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THE TECHNOLOGICAL PROCESS

THE question of whether modern technology (embracing the ensemble of techniques involved in automation and cybernetics) should be regarded as a benevolent genie destined to free the human race of all drudgery, or as a mechanistic Frankenstein that is dehumanizing mankind, will probably not be answered to general satisfaction until certain basic mysteries of human nature are better understood. Meanwhile, almost any chain of reasoning on this question can be justified, once you take a position and define your terms. If, for example, you argue, as one of our readers contends, that machines are morally neutral facts of life in an industrialized society, you may then proceed without fear of contradiction to say:

> . . . machines *do not and never will* control society. Their human manipulators may use them as weapons to gain control of others, much as the power of critical persuasion and the gun have been used in the past. But why blame the machines? They are quite neutral, which is a point in their favor. If anything, we should experience less manipulation in a machine-oriented society.
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> Nor are machines guilty of "inhuman systemization" (an expression used in a recent MANAS article). What they accomplish is nearly always of a very menial sort: routine, dull operations which human beings would find very uncreative and boring. Machines do a faster, more accurate, and more efficient job at these operations than human beings. We have replaced walking in large part by the horse, the bicycle, and now the automobile. Has this in any way dehumanized us? Invariably, under the compelling forces of evolutionary change, the machines will displace men in many areas. Why fight it? Jacques Ellul indicates as much (as quoted in MANAS, March 17):
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> "In the modern world, the most dangerous form of determinism is the technological phenomenon. It is not a question of getting rid of it, but, by an act of freedom, of transcending it. How is this to be done? I do not yet know."
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> Why not look at the bright side of the coin and regard the advent of machine technology as a liberation of the average working man from serfdom? Now, for perhaps the first time, the man or woman caught up in the boredom of routine tasks will be forced to examine his function in life and thereby *become* human. The machine will have helped to liberate him. On the other hand, he now becomes subject to manipulation by all the forces seeking to control his new-found leisure. These are *human* forces. It therefore behooves the individual to strengthen himself from within if he does not wish to be manipulated. The degree of mechanization to which he is daily subject is, by comparison, of little consequence.

There can be no quarrel with this view, so long as it does not become a way of ignoring the importance of what most people, including Jacques Ellul, mean, when they use the expression "technological society." They mean, more or less obviously, the entire complex of human attitudes, theories of progress, ideas of the good of man and how it is served, which have come to be identified with the people who create and approve the existing conditions of advanced industrialization What critics of the technological society are concerned about is the effects of this kind of thinking—which dates, for modern man, from the time of the Enlightenment—upon the quality of human life. If you insist that this criticism ought to proceed as a kind of moral analysis, leaving the "neutral" techniques introduced by scientific discovery out of the discussion, you may be able to say things worth saying—as for example Plato was able to do, in the second book of the Republic, or Lao-tse in the *Tao Te Ching*—but many contemporary critics find this an irrelevant and obscuring restriction.

Ellul most of all is unable to dissociate his strictures from the milieu developed by the complex of techniques which impose their requirements on human behavior. As he puts it:

> There is an attractive notion which would apparently resolve all technical problems: that it is not technique that is wrong, but the use men make of it. Consequently, if the use is changed, there will no longer be any objection to the technique. . . . But all this is an error. It resolutely refuses to recognize technical reality. It supposes, to begin with, that men orient technique in a given direction for moral, and consequently non-technical, reasons. But a principal characteristic is its refusal to tolerate moral judgments. It is absolutely independent of them and eliminates them from its domain. Technique never observes the distinction between moral and immoral use. It tends, on the contrary, to create a completely independent morality.

Now it is quite possible to disagree with Ellul, or to say that he is doing some personification and special pleading here, but one ought at least to understand his position. In his defense, you might propose that the submission of men to the demands of the total technological process is a behavior pattern which, over a considerable period of time, has become a kind of institutionalized conformity Ellul chooses to identify as an intrinsic element of the process. His discussion of the difference between tools and techniques shows that he is not unaware of this identification.

The same differentiation is made in another way by Gerald Sykes:

> The technical revolution demands in time that man be equal to his own creations. He cannot merely run his airplane well. His consciousness must go as high as his body does. He must be not merely a flyer but a Saint-Exupery. This may have been a reason why, as Lombroso suggests, the great innovators of the Renaissance called a halt to their inventions; they sensed that men would not be worthy of them. But we have gone ahead without, and now we must equal them or perish. A first step would be to realize how dangerous they are to mental health. One can so easily misuse them as ways of short-circuiting personal experience.

Erich Fromm makes a related comment based on long clinical experience and observation of political and social development during recent years. He says:

> Ever more pressing becomes the question why, in spite of good will and knowledge of the facts about nuclear war, the attempts to avoid it are feeble in comparison with the magnitude of the danger and the likelihood of war, given the continuation of the arms race and the continuation of the cold war. This concern has led me to study the phenomenon of indifference to life in an ever increasingly mechanized industrialism, in which man is transformed into a thing, and as a result, is filled with anxiety and with indifference to, if not hate against, life.

The question of why "the phenomenon of indifference to life" should appear "in an ever increasingly mechanized industrial society" has engaged the attention of warmly humanistic thinkers for almost a century. In the field of the applied arts, protest began in England with William Morris in the last century and continues in the present with men like Lewis Mumford. Eric Gill and Wilfrid Wellock are other Englishmen whose works ought to be consulted on this subject. Then, in 1948, Henry Regnery published an English translation of Friedrich Juenger's *The Failure of Technology: Perfection without Purpose,* a book which made systematic attack on the naïve optimism of the doctrine of technological progress. A few years earlier, in the United States, Ralph Borsodi had explored the dehumanizing effects of technology in *This Ugly Civilization.* Searching investigation of *why* the technological process inexorably works against human beings was offered more recently by Herbert Marcuse in his *One-Dimensional Man* (Beacon, 1964), He starts out by admitting the point of our correspondent: "True, the rationality of pure science is value-free and does not stipulate any practical ends, it is 'neutral' to any extraneous values that may be imposed on it." He goes on to show, however, that the basic assumptions of scientific method have positive implications which affect its application to human affairs:

> While science freed nature from inherent ends and stripped matter of all but quantifiable qualities, society freed men from the "natural" hierarchy of personal dependence and related them to each other in accordance with quantifiable qualities—namely, as units of abstract labor power, calculable in units of time. "By virtue of the rationalization of the modes of

> labor, the elimination of qualities is transferred from the universe of science to that of daily experience."
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> Between the two processes of scientific and societal quantification, is there parallelism and causation? . . . I am not here concerned with the historical relation between scientific and societal rationality in the beginning of the modern period. It is my purpose to demonstrate the *internal* instrumentalist character of this scientific rationality by virtue of which it is an *a priori* technology, and the *a priori* of a *specific* technology—namely, technology as form of social control and domination. . . . The principles of modern science were *a priori* structured in such a way that they could serve as conceptual instruments for a universe of self-propelling, productive control; theoretical operationalism came to correspond with practical operationalism. The scientific method which led to the ever-more-effective domination of nature thus came to provide the pure concepts as well as the instrumentalities for the ever-more-effective domination of man by man *through* the domination of nature. Theoretical reason, remaining pure and neutral, entered into the service of practical reason. The merger proved beneficial to both. Today, domination perpetuates and extends itself not only through technology but *as* technology, and the latter provides the great legitimation of expanding political power, which absorbs all spheres of culture.

This is Marcuse's theoretical justification for charging that there are *built-in* anti-human tendencies in the technological process. His book is a closely reasoned documentation of this claim, and a widely varied study of the debilitating effects on human beings of a machine-dominated society. Following is a brief statement of his general thesis:

> The point which I am trying to make is that science, by *virtue of its own method* and concepts, has projected and promoted a universe in which the domination of nature has remained linked to the domination of man—a link which tends to be fatal. . . . Nature, scientifically comprehended and mastered, reappears in the technical apparatus of production and destruction which sustains and improves the lives of the individuals while subordinating them to the masters of the apparatus. Thus the rational hierarchy merges with the social one. If this is the case, then the change in the direction of progress, which might sever this fatal link, would also affect the very structure of science—the scientific project. Its hypotheses, without losing their rational character, would develop in an essentially different experimental context (that of a pacified world); consequently, science would arrive at essentially different concepts of nature and establish essentially different facts.

This is a way of saying that the enormous prestige of science as a means of "getting things done" has so effectively imposed the reductive habits of scientific thinking (quantification, elimination of "secondary qualities") on the technological structure of modern society that this "thingification" of the entire world of daily life (including the transformation of man, as Fromm says, into a "thing") tends to become a functional displacement of the very meaning of human freedom. Here we have the ground on which such critical studies as Erich Kahler's *The Tower and the Abyss* are founded. We live in a world in which the subjective individual, the visionary, aspiring moral agent, has no authentic recognition save by an inadequately honored political bill of rights and ill-nourished religious and humanist traditions of individual worth.

Marcuse looks with hope toward a redefinition of scientific "reality" and a radical revision of technological ends. He has no wish to "abolish" technology, which he sees as the base of "the satisfaction of needs and the reduction of toil." But the base will have to be reconstructed—that is, developed with "a view of different ends." He sets the problem in a sentence: "Industrial civilization has reached the point where, with respect to the aspirations of man for a human existence, the scientific abstraction from final causes becomes obsolete in science's own terms." Accordingly, science must itself accept the philosophical burden, taking up "the transformation of values into needs, of final causes into technical possibilities (as) a new stage in the conquest of oppressive unmastered forces in society as well as in nature."

The obvious question is: Where are we going to get intensified conviction of human values, and deep philosophical concern with final causes, sufficient to accomplish so far-reaching a

revolution? Marcuse has no illusion that this will be easy:

> Can a society which is incapable of protecting individual privacy even within one's four walls rightfully claim that it respects the individual and that it is a free society? To be sure, a free society is defined by more, and more fundamental achievements, than private autonomy. And yet, the absence of the latter vitiates even the most conspicuous institutions of economic and political freedom—by denying freedom at its hidden roots. Massive socialization begins at home and arrests the development of consciousness and conscience. The attainment of autonomy demands conditions in which the repressed dimensions of experience can come to life again; their liberation demands repression of the heteronomous needs and satisfactions which organize life in this society. The more they have become the individual's own needs and satisfactions the more would their repression appear to be an all but fatal deprivation. But precisely by virtue of this fatal character it may create the primary subjective prerequisite for qualitative change—namely, the *redefinition of needs.*
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> To take an (unfortunately fantastic) example: the mere absence of all advertising and of all indoctrinating media of information and entertainment would plunge the individual into a traumatic void where he would have the chance to wonder and to think, to know himself (or rather the negative of himself) and his society. Deprived of his false fathers, leaders, friends, and representatives, he would have to learn his ABC's again. But the words and sentences which he would form might come out very differently, and so might his aspirations and fears.

It is no coincidence that Paul Goodman (as quoted in "Children . . . and Ourselves" two weeks ago) also singles out advertising for devastating criticism. He begins with the same point made by Marcuse:

> If the great mass of people were allowed to spend their time in the way that really gave them the most satisfaction, I'm afraid the gross national product might be cut as much as fifty per cent. It's a fantastic thing. Well, then, what does this mean for our society? It seems to me that, by and large, a chief purpose of our economy must be to prevent people from having the real satisfactions of life—the satisfactions which would enable them to grow and be happy.

Goodman points out that under the pressure of the need for additional sales to keep the technological machine running smoothly, advertising, instead of being merely informative (a necessary and legitimate function), or even competitive, is increasingly semi-monopolistic, the chief purpose being to artificially stimulate demand. This, as Goodman says, is an attempt to "trick" people:

> It isn't what the people would ordinarily want, but it distracts them into wanting something which they wouldn't even have *thought* of.
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> If they want these things and are willing to pay for them, to earn the money to buy the things, then of course the economic machine runs faster. And people who are interested in the economic machine running faster are happy; but everybody else is that much less happy.
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> Of course, a good deal of it is done by threat. The whole suburban way of life is founded on the notion that if we don't have all these things, then in some way we are in outer darkness. We don't belong. Something is wrong with us. That is, the people don't look and say, "What would we really do if we did what we wanted to do?"

Like Marcuse, Goodman is here calling for a psychological holiday from the public relations side of the technological process, to give people time to ask themselves some important questions. He wants them to recognize that "our economy is founded on a hoax. . . . they can't get out of this thing and that's why it looks like a rat race."

Well, suppose we accept this indictment of the propaganda for an endlessly acquisitive way of life: why should such a judgment become so sweeping as to include even the dynamics of modern technology? Mainly because the demands of the system of production create in turn the demands of the system of distribution. As Goodman points out, the people don't really *need* all those goods. Under this system, supply must not only satisfy demand but must also maintain a continuously abnormal increase in demand to keep

up with the growing capacities of production. The pace and strain of this arrangement affects nearly everybody in our society, and the thin excuse of what a good time we're all having is beginning to break down. Extended analysis and attack of the processes and popular justifications of the technological society, as we have developed it, are a natural and necessary result. (MANAS began its criticism along these lines back in 1948 and readers with bound volumes are invited to turn to Vol. I, No. 39 [p. 3], Vol. II, Nos. 22 [pp. 1 and 4] and 26 [p. 1] for discussion of similar issues.)

But why, it may be asked, should there be so much resistance to criticism of technology—or, more precisely, to criticism of the rationalizations of technology—if the facts are as these critics state them?

To answer this question, it must be seen that the claims in behalf of technological progress amount to a theory of salvation for modern man—a theory which has been expanded and developed in the West ever since the eighteenth century. There is of course much to be said in favor of the revolutions of the eighteenth century. We owe our doctrines of the dignity of man to this period—the ideas of equality, liberty and, to some extent, the brotherhood of man gained vital currency in thought from Enlightenment thinkers and reformers. The eighteenth century was also a time of triumph for the advocates of "natural philosophy" over the representatives of organized religion. For forward-looking men, the Book of Nature became the only text they would study in behalf of true knowledge about the world and the progress of the human race. A little later in tidal flow of Enlightenment ideas, La Place put its spirit very simply when Napoleon asked him where "God" fitted into his calculations. "Sire," the astronomer replied, "I have managed without that hypothesis."

But it was not only "God" that was left out. The entire subjective universe had no place in the new scientific model of the cosmos. The formula of the Enlightenment was engagingly simple. Abolish theology, and enthrone Reason. Declare for Natural Law and model constitutions upon it. Foster science, which will in time eliminate poverty and disease, and create the material plenty for which the entire world of ordinary men longs and certainly deserves. A vast enthusiasm gave support to this generous and determined spirit and its new-found confidence in human capacity.

Today, and several revolutions later, the disillusionments of our "affluent society" are making us realize that the Enlightenment philosophy was almost wholly lacking in an understanding of the nature of man in terms of a good that is not material—but who could worry about that in the glorious hour of a world being set free from political tyranny? Moreover, the claims of religion, mystical or otherwise, were at a distinct disadvantage in those days. The institutions of religion had shown themselves very much against both social justice and the progress of science. It has to be remembered that Galileo may have left all secondary qualities out of his image of nature for other reasons than the methodological convenience of his mathematical manipulation of matter and energy. He was warned in no uncertain terms by the Inquisition to stay out of the field of psychology. A scientist of the seventeenth century knew better than to do any independent thinking about man's inner or subjective life, if he wanted to publish his theories. It was bad enough to upset the Ptolemaic astronomy, as Galileo found to his great embarrassment and virtual imprisonment during the last years of his life. Cartesianism, as a principal source of modern mechanistic philosophy, may also be understood as involving an expedient avoidance of issues which might stir the wrath of the still powerful clergy.

So, for at least two reasons, the original conceptions of science and scientific method behind the rise of modern technology gave full justification for ignoring all questions directly affected by independent philosophical

assumptions. Men of science would solve the "practical" problems and leave such "speculative" matters to poets and dreamers for whom, in time, they developed an explicit contempt. After all, science and technology are *exact;* and their facts and truths are demonstrable to anyone who will take the trouble to master the intellectual disciplines and techniques. Just give us the orders, the technologists said in effect, and we'll produce the goods.

What the present-day critics of the technological society are saying is that modern man, being overwhelmingly impressed by the resulting deliveries of goods, allowed the laconic response of these experts to become his philosophy of life. And the critics are trying to show us how and why the formula doesn't work. It is not a philosophy of life, but an amazingly cunning and sophisticated program for producing goods. The critics say that its extraordinary development under the impetus of human hope, and in full confidence that we now have something going which *really works,* has brought us to a condition in which the great majority of people are compelled to find some way of fitting themselves in among the moving parts of this enormous and complicated program, simply in order to make a living, support their families, and survive. In addition, they think they have to *believe* that this ordeal constitutes a proper "way of life." The critics say that this view is a massive delusion and can think of no way to help the situation except by pointing out in books and articles what has happened. It seems fair, then, while approving the iconoclasm of the critics, to urge that we need another *Enlightenment,* one that will permeate the cultural atmosphere and operative education of our civilization with a restored sense of the inner meaning and values of human life. For only then can the reorientation and reconstruction of the technological society, starting at its very base, become a practical possibility—a project in which all can participate with full enthusiasm, and with a minimum of those anxieties and fears that are inevitable in a period of far-reaching social change.

REVIEW
A HOPE FOR PEACE

WALTER MILLIS brings a rare combination of ardor and dispassion to his latest project in a lifelong study of war and the means to prevent it—*An End to Arms* (Atheneum, 1965, $5.95). The most notable thing about this book is its optimism. Mr. Millis thinks that there is considerably less likelihood, today, of an outbreak of nuclear war between the great powers than there was ten years ago, his reason being that both the men in Washington and the men in the Kremlin are realizing that the interests of neither the United States nor Russia would be served by such a war. In evidence that the reliance on military solutions for international conflicts is slowly diminishing, he cites recent adjustments in political relationships in which the threat of nuclear weaponry played little part. He thinks that the *reductio ad absurdum* of war by the expansion of the capacity to destroy is gradually becoming manifest:

It is not the injustice or the unworkability of the results achieved by military coercion in the modern age that has condemned the militarized nation-state system. It is the ever more colossal human costs of military coercion and its ever dwindling efficiency as a means of achieving these results. Coercion cannot be absent from a global system any more than it can from any lesser one; but when it can be supplied, in the last analysis, only through the huge and mutually hostile modern military establishments, it defeats its own purpose.

What reason is there to expect that this sort of common sense will be adopted by the rulers and peoples of modern nations? Mr. Millis' hope is grounded on the insanity of any other course. The case against the military solution of international disputes is put in his first chapter:

> It is believed that the world's military arsenals today contain nuclear explosives equivalent to about seventy tons of TNT for every living human being; these explosives, moreover, are usable *only* for the destruction of human life and its ecology. It is unnecessary to repeat the many available estimates of the "megadeaths" (millions of deaths) and the environmental megadevastations which the actual employment of these weapons would probably produce. More shocking than the statistics—too huge in themselves to be comprehensible—is the simple fact that in the United States, the Soviet Union and other advanced states a large number of the best and most highly trained brains that the community can produce are almost wholly devoted to the design and production of amazingly sophisticated and costly instruments which can be put to no actual use except the mass torture and destruction of man and the probable extinction of his culture. It is a fact so inhuman, so patently immoral and so pointless as to stagger the intelligence. The scientists, however, as well as the weapons technicians and the bureaucrats who direct their efforts are all upright, humane men—good fathers and husbands, as a rule, with a strong moral sense, with a belief in man's future and with first-rate minds. They understand what they are doing and realize, when they permit themselves to think about it, the horrible absurdity of their endeavors. Yet they are as powerless to escape their situation as a man trapped in a quicksand. And all the rest of us seem equally powerless to escape the probably disastrous consequences.

An End to Arms moves from this setting of the problem to a brief history of modern war, a discussion of the Cold War and of the inadequacy of the language presently used to understand the causes of war, then launches on an analysis of power. Next Mr. Millis explores the possibility of transforming military power into police power—which has the purpose of reducing violence instead of using it—and proposes various means by which such a change might be accomplished.

This is a book which ought to be read by everybody. Without slighting any of the values of a free, democratic society, Mr. Millis succeeds by sheer understanding of history in taking the partisanship out of the study of current events. He shows what a sympathetic and informed rationality can do to remove the anger and the hate from the bitter controversies of the times. His book is easy to understand and its argument

moves step-by-step from the *status quo* to what he believes are attainable peace objectives.

For a concluding quotation, we choose a passage which throws an unfamiliar light on the role of the nation-state—as a balance to frequent statements of an opposite view in these pages:

> The sovereign nation-state, so often cast as the villain in the international drama, has in fact, . . . performed an indispensable role in the modern organization of power. What would we, or what would the world as a whole, do with the 200 million Russians or the 800 million Chinese if the political bonds that have organized them into cohesive and responsible entities were suddenly dissolved? The world society has suffered far more from division and chaos among them in the past than it is ever likely to suffer in the future from their unification. It is true that their repressive and police methods have played an unpleasantly prominent role in holding these great aggregates of human beings together, but to demand their destruction, for that reason, as mere "police states" is to take a very shallow view of the problem of power and the problems of policing a world of three billion human beings, not many of whom are shaped in the likeness of a Kennedy liberal or even a British parliamentarian. As a *military* entity the sovereign nation-state is reaching the end of its scope, but as a power organization it has not only contributed enormously to the creation of our modern world, but also provides the basis for advance toward a demilitarized world politics much more clearly than do plans for universal, "free" and democratic world government.

This statement needs amplification and critical perspective. As it stands, we're not sure that we understand or altogether agree, but the substance of some important realities is in this paragraph. Mr. Millis disarms his critics in two ways: he writes with a deep, impartial humanity, and he is obviously trying to ignore no discouraging facts. *An End to Arms* would serve as a far-reaching educational influence if it could be placed in the hands of all young Americans—those who before long will be shaping the future of both the United States and the world.

COMMENTARY
UNIVERSITY OF CALIFORNIA—A VERDICT

THE Byrne report, proposing major reorganization of the University of California—mainly by decentralization of authority to give substantial autonomy to its nine large campuses, involving a total of 70,000 students and faculty and staff of 30,000—burst into print in the middle of last month, voicing vigorous criticism of the Board of Regents of the University and of President Kerr, and amounting, in effect, to a moral vindication of the student revolt (Free Speech Movement) of the closing months of last year.

The Byrne report is the work of Jerome C. Byrne, a Beverly Hills labor attorney, and a staff of educational and management consultants. Mr. Byrne was retained as an investigator by the Forbes Committee, formed by the Board of Regents last December to uncover the "basic factors contributing to recent unrest within the University of California, giving particular attention to the disturbances on the Berkeley campus." After hearing his report on May 7, the Forbes Committee decided not to release it, but it was made public on the insistence of California's Governor Pat Brown.

From first to last, the Byrne report reflects a clear understanding of the difficult and far-reaching responsibilities of higher education. Pointing out that a "wise society" creates the university to be "its continuous critic," the report shows that the University of California administrators let their expectation of public disapproval of "critical" activity on the campus lead to restraining measures which brought only demoralization. "If a state," the report continues, "habitually imposes popular opinion on its university, the result is that the state acquires a reputation for being inhospitable to the life of the mind." In time this means "a second-class university." After examining in detail the circumstances and events of the student revolt, the report cleared the Free Speech Movement of charges of "Communist" influence, showed that non-student participants were not an important factor, and observed: "These students saw direct action and civil disobedience as instruments for affirming their own moral commitment to a more just society and as an outlet for their impatience with the seemingly glacial pace of social progress under society's orthodox procedures." Meanwhile, confusion in the University's administrative rules, methods, and precedents left it ill-equipped to meet such an emergency and unable to hold either the trust or the respect of the students. Crisis and the breakdown of authority were the result.

The 84-page Byrne Report supports conclusions of this sort with extensive factual analysis. It ends its recommendations for administrative reform by saying: "The function of a great university is to maintain a tradition while transforming it. To do the same may well be the ultimate test of the institution of Regency."

CHILDREN
. . . and Ourselves
THE COMMUNITY SCHOOL

OUR discussions of "continuing education" during the adult years may be usefully supplemented by some review of the problems affecting use of public funds for progress in this field. As Samuel Gould said at the end of *Knowledge Is Not Enough*, the rapidly increasing "leisure time" resulting from automation and cybernation provides ample opportunity for self-improvement, but people need to be helped to realize that their worth to the community and themselves is increased by further learning and that evaluative discussions in classes and seminars will result in more enlightened participation in community and national affairs.

Recent Federal disbursements have been fairly lavish for job retraining of persons displaced by automation, but education beyond vocational guidance and the always-needed literacy instruction is only now beginning to receive attention.

During President Kennedy's administration, a Committee on Higher Education developed the conception of a "community college," and a movement in this direction is at present characteristic of junior and city colleges, begun, initially, to provide means for high school graduates to advance at least as far as upper-division university work. In *Adult Education in Transition* (University of California Press, 1958), Burton Clark comments:

> Although the colleges were originally defined as secondary schools for youth who had completed high school, there have been no age restrictions. Under these conditions it was a natural evolution that, in broadening the scope of their activities, the junior colleges should develop specialized courses available to an all-age adult clientele. Today it is not uncommon for the student population of a junior college to be mainly over twenty-one, and for the college to be committed to a host of short-term courses similar to the adult pattern.
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> Partly as cause and partly as effect of program extensions a movement has developed within junior college circles for the broadening of the colleges into community colleges. The core idea in this conception is that program services should be greatly expanded in order to provide many classes needed by the community.

Jesse P. Bogue, a spokesman for the idea of the community college as linking the democratic process with educational opportunity, discusses the report of the President's Commission:

> What, then, is a community college and what did the President's Commission on Higher Education have in mind when the term was used? The first qualification is *service* primarily to the people of the community. The community institution goes to the people who live and work where it is located, makes a careful study of the needs of these people for education not being offered by any other institution of learning, analyzes these needs, and builds its educational program in response to the analyses.
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> It is not for the colleges and other schools to attempt to give the people what the colleges think they ought to have; it is for the people to decide for themselves what they want. . . . We will teach anyone, anywhere, anything, at any time whenever there are enough people interested in the program to justify its offering.

A statement by the American Association of Junior Colleges raises other considerations: "Even if the college is thinking only in terms of enlightened self-interest, its services to adults can be, as they have proved to be in many communities, one of the surest and soundest ways to build strong and favorable public relations. Many of the problems now facing public-school systems owing to the indifference of tax-payers could be resolved by services to the adults of the community."

While the idea of increasing opportunities for adult learning through the facilities of the junior colleges is developing nicely, many of the adult programs financed through city high school offices labor under severe handicaps. The subtitle of Dr. Clark's book, "A Study of Institutional Insecurity," is explained by a factual report on the history and present limitations of schools for

adults. In California, as elsewhere, evening classes first began as early as the 1850's, giving instruction to youths who had to work in the daytime. By 1910, increasing immigration created demand for Americanization and citizenship classes. This phase of adult learning, Dr. Clark points out, became "a special badge of merit of adult participation in the public school [for it was] linked to a widespread concern during World War I over the assimilation of national minorities." Dr. Clark continues:

> With this strong, if temporary, national urgency behind it, immigrant education played an important role in the evolution of evening-school functions, providing a public-supported bridge from the early continuation school, with its age-group limitations, to the expansions in purpose, program, and clientele that took place after 1920. At the level of belief and moral persuasion, the Americanization movement was a transition to the more general idea of educating older adults. The unassimilated (and later, the illiterate) within the adult population became approved bases for the schools. At the same time, with increasing participation of adults in vocational and academic courses, these too became approved means of growth.

In 1921 the California Department of Adult Education secured passage of a law supporting expansion of adult programs, offering bonus funds for the first thirty units of attendance secured by any of the high schools in the state.

Although the main emphasis was still on immigrant and literacy education, nothing in the law prevented the introduction of courses in the liberal arts and the humanities, when there was local demand. To the extent that this demand was felt, and responded to, the adult school began to embody something of the community college concept, according to the requests for courses within each high school district which had an adult school. Various factors, however, mostly financial, have made it difficult for the adult school to expand. Listing the hard realities, Dr. Clark speaks of the "marginality" of the adult program as a consequence of lack of "separate plant facilities and other fixed capital." He also notes that "the pressure of economy minded interest groups is especially severe upon the adult school." Legislative committees (one was appointed in 1951 to study adult education) are prone to think that state expenditures should be encouraged only when orthodox studies are offered under professional control. While a few pioneering leaders in adult education have sought for open-ended curricula with qualified teachers of diverse backgrounds, those who happen to lack conventionally required "credits" have an uphill battle. The result, as Dr. Clark puts it, is that "the adult school has had handicaps of marginality, open-ended purpose, and severe enrollment economy pressures." He says further:

> The rules of administrative conduct that have emerged within the service organizations are not compatible with gaining acceptance on traditional grounds. The administrators have tried to justify their practices by means of the ideology of service, but they must contend with the traditional principle that each course should be judged on its relative educational merits. The latter means program building on the basis of professional discrimination among endless subject-matter alternatives. . . .
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> [However] the adult school has ridden out sustained attacks before, and seemingly has gradually strengthened its popular support and political power within the educational hierarchy. Its own principles of legitimacy have some acceptance, and external lay authority can only partially hem it in.
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> [But] the most important symptom of the present marginality of the adult school is the necessity of having to sell the program to the public and especially to other educators. This need is strongly felt within the ranks of adult administrators. The administrators define their position as "stepchild" in nature. They perceive that they are not afforded a fundamental acceptance by other schoolmen and by state legislators.
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> To the extent that the program's educational value is ranked low relative to other uses of school funds, the position of the adult school is insecure. *Organizational marginality is the basic source of insecurity* for the administrative branches of adult education. . . . It seems evident that security for the adult school is dependent upon the acceptance, principally by those with power within school ranks,

> of adult education as a central activity of the public school.

The foregoing shows the importance of public demand for the determination of adult education curriculum. And, as Dr. Clark remarks, "the doctrine of public demand has strength in a field where there is now much self-consciousness about democratic administration and community-school relations." Dr. Clark continues:

> This principle is an important fighting tool, for it labels opponents of the service-type program as autocratic and arbitrary in their opposition to a people's program. In addition, it links directly to the interests of each student group. Each student bloc feels that its own interests are equal or superior to other interests as components of the program. The doctrine of public demand gives administrative sanction to the view that no courses have priority. All are equal, and their value is to be determined by strength of demand. In this way program administrators come to view their authority and practices as legitimized by public demand, defining this as appropriate for a democratic adult education program.

It is equally clear that the idea of lifelong learning for adults, encouraged by courses which promote evaluative discussion and expansion of intellectual horizons, needs to be emphasized over and above chiefly recreational courses. The adult school can and should provide a means by which its students may become more and more self-reliant as *thinkers;* provincialism in thought needs to give way to broader perspectives. This ideal has inspired many of those who are now devoting their lives to what have been considered the "marginal" activities of adult education.

FRONTIERS

The Continuing Dialogue

FROM his earliest years in academic life, Robert M. Hutchins has held that the path to learning and constructive citizenship begins with evaluative discussion and ends with the unique commitment of the individual. In a society dedicated to the preservation of free speech and free inquiry for all—including dissident minorities, down to a minority of one—any genuine advance must be accomplished by a willingness to reconsider and revise one's ideas, and when necessary to discard preconceptions.

Dialogue is not debate. It proceeds on the assumption that each one can expand his own outlook by learning from other points of view. When Hutchins was president of the University of Chicago, he insisted upon study of the roots in political philosophy of all the competing ideologies of the time, and while this policy was met with various shades of suspicion, it represents the outlook which presently characterizes the Center for the Study of Democratic Institutions in Santa Barbara, of which Robert M. Hutchins is president.

During recent years, there has been some doubt whether the "Center," now the chief activity of the Fund for the Republic, which was originally created by a grant from the Ford Foundation, would be able to maintain its facilities for encouraging free discussion of major issues among philosophers, jurists, statesmen, economists, and educators. But just as the Bill of Rights has been preserved against the erosions of public indifference and, more recently, the vehement attacks on the Supreme Court's implementation of its intent (as in 1954 and 1963), so the Hutchins enterprise has been rescued from dissolution. A report in the Los Angeles *Times* for Feb. 21 gives the heart-warming "success story," despite the withdrawal of further support to the Center from the vast resources of the Ford Foundation:

> New York—Robert Maynard Hutchins was honored by 800 friends and admirers Saturday night with a dollars and cents promise that will keep alive his favorite project for another year.
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> The formal dinner tribute was highlighted by announcement that $125 million has been pledged to maintain the work of the Center for the Study of Democratic Institutions in Santa Barbara. Hutchins is its founder and president.
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> World and national figures joined in the tribute to Hutchins and to his career in which he has revolutionized higher education in the United States, encouraged identification and mass production of the great books of the past and stirred repeated controversies in the arena of academic freedom and intellectual challenge.
>
> The Center itself has focused on two old-fashioned approaches to education—free discussion and provocative publications. It is the scene each day in the forenoon of a roundtable talk on a critical problem of democracy. Its pamphlets, tapes and other records are sent throughout the world with sufficient impact to bring back 100,000 letters and inquiries a year.

In other words, Mr. Hutchins and his associates have demonstrated that their endeavors are of enduring importance to thinking Americans, so that the Center has been made to survive, not by a single large grant or endowment, but by voluntary commitments of support.

It should be of interest to glance at the history underlying the establishment of the Center for the Study of Democratic Institutions within the Fund for the Republic, and of its huge, careless parent, the Ford Foundation. From 1936 to 1947, the enormous profits of the Ford Motor Company, the refusal of the family to sell stock, and the changing requirements of the Internal Revenue Code suggested diversion of 90 per cent of the corporation's non-voting stock to a tax-exempt corporation founded in 1936 by Edsel Ford. This institution, provided with a modest, initial grant of $25,000, was empowered to "receive and administer funds for scientific, educational and charitable purposes, all for the public welfare." When the stock transfer was complete, the Foundation's assets had suddenly mounted to

approximately a quarter of a billion dollars, making it the largest philanthropic institution in the world. It was then faced with the problem of how to spend large sums of money in a manner required by law. Many, of course, were the proposals of ways to disperse this self-augmenting fortune, among them a brief, if highly generalized, commitment to the preservation of free inquiry. A "guide-line" prepared for the Foundation spoke of "strengthening democracy" in the following terms:

> The Ford Foundation will support activities designed to secure greater allegiance to the basic principles of freedom and democracy in the solution of the insistent problems of an ever-changing society.
>
> The Foundation will support activities directed toward the elimination of restrictions on freedom of thought, inquiry and expression in the United States, and the development of policies and procedures best adapted to protect these rights in the face of persistent international tension.

This was the mandate for the creation of the Fund for the Republic.

When Paul G. Hoffman, fresh from serving abroad as Economic Cooperation Administrator, and guide of the Marshall Plan, was asked to be President of the Ford Foundation, he accepted on the condition that the man he most admired, the controversial Mr. Hutchins, be named as Associate Director. And here we have the beginning of that fearless dedication to authentic public good which first produced uneasiness in the Ford family and finally separated both Hoffman and Hutchins from further support, while leaving them free for as long as the money lasted to administer the independent resources of "The Fund for the Republic."

Why all the anxiety about Mr. Hutchins? Something of his "controversial" temper is indicated in a recent paper, by Thomas C. Reeves. This is what happened at the University of Chicago, with Hutchins determining policy:

> To the shock of not a few, Hutchins had eliminated compulsory class attendance, awarded bachelor's degrees to a select number who would normally have been completing their sophomore year, and told audiences around the country that educational institutions of higher learning should be managed by professional educators rather than by their more opulent trustees. Seeming to thrive on controversy, Hutchins was widely known for such statements as: "No faculty member can ever be fired except for rape or murder committed in broad daylight before three witnesses."
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> With an educational philosophy centering upon the search for knowledge rather than information, first principles rather than details, it was natural that he took unequivocal stands on civil liberties, intellectual freedom, and civil rights. Controversy was, to Hutchins, the very soul of a vital democracy; the enlightenment of free men could come about only as ideas were willingly and freely submitted to critical examination.
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> As he once put it: "In this country we do not have to take anybody's word for anything. Our reliance is upon the intelligence and character of the independent individual. The greatest danger to the ideals that we cherish are fear and conformity. Courage and independence are the best guarantees of freedom and justice."

A Republic which finds funds to support a man who practices as well as professes these ideals has some health in it.