

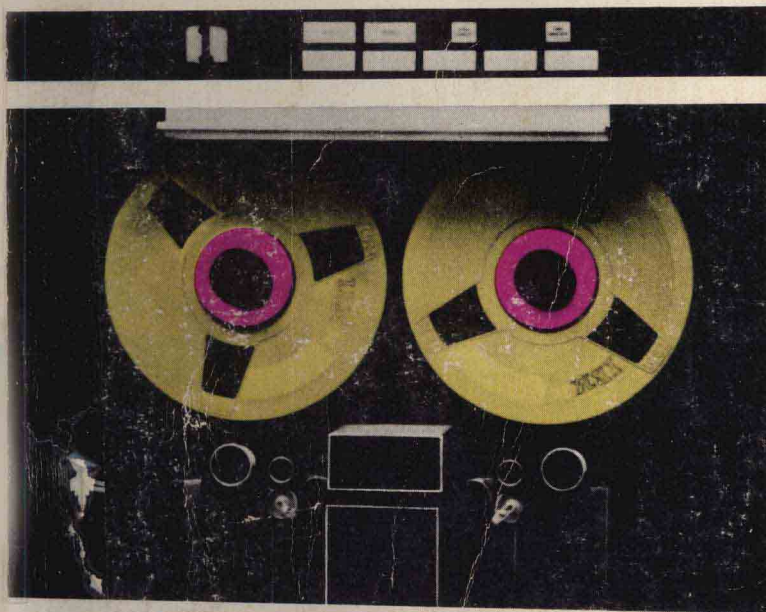
THE TECHNOLOGICAL SOCIETY

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 f man

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TECHNOLOGICAL
SOCIETY

JACQUES ELLUL

TRANSLATED FROM THE FRENCH BY JOHN WILKINSON



WITH AN INTRODUCTION BY ROBERT K. MERTON,
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Statement from the Publisher

I would never have heard of this book and its author were it not for my friend W. H. Ferry, Vice-President of the Center for the Study of Democratic Institutions of the Fund for the Republic, Inc., at Santa Barbara, California.

Sometime in 1961, Robert M. Hutchins and Scott Buchanan told Aldous Huxley of the Center's interest in technology and asked his opinion about contemporary European works on the subject. Huxley recommended above all Ellul's *La Technique*, which had been published in Paris by Armand Colin in 1954 without having attracted much attention. At any rate the copies of the French original which the Center hastened to procure were from the first edition, as was also the copy I secured after my old friend Ferry had written me about it.

I couldn't possibly read Ellul's French, which apart from the matters with which he deals is very difficult, but since Scott Buchanan and Columbia's distinguished sociologist Robert K. Merton both said the book deserved publication in English, and since Mr. Buchanan had a translator at hand in John Wilkinson of the Center staff, who was willing to tackle this difficult and almost sure to be thankless job, I committed our firm to an undertaking that I soon began to call "Knopf's folly."

Members of the Center met Ellul in Greece in 1961, where he attended a conference as the Center's guest and read a paper he had written at their request. They later paid him for a new introduction he had written for the American edition of *La Technique*. And the Center also helped to defray some extraordinary expenses incurred by Professor Wilkinson in the course of his work.

I wish belatedly to thank the Center publicly for all they did to help us with one of the most difficult editorial tasks Alfred A. Knopf, Inc., has ever undertaken. This note should have appeared in our first printing and I am sorry it did not.

Foreword

In *The Technological Society*, Jacques Ellul formulates a comprehensive and forceful social philosophy of our technical civilization. Less penetrating than Thorstein Veblen's *The Engineers and the Price System*, it nevertheless widens the scope of inquiry into the consequences of having a society pervaded by technicians. Ellul's book is more colorful and incisive than Oswald Spengler's *Man and Technics*—which by contrast seems faded and unperceptive—and it is more analytical than Lewis Mumford's trilogy—although Ellul handles the historical evidence much more sparingly and with less assurance than Mumford. And it is more far-ranging and systematic than Siegfried Giedion's *Mechanization Takes Command*, which, of all the books overlapping Ellul's subject, comes close to giving the reader a sense of what the dominance of technique might mean for the present and the future of man. In short, whatever its occasional deficiencies, *The Technological Society* requires us to examine anew what the author describes as the essential tragedy of a civilization increasingly dominated by technique.

Despite Ellul's forceful emphasis upon the erosion of moral values brought about by technicism, he has written neither a latter-day Luddite tract nor a sociological apocalypse. He shows that he is thoroughly familiar with the cant perpetuated by technophobes

and for the most part manages to avoid their clichés. Indeed, he takes these apart with masterly skill to show them for the empty assertions they typically are. Neither does he merely substitute a high moral tone or noisy complaints for tough-minded analysis. His contribution is far more substantial. He examines the role of technique in modern society and offers a system of thought that, with some critical modification, can help us understand the forces behind the development of the technical civilization that is distinctively ours.

Enough of Ellul's idiosyncratic vocabulary has survived the hazards of transoceanic migration to require us to note the special meanings he assigns to basic terms. By *technique*, for example, he means far more than machine technology. Technique refers to any complex of standardized means for attaining a predetermined result. Thus, it converts spontaneous and unreflective behavior into behavior that is deliberate and rationalized. The Technical Man is fascinated by results, by the immediate consequences of setting standardized devices into motion. He cannot help admiring the spectacular effectiveness of nuclear weapons of war. Above all, he is committed to the never-ending search for "the one best way" to achieve any designated objective.

Ours is a progressively technical civilization: by this Ellul means that the ever-expanding and irreversible rule of technique is extended to all domains of life. It is a civilization committed to the quest for continually improved means to carelessly examined ends. Indeed, technique transforms ends into means. What was once prized in its own right now becomes worthwhile only if it helps achieve something else. And, conversely, technique turns means into ends. "Know-how" takes on an ultimate value.

The vital influence of technique is of course most evident in the economy. It produces a growing concentration of capital (as was presciently observed by Marx). Vast concentrations of capital require increasing control by the state. Once largely confined within the business firm, planning now becomes the order of the day for the economy as a whole. The dominance of technique imposes centralism upon the economy (despite comparatively inconsequential efforts to decentralize individual industrial firms), for once technique develops beyond a given degree, there is no effective

alternative to planning. But this inevitable process is impersonal.

Only the naïve can really believe that the world-wide movement toward centralism results from the machinations of evil statesmen.

The intellectual discipline of economics itself becomes technicized. Technical economic analysis is substituted for the older political economy included in which was a major concern with the moral structure of economic activity. Thus doctrine is converted into procedure. In this sphere as in others, the technicians form a closed fraternity with their own esoteric vocabulary. Moreover, they are concerned only with what is, as distinct from what ought to be.

Politics in turn becomes an arena for contention among rival techniques. The technician sees the nation quite differently from the political man: to the technician, the nation is nothing more than another sphere in which to apply the instruments he has developed. To him, the state is not the expression of the will of the people nor a divine creation nor a creature of class conflict. It is an enterprise providing services that must be made to function *efficiently*. He judges states in terms of their capacity to utilize techniques effectively, not in terms of their relative justice. Political doctrine revolves around what is useful rather than what is good. Purposes drop out of sight and efficiency becomes the central concern. As the political form best suited to the massive and unprincipled use of technique, dictatorship gains in power. And this in turn narrows the range of choice for the democracies: either they too use some version of effective technique—centralized control and propaganda—or they will fall behind.

Restraints on the rule of technique become increasingly tenuous. Public opinion provides no control because it too is largely oriented toward "performance" and technique is regarded as the prime instrument of performance, whether in the economy or in politics, in art or in sports.

Not understanding what the rule of technique is doing to him and to his world, modern man is beset by anxiety and a feeling of insecurity. He tries to adapt to changes he cannot comprehend. The conflict of propaganda takes the place of the debate of ideas. Technique smothers the ideas that put its rule in question and filters out for public discussion only those ideas that are in substantial

accord with the values created by a technical civilization. Social criticism is negated because there is only slight access to the technical means required to reach large numbers of people.

In Ellul's conception, then, life is not happy in a civilization dominated by technique. Even the outward show of happiness is bought at the price of total acquiescence. The technological society requires men to be content with what they are required to like; for those who are not content, it provides distractions—escape into absorption with technically dominated media of popular culture and communication. And the process is a natural one: every part of a technical civilization responds to the social needs generated by technique itself. Progress then consists in progressive de-humanization—a busy, pointless, and, in the end, suicidal submission to technique.

The essential point, according to Ellul, is that technique produces all this without plan; no one wills it or arranges that it be so. Our technical civilization does not result from a Machiavellian scheme. It is a response to the "laws of development" of technique.

In proposing and expanding this thesis, Ellul reopens the great debate over the social, political, economic, and philosophical meaning of technique in the modern age. We need not agree with Ellul to learn from him. He has given us a provocative book, in the sense that he has provoked us to re-examine our assumptions and to search out the flaws in his own gloomy forecasts. By doing so, he helps us to see beyond the banal assertion that ours has become a mass society, and he leads us to a greater understanding of that society.

ROBERT K. MERTON

Columbia University
January 1964

Translator's Introduction

Jacques Ellul
as the Philosopher of the Technological Society

Ernst Jünger once wrote that technology is the real metaphysics of the twentieth century. The irreversible collectivist tendencies of technology, whether it calls itself democratic or authoritarian, were already apparent to him, at the end of World War I. It is this society, in all its forms, which Jacques Ellul, of the Faculty of Law of Bordeaux, seeks to analyze.

Professor Ellul, unlike most of the other surviving leaders of the French Resistance, still functions as a voice of conscience for a France which seems to feel itself in danger of being overwhelmed from literally every point of the compass by the materialistic values of the cold war—consumer society. Greater influence is enjoyed by others such as Malraux and Sartre; but Malraux is in the service of the welfare state (albeit one with Gallic flourishes) and Sartre is growing rich by dispensing absinthe morality in the cellars of the Left Bank. "I sometimes wonder," says Ellul in a related connection, "about the revolutionary value of acts accompanied by such a merry jingle of the cash register."

Ellul's principal work, this book, appeared under the title *La Technique* and the subtitle *L'enjeu du siècle*. The subtitle, which means literally "the stake of the century," is a characteristically dark and difficult Ellulian phrase which may or may not refer to a kind of "Pascal wager" put on technology by twentieth-century man. The *Technique* of the title, however, lends itself more easily to interpretation, although, characteristically, it too is used in a sense it does not usually enjoy. *Technique*, the reader discovers more or less quickly, must be distinguished from the several *techniques* which are its elements. It is more even than a generalized mechanical technique; it is, in fact, nothing less than the organized ensemble of *all* individual techniques which have been used to secure any end whatsoever. Harold Lasswell's definition comes closest to Ellul's conception: "The ensemble of practices by which one uses available resources to achieve values." This definition has the merit of emphasizing the *scope* of technique; but Ellul's further account makes it clear that it does not go far enough, since technique has become indifferent to all the traditional human ends and values by becoming an end-in-itself. Our erstwhile means have all become an end, an end, furthermore, which has nothing human in it and to which we must accommodate ourselves as best we may. We cannot even any longer pretend to act as though the ends justified the means, which would still be recognizably human, if not particularly virtuous. Technique, as the universal and autonomous technical fact, is revealed as the technological society itself in which man is but a single tightly integrated and articulated component. *The Technological Society* is a description of the way in which an autonomous technology is in process of taking over the traditional values of every society without exception, subverting and suppressing these values to produce at last a monolithic world culture in which all nontechnological difference and variety is mere appearance.

The technical malaise so deeply felt in non-Communist Europe at the imminent takeover has brought forth in recent years an astonishingly large number of literary, philosophic, and sociological analyses of the technical phenomenon. One of the great merits of Ellul's book arises from the fact that he alone has pushed such analysis to the limit in all spheres of human activity and in the totality of their interrelatedness. It may be added that what some

authors feel to be the book's demerits arise from the same source; they maintain that society more often than not refuses to be pushed to that *reductio ad absurdum* which is the inevitable end point of every thoroughgoing analysis. The books of such authors generally end on a note of optimism. A final chapter always asks: "What is to be done?" Unfortunately, their answers to the question are either inefficacious myths which confront reality with slogans, or only too efficacious technical solutions to technical problems which end only in subjecting man the more thoroughly to technology. The former are exemplified by most modern religions, philosophical systems, and political doctrines; the latter by schemes for mass education or mass cultivation of leisure, which, in Ellul's analysis, are themselves highly impersonal and technicized structures having much more in common with the assembly line than with what mankind has traditionally designated by these names.

The technological malaise seems to have been much less acutely felt in the United States. Individuals such as Aldous Huxley, Paul Tillich, and Erich Fromm, who have raised their voices in protest, are of European origin and received their education in Europe. Technolaters such as Professors B. F. Skinner of Harvard and most other American professors represent the familiar type of the American intellectual caught in an ecstatic technical vertigo and seldom proceeding beyond certain vague meditations on isolated problem areas such as the "population explosion," if indeed he considers the real problems posed by technology at all. Ellul holds the Americans to be the most conformist people in the world, but in fairness it must be objected that, in his own analysis, the Soviets seem better to deserve this dubious honor since they have made even politics into a technique. The Americans, apart from technicizing the electoral process, have left at least the sphere of politics to the operations of amateurish bunglers and have thereby preserved a modicum of humanity. It may be added that France, too, has been taken into the technological orbit with a speed which must have astonished Ellul. De Gaulle's plans for his new France contemplate the complete technicization of French society in nine years instead of the quarter century of grace which Ellul predicts in his book.

Since the religious object is that which is uncritically worshipped, technology tends more and more to become the new god.

This is true for all modern societies, but especially so for Communist societies, since Marxism, in Ellul's analysis of it, *consciously* identifies the material infrastructure, upon which the social superstructure is raised, with technology.¹ The expression of technological malaise in the Soviet Union or in Red China, where technolatriy has become the new Establishment, would be blasphemy in the strictest sense of the word.

In composition and style, Ellul's book is certain to be an enigma, and even a scandal, to many. It is not sociology, political economy, history, or any other academic discipline, at least as these terms are usually understood. It will not even appear to be philosophy to a generation whose philosophic preoccupations are almost exclusively analytic. Ellul himself is in doubt about the value of the designation *philosopher*. But, if we think back to the *dialectical philosophies of the whole* of thinkers such as Plato and Hegel, Ellul's book is philosophy. If an American specialist, say, in economics, with his "terribly linear" logic and his apparently unshakable conviction that his arbitrarily delimited systems can and should be studied in isolation from all others, were to flip open Ellul's book to those sections which treat of matters economic, it is conceivable that he would be repelled by what he found. But if this same specialist could somehow or other implausibly be persuaded to persevere in the attempt to see with Ellul economics in the light of the whole of modern technical culture, it is likewise conceivable that he would gain important insights, not perhaps into the fine-structure of academic economic problems, but in the border region where his subject abuts on other disciplines, in that area where basic discoveries in economics (and everything else) are always made by gifted amateurs, who *faute de mieux* must be called philosophers.

Ellul's admittedly difficult style is not to be referred to that *style heurté* affected by so many postwar French existentialists. An element of this is doubtless present, but it would be much more accurate to say that, in an essentially dramatic work such as the present book must be deemed to be, the transitions and turns of thought must have a character entirely different from those to be

¹ Ellul once again showed much prescience. Marxist publications of the last few years have come to speak of the "technical-material infrastructure" instead of the "material infrastructure."

encountered in the ultra-respectable academic texts which have taken over from mathematics certain linear and deductive modes of presentation; modes, which, whatever their pedagogic value may be, serve, even in mathematics, only to obscure the way in which truth comes into being. To its dramatic presentation of what are, after all, well-known facts, Ellul's book owes its high persuasive quality.

This dramatic character would have been clearly evident if the book had been written as a dialogue. Indeed, a reader could easily cast it into this form by representing to himself the various thinkers who are introduced by name as the *dramatis personae*, and by treating the nameless "On the one hands" and "On the other hands" in the same way. In this way the "successive recantations" of some positions and the development of others in the light of a guiding concept of the whole become clear, and the book's essential affinity to a Platonic dialogue like the *Republic* is evident. (Nowhere is this successive recantation more evident than in the first chapter's search for definitions.) Even clearer is the similarity of the book to Hegel's *Phänomenologie des Geistes*, the last work of Western philosophy with which, in the translator's opinion, the present work bears comparison. *The Technological Society* is not a "phenomenology of mind" but rather a "phenomenology of the technical state of mind." Like Hegel's book, it is intensely histrionic; and like it, it shows, *without offering causal mechanisms*, how its subject in its lowest stage (technique as machine technique) develops dialectically through the various higher stages to become at last the fully evolved phenomenon (the technical phenomenon identical with the technical society). Again, as with Hegel, what the philosopher J. Loewenberg has called the "histrionic irony" of statement must drive the literal-minded reader mad.

The Danish historian of philosophy, Harald Hoeffding, says of Hegel's *Phenomenology*:

The course of development described in this unique work is at once that of the individual and of the race; it gives at the same time a psychology and a history of culture—and in the exposition the two are so interwoven that it is often impossible to tell which of the two is intended.

With the stipulation that Ellul is treating of culture in the sense of the technological society, Hoeffding's penetrating remark holds as well for Ellul's book.

In such a work it is impossible to separate method from content. Yet, in another sense, and especially for a translator, it is imperative to do so. Although, after the time of Descartes, French savants in general were preoccupied with clarifying problems of method, it has been almost impossible in the twentieth century to extort from French writers on sociology and economics an adequate account of their procedures. Some of them have doubtless been oversensitive to Poincaré's famous jibe concerning the sciences "with the most methods and the fewest results." In Ellul's case, however, disinclination to discuss methodology specifically is almost certainly due in large part to his pervasive distrust of anything at all resembling a fixed doctrine. Nevertheless, throughout the book are scattered a large number of references to method, and it is possible and necessary to reconstruct from them a satisfactory account of the author's methodology.

Ellul first "situates" the "facts" of experience in a general context, and then proceeds to "focus" them. This figure of speech, drawn from, or at least appropriate to, descriptive astronomy, appears over and over again in connection with each supervening stage of complexity of the subject matter. The final result of the procedure is to bring to a common focal point rays proceeding from very different spheres. The reader should be warned that it is only possible to approximate in English the mixed metaphors and the studied imprecisions of each new beginning of the process, which are gradually refined to yield *at the focus* a precise terminology. The translator was always uncomfortably aware of too little precision, or too much, in his choice of English words. The reader seriously interested in these nuances has no recourse but to consult the original. The translator can do little more for him than to call his attention to the problem. Anyone familiar with similar "dialectic moments" in the works of Hegel or of Max Weber will understand at once what is meant.

Ellul repeats again and again that he is concerned not to make value judgments but to report things as they are. One might be tempted to smile at such statements in view of the intensely personal and even impassioned quality of a work in which one is never

for a moment unaware where the author's own sympathies lie. Nonetheless, on balance, it seems clear that he has not allowed his own value judgments to intrude in any illegitimate way on questions of fact. "Fact" is very important to Ellul, but only as experienced in the context of the whole. Facts as they figure in uninterpreted statistical analyses of a given domain, or as they may be revealed by opinion polls and in newspapers, are anathema to him; and he permits himself many diatribes against this kind of "abstract," disembodied fact which is so dear to the hearts of Americans, at least as Ellul imagines them to be. With this proviso, Ellul can echo the dictum of Hegel's *Phenomenology* that the only imaginable point of departure of philosophy is experience.

The insistence on rendering a purely phenomenological account of fact, without causal explanation of the interrelation of the subordinate facts, may seem distasteful to some readers. Since Aristotle it has been a common conception of science that we have knowledge only when we know the Why. Admittedly, whenever causal knowledge is available, it is indeed valuable. But it ought not to be forgotten that such knowledge is increasingly hard to come by, and, in fact, hardly makes its appearance at all in modern physics, say, where one must, for the most part, be content with purely functional (that is, phenomenological) equations, which dispense with any appeal to mechanism but which are nonetheless adequate for prediction and explanation, and which have the enormous additional advantage of containing no hidden concepts unconfrontable by experience. The important questions concerning the technological society rarely turn for Ellul on how or why things came to be so, but rather on whether his description of them is a true one.

Ellul's methodology is fundamentally dominated by the principle which has come to be called Engel's law, that is, the law asserting the passage of quantity into quality. To give a commonplace example, the city, after it reaches a certain threshold of population, is supposed to pass over into a qualitatively different type of urban organization. Unfortunately, both the popular and the usual philosophical accounts of Engel's law are incomplete, to use no worse word.

First, it is incorrect to speak at all of a "threshold" of quantity which, having been transcended, gives rise to a change of quality and to a new set of laws and explanatory principles. In dialectical

logic, *every* change of quantity is simultaneously a change of quality; and the discernment of a "threshold" quantity is partly a psychological fact of awareness, and partly an illicit attempt to try to import back into a dialectical logic some of the unequivocalness of the ordinary either/or logic. Now, Ellul's explanation of the technical takeover is based fundamentally on the fact that the material (that is, technical) substratum of human existence, which was traditionally not allowed to be a legitimate end of human action, has become so "enormous," so "immense," that men are no longer able to cope with it as means, so that it has become an end-in-itself, to which men must adapt themselves. But, with a better understanding of the illusory nature of the "threshold quantity," we are able to turn aside the objections which are always raised by those who rightly but extraneously urge that historical societies have *always* had to struggle with the possibility of a material takeover and that the present state of affairs is therefore not something new. The answer, of course, is that the objection is irrelevant. Ellul could not mean to assert that men in the past have not had to contend with material means which threatened to exceed their capacity to make good use of them, but that men in the past were not confronted with technical means of production and organization which in their sheer numerical proliferation and velocity unavoidably surpassed man's relatively unchanging biological and spiritual capacities to exploit them as means to human ends.

Second, Engel's law must *never* be taken to imply a one-way transition of quantity into quality. In dialectical logic the transformation of quality into quantity is a necessary concomitant of the reversible transformation of quantity into quality. It is, in fact, *the essence of technique to compel the qualitative to become quantitative*, and in this way to force every stage of human activity and man himself to submit to its mathematical calculations. Ellul gives examples of this at every level. Thus, technique forces all sociological phenomena to submit to the clock, for Ellul the most characteristic of all modern technical instruments. The substitution of the *tempus mortuum* of the mechanical clock for the biological and psychological time "natural" to man is in itself sufficient to suppress all the traditional rhythms of human life in favor of the mechanical. Again, genuine human communities are suppressed by