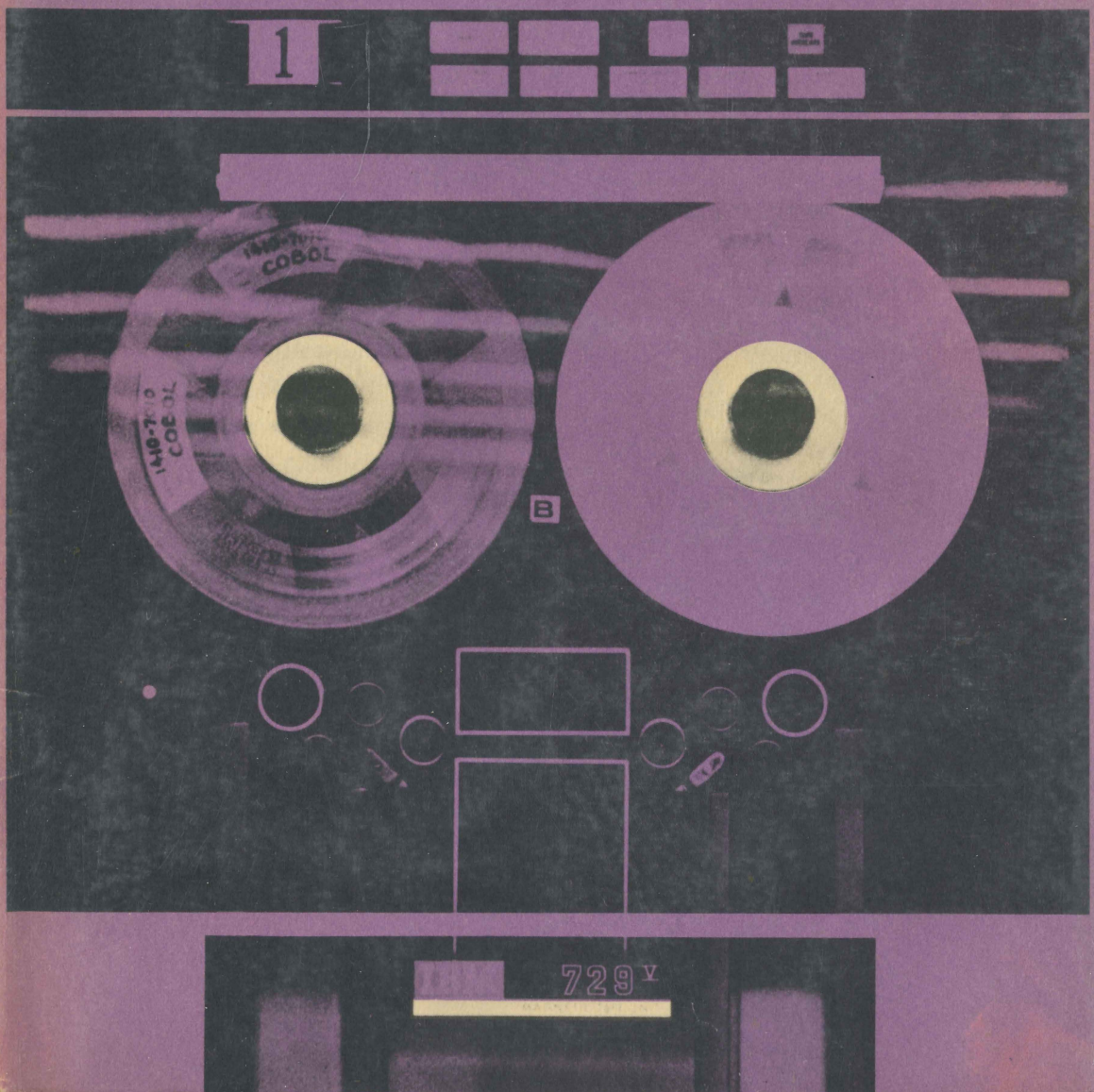
The Technological Society

Jacques Ellul

With an Introduction by Robert K. Merton

A penetrating analysis of our technical civilization and of the effect of an increasingly standardized culture on the future of man



THE TECHNOLOGICAL SOCIETY

is a rigorous, detailed, and persuasive analysis of virtually every aspect of contemporary civilization. With unsparing honesty, M. Ellul examines the impact of the technical view of life on politics, economics, and the totality of relationships in our culture. By technique he means not only the machine technology so many thinkers have attacked, but the standardization of procedures and behavior in order to develop "the one best method" for the achievement of any result. Thus, according to M. Ellul, the problem posed by technique lies in something more than the domination of machines over men; it lies in the domination of standardization over spontaneity and means over ends. Technique, and its substitution of "know how" for "know why," imposes routine and rigidity on every activity it touches; it erodes moral values; and it leads, in time, to a complete dehumanization. And the danger is that all this occurs not by design but by drift—by the very nature of technique itself.

In proposing and expanding this thesis, M. Ellul reopens, in sharp and forceful terms, the great debate of our age—the debate about the social, political, economic, and philosophical meanings of technique in the modern world. He offers no solution to our problems, but, as Robert K. Merton says in his illuminating introduc-

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TRANSLATED FROM THE FRENCH BY JOHN WILKINSON

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difference, however, relates to spontaneity. Propaganda technique is calculated and deliberate, whereas amusement technique is spontaneous and nondeliberate. The former is the result of the organizer's decision; the latter, of the mob's need.

Consider the average man as he comes home from his job. Very likely he has spent the day in a completely hygienic environment, and everything has been done to balance his environment and lessen his fatigue. However, he has had to work without stopping and under constant pressure; nervous fatigue has replaced muscular fatigue. When he leaves his job, his joy in finishing his stint is mixed with dissatisfaction with a work as fruitless as it is incomprehensible and as far from really productive work. At home he "finds himself" again. But what does he find? He finds a phantom. If he ever thinks, his reflections terrify him. Personal destiny is fulfilled only by death; but reflection tells him that for him there has not been anything between his adolescent adventures and his death, no point at which he himself ever made a decision or initiated a change. Changes are the exclusive prerogative of organized technical society, which one day may have decked him out in khaki to defend it, and on another in stripes because he had sabotaged or betrayed it. There was no difference from one day to the next. Yet life was never serene, for newspapers and news reports beset him at the end of the day and forced on him the image of an insecure world. If it was not hot or cold war, there were all sorts of accidents to drive home to him the precariousness of his life. Torn between this precariousness and the absolute, unalterable determinateness of work, he has no place, belongs nowhere. Whether something happens to him, or nothing happens, he is in neither case the author of his destiny.

The man of the technical society does not want to encounter his phantom. He resents being torn between the extremes of accident and technical absolutism. He dreads the knowledge that everything ends "six feet under." He could accept the six-feet-under of his life if, and only if, life had some meaning and he could choose, say, to die. But when nothing makes sense, when nothing is the result of free choice, the final six-feet-under is an abominable injustice. Technical civilization has made a great error in not suppressing death, the only human reality still intact.

Man is still capable of lucid moments about the future. Propa-

ganda techniques have not been able wholly to convince him that life has any meaning left. But amusement techniques have jumped into the breach and taught him at least how to flee the presence of death. He no longer needs faith or some difficult asceticism to deaden himself to his condition. The movies and television lead him straight into an artificial paradise. Rather than face his own phantom, he seeks film phantoms into which he can project himself and which permit him to live as he might have willed. For an hour or two he can cease to be himself, as his personality dissolves and fades into the anonymous mass of spectators. The film makes him laugh, cry, wonder, and love. He goes to bed with the leading lady, kills the villain, and masters life's absurdities. In short, he becomes a hero. Life suddenly has meaning.

The theater presupposed an intellectual mechanism and left the spectator in some sense intact and capable of judgment. The motion picture by means of its "reality" integrates the spectator so completely that an uncommon spiritual force or psychological education is necessary to resist its pressures. In any case, people go to the movies to escape and consequently yield to its pressures. They find forgetfulness, and in forgetfulness the honied freedom they do not find in their work or at home. They live on the screen a life they will never live in fact.

It will be said that dreams and hope have been the traditional means of escape in times of famine and persecution. But today there is no hope, and the dream is no longer the personal act of an individual who freely chooses to flee some "reality" or other. It is a mass phenomenon of millions of men who desire to help themselves to a slice of life, freedom, and immortality. Separated from his essence, like a snail deprived of its shell, man is only a blob of plastic matter modeled after the moving images.

There is a vast difference between the dreams and hopes of the past and those of the present. Formerly, with the conviction that "things would change," hope was a beacon illuminating the future. Dreams represented flight, but flight into one's own self. In motion pictures, however, the future is not involved. On the strip of film, what ought to change has already changed. And the flight of cinematic dreams has nothing to do with the inner life; it concerns mere externals. When people leave the movie theater, they are full of the possibilities they experienced in the shadows; they have received

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A LOOK AT THE FUTURE

We have completed our examination of the monolithic technical world that is coming to be. It is vanity to pretend it can be checked or guided. Indeed, 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, thraldom 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. (I have analyzed human victory over hunger in this vein.) 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 Pensée artificielle,* 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 Aventur has demonstrated, such knowledge can only be technical knowledge. Alas, the panacea of merely theoretical humanism is as vain as any other.[1]

"Man, in his biological reality, must remain the sole possible reference point for classifying needs," writes Aventur. Aventur'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

[1] It must be clear that the ends sought cannot be determined by moral science. The dubiousness of ethical judgments, and the differences between systems, make moral science unfit for establishing these ends. But, above all, its subjectivity is a fatal blemish. It depends essentially on the refinement of the individual moral conscience. An average morality is ceaselessly confronted with excessive demands with which it cannot comply. Technical modalities cannot tolerate subjectivity.

constructed. He is also completely despoiled of everything that traditionally constituted 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.

A Look at the Year 2000. In 1960 the weekly *l'Express* of Paris published a series of extracts from texts by American and Russian scientists concerning society in the year 2000. As long as such visions were purely a literary concern of science-fiction writers and sensational journalists, it was possible to smile at them.[2] Now we have like works from Nobel Prize winners, members of the Academy of Sciences of Moscow, and other scientific notables whose qualifications are beyond dispute. The visions of these gentlemen put science fiction in the shade. By the year 2000, voyages to the moon will be commonplace; so will inhabited artificial satellites. All food will be completely synthetic. The world's population will have increased fourfold but will have been stabilized. Sea water and ordinary rocks will yield all the necessary metals. Disease, as well as famine, will have been eliminated; and there will be universal hygienic inspection and control. The problems of energy production will have been completely resolved. Serious scientists, it must be repeated, are the source of these predictions, which hitherto were found only in philosophic utopias.

The most remarkable predictions concern the transformation of educational methods and the problem of human reproduction. Knowledge will be accumulated in "electronic banks" and transmitted directly to the human nervous system by means of coded electronic messages. There will no longer be any need of reading or learning mountains of useless information; everything will be received and registered according to the needs of the moment. There will be no need of attention or effort. What is needed will pass directly from the machine to the brain without going through consciousness.

In the domain of genetics, natural reproduction will be forbidden. A stable population will be necessary, and it will consist of the highest human types. Artificial insemination will be employed. This, according to Muller, will "permit the introduction into a car-

[2] Some excellent works, such as Robert Jungk's *Le Futur a déjà commencé,* were included in this classification.

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tion, he "formulates a comprehensive and forceful social philosophy of our technical civilization . . . and requires us to examine anew . . . the essential tragedy of a civilization increasingly dominated by technique."

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JACQUES ELLUL was born on January 6, 1912, in Bordeaux, France. He studied at the University of Bordeaux and at the University of Paris, and holds degrees in Sociology, Law, and the History of Law. Since 1938, he has been associated with the University of Bordeaux as professor of History and Contemporary Sociology.

During the Second World War, M. Ellul was a leader in the French resistance movement, and since then he has been active in politics in his native city. He is prominent in the worldwide Ecumenical movement.

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