- 1. L. S. Kubie, "Freud's Legacy to Human Freedom," Perspectives in Biology and Medicine 1 (1957): 105.
  2. Gardner Williams, "The Natural Causation of Free Will," Zygon 3 (1968): 72.
- 3. D. J. Ingle, "The Ethics of Biomedical Interventions," Perspectives in Biology and Medicine 13 (1970): 364.
- 4. L. S. Kubie, "Problems of Multidisciplinary Conferences, Research Teams, and Journals," Perspectives in Biology and Medicine 13 (1970): 404.