

The Technological Society

excerpt from the book by Jacques Ellul

Modern society is moving toward a mass society, but the human being is still not fully adapted to this new form.

The purpose of human techniques is to defend man, and the first line of defense is that he be able to live. If these techniques strengthen him in his nineteenth-century individualism (itself no ideal state of affairs), they only aggravate the split between the material structures of society, the social institutions, and the forces of production, on the one hand, and man's personal tendencies, on the other. This presupposes that technique can in fact defend man's individuality. But such a disruption is technically impossible because it would entail insupportable disorders for man. Human techniques must therefore act to adapt man to the mass. Moreover, these techniques remain at variance with the other material techniques on which they depend. They must contribute to making man a mass man and help put an end to what has hitherto been considered the normal type of humanity. The type that will emerge and the type that will disappear will be the subjects of a forthcoming work. For the moment, it suffices to establish concretely the tendencies of our human techniques to create the mass man.

Material techniques usually result in a collective social form by means of a process which is largely involuntary. But it is sometimes voluntary; the technician, in agreement with the technical data, may consider a collectivity a higher social form. Involuntary and voluntary action are both to be observed, for example, in the sphere of psychological collectivization. I have indicated . . . the means by which this involuntary and, in a way, automatic

adaptation appears. I shall refer to one other striking phenomenon of involuntary psychological collectivization; advertising. The primary purpose of advertising technique is the creation of a certain way of life. And here it is much less important to convince the individual rationally than to implant in him a certain conception of life. The object offered for sale by the advertiser is naturally indispensable to the realization of this way of life. Now, objects advertised are all the result of the same technical progress and are all of identical type from a cultural point of view. Therefore, advertisements seeking to prove that these objects are indispensable refer to the same conception of the world, man, progress, ideals—in short, life.

Once again we are confronted by a technical phenomenon completely indifferent to all local and accidental differences. Indeed, American, Soviet and Nazi advertisements are in inspiration closely akin; they express the same conception of life, despite all superficial differences of doctrine. The Soviet Union, after having for a period violently rejected the technical system of advertising publicity, had more recently found it indispensable.

Advertising, which is founded on massive psychological research that must be effective, can "put across" the technical way of life. Any man who buys a given object participates in this way of life and, by falling prey to the compulsive power of advertising, enters involuntarily and unconsciously into its psychological framework.

One of the great designs of advertising is to create needs; but this is possible only if these needs correspond to an ideal of life that man accepts. The way of

life offered by advertising is all the more compelling in that it corresponds to certain easy and simple tendencies of man and refers to a world in which there are no spiritual values to form and inform life. When men feel and respond to the needs advertising creates, they are adhering to its ideal of life. This explains the extremely rapid development, for example, of hygiene and cocktails. No one, before the advent of advertising, felt the need to be clean for cleanliness' sake. It is clear that the models used in advertising (Elsie the Cow, for instance) represent an ideal type, and they are convincing in proportion to their ideality. The human tendencies upon which advertising like this is based may be strikingly simpleminded, but they nonetheless represent pretty much the level of our modern life. Advertising offers us the ideal we have always wanted (and that ideal is certainly not a heroic way of life). Advertising goes about its task of creating a psychological collectivism by mobilizing certain human tendencies in order to introduce the individual into the world of technique. Advertising also carries these tendencies to the ideal, absolute limit. It accomplishes this by playing down all other human tendencies. Every man is concerned, for example, about his bodily health—but show him Superman and it becomes his destiny to be Superman. In addition, advertising offers man the means for realizing material desires which hitherto had the tiresome propensity of not being realized. In these three ways, psychological collectivism is brought into being. Advertising must affect all people; or at least an overwhelming majority. Its goal is to persuade the masses to buy. It is therefore necessary to base advertising on general psychological laws, which must then be unilaterally developed by it. The inevitable consequence is the creation of the mass man. As advertising of the most varied products is

concentrated, a new type of human being, precise and generalized, emerges. We can get a general impression of this new human type by studying America, where human beings tend clearly to become identified with the ideal of advertising. In America, advertising enjoys universal popular adherence, and the American way of life is fashioned by it.

In addition to the involuntary, psychological activity which leads to the creation of the mass man, there are certain conscious means which can be used to attain the same end. We must not misunderstand the qualification conscious in this connection. The degree of choice is very small; the process is effectively conditioned by material techniques and the beliefs they engender. However, this consciously concerted action is geared to psychological collectivization and, unlike advertising techniques, exerts a direct effect. It has a twofold basis and a twofold orientation, and centers about the notions of group integration and unanimity. . . .

Up to now, in discussing human techniques we have considered only man's need for adaptation with a view to his happiness or, at least, his equilibrium. This plays a role here too. For example, it can be shown that in our society the individual experiences tranquility only in a consciously gregarious state. This involves not only the undeniable "strength of unity" and "forgetfulness of one's lot in the crowd," but also the conscious recognition of the need to apply adequate remedies to social dangers. In our culture, the person who is not consciously adapted to his group cannot put up adequate resistance. Lewin's studies of anti-Semitism, for example, indicate that the Zionist groups with their collective psychology were able to withstand persecution much more readily than were the unorganized Jews who had retained an individualistic mentality.

It cannot be denied that this kind of conscious psychological adaptation, which gives the individual a chance to survive and even be happy, can produce beneficial effects. Though he loses much personal responsibility, he gains as compensation a spirit of co-operation and a certain self-respect in his relations with other members of the group. These are eminently collectivist virtues, but they are not negligible, and they assure the individual a certain human dignity in the collectivity of mass men. While I have insisted on the “humanistic” tendencies of human techniques and, starting from the premise that man must be adapted to be happy, have tried to demonstrate the necessity of these techniques and their interrelation with all other techniques, my attitude has been resolutely optimistic. I have presupposed that technical practices and the intentions of the technicians were subordinated to a concern with human good. And when I traced the background of the human techniques, I proceeded from the most favorable position, that of integral humanism, which it is claimed, is their foundation.

But there are more compelling realities. The tendency toward psychological collectivization does not have man’s welfare as its end. It is designed just as well for his exploitation. In today’s world, psychological collectivization is the sine qua non of technical action. Munson says: “By building the morale of the troops, we are trying to increase their yield, to substitute enthusiastic self-discipline for forced obedience, to stimulate their will and their attention—in short, we are pursuing success.” There he gives us the key to the kind of psychological action: the yield is greater when man acts from consent, rather than constraint. The problem then is to get the individual’s consent artificially through depth psychology, since he will not give it of his

own free will. But the decision to give consent must appear to be spontaneous. Anyone who prates about furnishing man an ideal or a faith to live by is helping to bring about technique’s ascendancy, however much he talks about “good will.” The “ideal” becomes so through the agency of purely technical means whose purpose is to enable men to support an insupportable situation created within the framework of technical culture. This attitude is not the antithesis of the humanistic attitude; the two are interwoven and it is completely artificial to try to separate them.

Human activity in the technical milieu must correspond to this milieu and also must be collective. It must belong to the order of the conditioned reflex. Complete human discipline must respond to technical necessity. And as the technical milieu concerns all men, no mere handful of them but the totality of society is to be conditioned in this way. The reflex must be a collective one. As Munson says, “In peacetime, morale building aims at creating among the troops the state of mental receptivity which makes them susceptible to every psychological excitation of wartime.” And this “receptivity” must also be installed in every other human group in the technical culture, and especially in the masses of the workers.

Psychological conditioning presupposes collectivity, for masses of men are more receptive to suggestion than individuals, and, as we have seen, suggestion is one of the most important weapons in the psychological arsenal. At the same time, the masses are intolerant and think everything must be black or white. This results from the moral categories imposed by technique and is possible only if the masses are of a single mind and if countercurrents are not permitted to form.

The conditions for psychological efficiency are, first, group integration and, second, group unanimity. (This should not be taken to mean that on a larger scale there may not be a certain diversity.) I am speaking of a determinate group (for example, a political party, the army, an industrial plant) which has a definite technical function to fulfill. The purpose of psychological methods is to neutralize or eliminate aberrant individuals and tendencies to fractionation. Simultaneously, the tendency to collectivization is reinforced in order to “immunize” the environment against any possible virus of disagreement.

When psychological techniques, in close co-operation with material techniques, have at last succeeded in creating unity, all possible diversity will have disappeared and the human race will have become a bloc of complete and irrational solidarity.

A Look to the Future

. . . The human race is beginning confusedly to understand at last that it is living in a new and unfamiliar universe. The new order was meant to be a buffer between man and nature. Unfortunately, it has evolved autonomously in such a way that man has lost all contact with his natural framework and has to do only with the organized technical intermediary which sustains relations both with the world of life and with the world of brute matter. Enclosed within his artificial creation, man finds that there is “no exit”; that he cannot pierce the shell of technology to find again the ancient milieu to which he was adapted for hundreds of thousands of years.

The new milieu has its own specific laws which are not the laws of organic or inorganic matter. Man is still ignorant of these laws. It nevertheless begins to appear with crushing finality that a new necessity is taking over from the old. It is easy to boast of victory over ancient oppression, but what

if victory has been gained at the price of an even greater subjection to the forces of the artificial necessity of the technical society which has come to dominate our lives?

In our cities there is no more day or night or heat or cold. But there is overpopulation, thralldom to press and television, total absence of purpose. All men are constrained by means external to them to ends equally external. The further the technical mechanism develops which allows us to escape natural necessity, the more we are subjected to artificial technical necessities. . . The artificial necessity of technique is not less harsh and implacable for being much less obviously menacing than natural necessity. When the Communists claim that they place the development of the technical society in a historical framework that automatically leads to freedom through the medium of the dialectical process; when Humanists such as Bergson, or Catholics such as Mounier, assert that man must regain control over the technical “means” by an additional quantity of soul, all of them alike show both their ignorance of the technical phenomenon and an impenitent idealism that unfortunately bears no relation to truth or reality.

Alongside these parades of mere verbalisms, there has been a real effort, on the part of the technicians themselves, to control the future of technical evolution. The principle here is the old one we have so often encountered: “A technical problem demands a technical solution.” At present, there are two kinds of new techniques which the technicians propose as solutions.

The first solution hinges on the creation of new technical instruments able to mediate between man and his new technical milieu. Robert Jungk, for example, in connection with the fact that man is not completely adaptable to the demands of the technical age, writes that “it is impossible to

create interstellar man out of the existing prime matter; auxiliary technical instruments and apparatus must compensate for his insufficiencies." The best and most striking example of such subsidiary instruments is furnished by the complex of so-called "thinking machines," which certainly belong to a very different category of techniques than those that have been applied up to now. But the whole ensemble of means designed to permit human mastery of what were means and have now become milieu are techniques of the second degree, and nothing more. Pierre de Latil, in his *La Pensee artificielle* [Artificial Thought], gives an excellent characterization of some of these machines of the second degree:

"In the machine, the notion of finality makes its appearance, a notion sometimes attributed in living beings to some intelligence inherent in the species, innate to life itself. Finality is artificially built into the machine and regulates it, an effect requiring that some factor be modified or reinforced so that the effect itself does not disturb the equilibrium . . . Errors are corrected without human analysis, or knowledge, without even being suspected. The error itself corrects the error. A deviation from the prescribed track itself enables the automatic pilot to rectify the deviation . . . For the machine, as for animals, error is fruitful; it conditions the correct path."

The second solution revolves about the effort to discover (or rediscover) a new end for human society in the technical age. The aims of technology, which were clear enough a century and a half ago, have gradually disappeared from view. Humanity seems to have forgotten the wherefore of all its travail, as though its goals had been translated into an abstraction or had become implicit; or as though its ends rested in an unforeseeable future of undetermined date, as in the case of Communist society.

Everything today seems to happen as though ends disappear, as a result of the magnitude of the very means at our disposal.

Comprehending that the proliferation of means brings about the disappearance of the ends, we have become preoccupied with rediscovering a purpose or a goal. Some optimists of good will assert that they have rediscovered a Humanism to which the technical movement is subordinated. The orientation of this Humanism may be Communist or non-Communist, but it hardly makes any difference. In both cases it is merely a pious hope with no chance whatsoever of influencing technical evolution. The further we advance, the more the purpose of our techniques fades out of sight. Even things which not long ago seemed to be immediate objectives—rising living standards, hygiene, comfort—no longer seem to have that character, possibly because man finds the endless adaptation to new circumstances disagreeable. In many cases, indeed, a higher technique obliges him to sacrifice comfort and hygienic amenities to the evolving technology which possesses a monopoly of the instruments necessary to satisfy them. Extreme examples are furnished by the scientists isolated at Los Alamos in the middle of the desert because of the danger of their experiments; or by the would-be astronauts who are forced to live in the discomfort of experimental camps in the manner so graphically described by Jungk.

But the optimistic technician is not a man to lose heart. If ends and goals are required, he will find them in a finality which can be imposed on technical evolution precisely because this finality can be technically established and calculated. It seems clear that there must be some common measure between the means and the ends subordinated to it. The required solution, then, must be a technical inquiry into ends, and this alone can bring about a

systematization of ends and means. The problem becomes that of analyzing individual and social requirements technically, of establishing, numerically and mechanistically, the constancy of human needs. It follows that a complete knowledge of ends is requisite for mastery of means. But, as Jacques Aventure has demonstrated, such knowledge can only be technical knowledge. Alas, the panacea of merely theoretical humanism is as vain as any other.

“Man, in his biological reality, must remain the sole possible reference point for classifying needs,” write Aventure. Aventure’s dictum must be extended to include man’s psychology and sociology, since these have also been reduced to mathematical calculation. Technology cannot put up with intuitions and “literature.” It must necessarily don mathematical vestments. Everything in human life that does not lend itself to mathematical treatment must be excluded—because it is not a possible end for technique—and left to the sphere of dreams.

Who is too blind to see that a profound mutation is being advocated here? A new dismembering and a complete reconstitution of the human being so that he can at last become the objective (and also the total object) of techniques. Excluding all but the mathematical element, he is indeed a fit end for the means he has constructed. He is his essence. Man becomes a pure appearance, a kaleidoscope of external shapes, an abstraction in a milieu that is frighteningly concrete—an abstraction armed with all the sovereign signs of Jupiter the Thunderer.