

Modernity, Science and Rationality

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IN A BRILLIANT ESSAY, "The Importance of Cultural Freedom,"¹ Richard Weaver observes that "A poet who cannot show that he has felt the disillusionment of his own time as poignantly as other people cannot speak to his time." If one applies this dictum to the topic under discussion one must assume that any exploration of the anti-nomian, anti-rational and anti-scientific movement which is so markedly an aspect of modernity, or better said, contemporaneity, should come from someone who understands and at least shows some sympathy for the attitudes and arguments which mark the so-called "cultural revolution." If we are unable to bring to our topic that initial understanding we will be able neither to speak to our contemporaries nor overcome those anti-cultural and anti-rational forces which lodge not only in our society but are an important element in our own natures.

Let us begin by agreeing with Robert Frost when he wrote:

Some thing there is that doesn't love a wall,

That sends the frozen-ground-swell under it
And makes gaps even two can pass abreast.

Robert Frost was uneasy about walls, boundaries, rules, analysis and order, fearing their impact on himself and on his world. He knew, of course, as we know that life is impossible without all of these elements though just where one should strike a balance Frost was uncertain and his poetry is a long discussion of freedom and constraint. And we too are uneasy and troubled at the iron necessity of law, ineluctable order, the need for instinctual renunciation, the thought of a world in which all passion has given way to calculation and all feeling has become analysis. We all fear the loss of our humanity and think it just possible that the most important choices of our lives may be made somewhere outside ourselves on the basis of knowledge and information unknown to us. Worse still we fear that we will be lamed in our vitality, that spiritually and physically we will find ourselves robbed of our potency and creativity; reduced to shadowy functionaries serving the

mechanical necessities of a sterile robot culture.

Behind these well-founded fears and at a deeper level of our existence, unconscious but powerful, lies the strong human drive to anarchy and immediate and complete instinctual gratification. We want what we want when we want it and what we want is nearly always to be had only at the expense of society and by endangering our own futures. The criminal, the con-man, the delinquent are all men who have chosen what all of us are tempted to choose. As Jacob Bronowski writes:²

Each of them is protesting against something in society which constricts him, and each of them wants to be a man after his own heart; yet each act of protest is more commonplace, and each conspiracy more uniform, than the society they would like to despise.

“Some thing there is that doesn’t like a wall” and yet the walled city, the walled garden, the enclosure made by the four walls of a house, all these are the very symbols of the exclusion of chaotic and anarchic nature. They are the ways by which men secure themselves and order their existences. Beyond the wall lies the insecurity and the violence of a world where the rules and purposes of civilized life do not apply. In myth and legend those anarchic and threatening forces outside the wall are depicted as dragons, Minotaurs, and Sphinxes. But they have allies in the city, allies who give them the power which they possess to work destruction on the city. Those allies are no less than the citizenry of the city who in their divided natures and wishes seek the destruction of order at the very same time as they desire its preservation. It is for this reason that the Minotaur is kept at bay by human sacrifice; a part of mankind, a part of human society is surrendered to him. Seven youths and seven maidens were sacrificed each year to the

half-man, half-beast monster who lived in a labyrinth cunningly constructed by the first of the great technicians.

The image of the city with its protecting wall is more than the image of community life. It is the image of all order. That order is threatened by what lies outside the city wall but the city is in even greater danger from what lies within. The Trojan horse of unreason, the lust for lawlessness and disorder, and the impiety of Alcibiades and his drunken friends are all a greater threat to the life of the city than the enemy outside. Order is bought at a great price. It is always provisional and unstable and it is always enforced at the expense of individual men and their fondest desires. Law is necessary in all those instances where the common advantage is not coincident with the advantage of the individual. The theory of anarchism supposes that altruism and voluntary association will enable men to live without the law or the ordinary structures of organized community. But law exists, and community exists precisely because the individual, left to his own devices sees advantage in disorder and the triumphant will of the strong individual. Whatever the truth or the untruth in terms of historical accuracy of Sigmund Freud’s exploration of the development of community in *Totem and Taboo*, *Moses and Monotheism*, and *Civilization and its Discontents*, Freud’s essays possess a profound mythic truth in their acknowledgment and affirmation of the drive to immediate instinctual gratification, their awareness of the social dimension of all culture and their insistence that culture is created in the ceaseless war against nature and through instinctual renunciation. Man in his human rather than his animal dimension is a cultural creation. His hold upon order and civility is always precarious and threatened both by the natural exterior and by his own anarchic and ego-involved interior. Nature outside the

gates and man inside both do not love a wall and would have it down.

But why, precisely, is that wall so important and why is order so essential to any human activity? It is a fact that the very structure of our humanity is dependent upon the ordered world of symbolic thought. Language, numbers and the objectification of experience in art are all ways of ordering and structuring. Outside the world of symbols there is and can be no humanity.³

Even were we to discount the value of our humanity and assume that an unspoiled and unfettered animality was preferable to the world of culture, we men would still find ourselves trapped in the world of the distinctively human. As animals we are terribly ill-prepared, aside from our superior intellectual capacity, for the unremitting struggle with nature which is the essential condition of the non-human world around us. It is precisely the ability to order, to symbolize, to organize, to deny present gratification in order to gain a distant or long-term advantage which enables the "naked ape" to succeed in this hostile and unfriendly universe. Were we to abandon this single advantage man would cease to be the most successful biological organism on earth and would very possibly disappear altogether. The choice has been made. We may reject its implications. We may balk at the demands which the choice entails but unless we are willing to hazard extinction there is no turning back.

Nor, indeed, are many other than the satisfied and satiated classes of the Western world, going to be willing to turn back. Some time before ecology became fashionable and antinomian irrationality became the vogue among the well-healed cognoscenti in our society, C. P. Snow made this point very ably. He wrote:⁴

For, of course, one truth is straightforward, industrialization is the only

hope of the poor. I use the word "hope" in a crude and prosaic sense. I have not much use for the moral sensibility of anyone who is too refined to use it so. It is all very well for us, sitting pretty, to think that material standards of living don't matter all that much. It is all very well for one, as a personal choice to reject industrialization—do a modern Walden, if you like, and if you go without much food, see most of your children die in infancy, despise the comforts of literacy, accept twenty years off your own life, then I respect you for the strength of your aesthetic revulsion. But I don't respect you in the slightest if, even passively, you try to impose the same choice on others who are not free to choose. In fact we know what their choice would be. For, with singular unanimity, in any country where they have had the chance, the poor have walked off the land into the factories as fast as the factories would take them.

More recently Peter Drucker made the same point in his impressive study, *The Age of Discontinuity*:⁵

It does not even matter greatly whether the developed countries would prefer to call a halt to technological change and economic growth. There is no sign that mankind is ready to forswear economic growth and with it technological change. There is no sign that the majority of mankind is willing to take vows of poverty while the minority in the developed countries live in great wealth. Not only are the developing nations desperate for economic advancement; other developed nations, especially Western Europe and Japan (not to mention Russia), are eager to catch up with the United States and to push economic growth as fast as it can be pushed.

Science and Technology, economic growth and industrialization are, however, perhaps only the most obvious aspects of the revolution against reason and order in

the modern world. There can be no doubt that science and technology themselves have too often been caught up in the pursuit of irrational and anti-human goals and objectives; that science has too often confined itself to the realm of means rather than to the analysis of ends. That, however, is a subject for another lecture series. Suffice it to say that the problem is not simply the rejection of science and technology but rather the rejection of rationality altogether.

Daniel Bell has explored at considerable length⁶ the cultural consequences of the triumph of the will over reason. He regards the current wave of irrationalism in our society, as a major cultural crisis. One need not be as pessimistic as Bell in order to recognize this development as a movement of major consequences to ourselves.

Although the development of rationality is a process which antedates the appearance of man and although the technical manipulation and mastery of the environment is as old as man the self-conscious employment of science, technology and all the processes of rationalization do not extend back over a period of time longer than Europeans have been present in significant numbers on the North American Continent. The really major changes in the organization of society, the growth of knowledge and the mastery of the environment through science and technology which mark off "modernity" from the past have nearly all come since 1600. The decisive changes produced by these cultural and intellectual forces are even more recent. The process has been an accelerating one. You are all acquainted with the statistic that ninety percent of all the scientists who ever lived are alive at the present moment and those of you who have browsed in the work of the "futurologists" know that further dramatic technical and social changes lie in the immediate future, indeed are already

well under way.⁷ Indeed, if we look back over that comparatively short time span since 1600 in comparison with the totality of human history we will recognize that it accounts for greater changes in man's world and in humanity itself than any brief time span since the Neolithic revolution.

How are we to account for this enormous speed up in the rate at which change impinges upon us and in the manner in which events of world historical importance pile in upon us? It sometimes must seem that history is rather like a motion picture; that vast stretches of it are in slow motion, (some societies, even today, live in this world of slow motion). But about the twelfth century the projectionist began to speed up the picture until today the figures dance a mad and uncoordinated jig; run about confusedly like the participants in certain well known television commercials.

Why has this enormous speed up taken place? What is the driving force behind the transformation of Western history since 1600? We know that Western society in that time span was unique; that no other society in history has exhibited such dynamism and such revolutionary energies. Indeed, all the non-Western societies we know are traditionalist—or were until the West touched them with its transforming energies. Many of them were stagnant and changeless, caught and encapsulated in the past as fossil flies are caught in amber. Or change occurred in them in a random, meaningless fashion. The notion of progress; of unidirectional linear time, of development and progress are distinctively Western ideas. These days there is a great deal of discussion of the impact of the non-Western world on the West. There has been a return to the cult of *ex Orient lux*, that curious belief that the failed societies of the so-called third world have some special humanity and spirituality which the non-Western world is lacking, and that we ought

to renounce our rationality and science for the primitive but pure life of non-technical society. No one can deny the tremendous influence which non-Western societies have exerted on the West nor the value of non-Western Culture to contemporary Western man but the fact remains that it was and is the West which opened up the world and both destroyed and energized the traditional non-Western societies. Still, the question remains,—why has the West been the changing, aggressive, energetic, innovating society it is? Why has history speeded up for us and why finally, does it appear, as Spengler, Toynbee and others have pointed out, that our culture is in a state of dissolution and decay?

Max Weber in his introduction to *The Protestant Ethic and the Spirit of Capitalism*⁸ points out that “only in the West does science exist as a stage of development which we recognize today as valid”. He goes on to insist that in every aspect of Western life a long term and unique rationalization exhibits itself; in philosophy, religion, art, government and, in short the total structure of culture and the organization of life. Weber recognized that implicit in Western culture was an anti-traditionalism, a rationalism, a calculating spirit which constantly and with ever increasing momentum transformed Western life. The motive power of Western history, as Weber saw it, was the vision of a rationally ordered life which called forth an energetic and unremitting pursuit of its goal and which eschewed all magical escapes.

Far from the spirit of Western man being the product of the material environment and dominated by the mode of production as vulgar Marxists insist, the spirit of Western man transforms and revolutionizes through its persistent quest for rationality this material environment and the mode of production. The history of medieval society is the story of the slow process

of the rationalization of that society and the displacement and destruction of traditional institutions and ideas or their amalgamation with more rationalized forms and modes.

This rationalization of all the aspects of Western life has involved a successive elaboration of techniques and methods and the creation in those who employ the techniques of attitudes which can best be described as professional. Technique is a rational method applied to a particular problem. The problem may be totally intellectual or spiritual or it may be manipulative or mechanical. What in each case it involves is the employment of rational means to achieve rationally conceived ends.

Now the essential characteristic of modernity is not that it is “the most recent,” and certainly not that it represents a period of Western history which began in 1492 or 1600. The modern age rather is the period of Western history marked most decisively by the process of rationalization. If we are attempting to define an institution or an idea as modern we will not inquire into its date but will simply ask to what extent its orientation is traditional, that is rooted in customary behavior, poses for itself non-rational objectives, and acts through non-rational methods or to what extent is it a rational system. Custom, fear, unpredictableness, anxiety and magic are the marks of the older, traditional and especially the non-Western cultures. To be modern is to seek, insofar as possible, the solution to practical and intellectual problems through the employment and expansion of rational means.

Essential to these developments is the professionalization of life; the increasing bureaucratization of every aspect of human existence. For professionalization and bureaucratization are among the most important techniques by which life is rationalized. The substitution of known procedures

which are indifferent to the status or the influence of the person for arbitrary or baffling actions by government, by teachers, by doctors; these are all a part of the general development of professionalism and bureaucracy.

It is, of course, tempting to see the rational-innovating forces of our society as always on the side of progress—tempting to always approve of revolution if it is made in the name of reason; to forever transform without thought of consequences; to believe that reason is always right and that the heart, whatever its reasons, is always wrong.

But obviously not all of life is subject to rational manipulation; nor is the spirit exclusively rational. We are all aware, or at least I hope we are, that important areas of life are not so much irrational as arational. That is to say they lie outside the purview of rational systems and rational methods. When rationalism becomes too exaggerated in its claims these aspects of life which lie outside reason, beyond it, revolt and take their revenge upon rational systems. And that too is a part of the history of the recent past.

It is the fear of a totally rational society and its constraining and deadening impact upon human behavior which led Max Weber to the gloomy and pessimistic passage with which he closed his essay on *The*

Protestant Ethic and the Spirit of Capitalism in 1920:⁹

No one knows who will live in this cage in the future, or whether at the end of this tremendous development entirely new prophets will arise, or there will be a great rebirth of old ideas and ideals, or if neither, mechanized petrification, embellished with a convulsive self-importance. For the last stage of this cultural development, it might well be truly said: "Specialists without spirit, sensualists without heart; this nullity imagines that it has attained a level of civilization never before achieved."

But this is not the only and is perhaps not the most important problem involved in the processes of rationalization and technological mastery. Surely one of the most threatening aspects of technology and bureaucracy lies in the separation of rational techniques from a rational spirit. The consequence of this separation is that rational means of a highly sophisticated nature are employed in the pursuit of totally irrational objectives. The processes of dehumanization and alienation are the direct effects of the pursuit of irrational ends. If the ends of life go unexamined and only the means are considered by our society; if we assume that everything is allowed so long as it is technically possible then we condemn ourselves to a sophisticated barbarism.

¹Richard Weaver, "The Importance of Cultural Freedom" in *Life Without Prejudice and other Essays* (Chicago: Henry Regnery Company, 1965), p. 36.

²Jacob Bronowski, *The Face of Violence* (Cleveland: Meridian Books, 1967), p. 5.

³Peter L. Berger and Thomas Luckmann, *The Social Construction of Reality, A Treatise in the Sociology of Knowledge* (New York: Doubleday & Company, 1966).

⁴Sir Charles P. Snow, *The Two Cultures: And a Second Look* (New York: New American Library, 1964), p. 30.

⁵Peter F. Drucker, *The Age of Discontinuity*,

Guidelines to our Changing Society (New York: Harper and Row, 1969), p. 71.

⁶Daniel Bell, "The Cultural Contradictions of Capitalism" in *The Public Interest*, No. 21, Fall, 1970, pp. 16-43.

⁷Herman Kahn and Anthony J. Weiner, *The Year 2000* (New York: MacMillan, 1967). Victor C. Ferkiss, *Technological Man, The Myth and the Reality* (The New American Library, 1970). Drucker, *op. cit.*

⁸Max Weber, *The Protestant Ethic and the Spirit of Capitalism* (New York: Scribner's 1958), p. 15.

⁹*Ibid.*, p. 182.