

From *The Technological Society* by Jacques Ellul

(1954, French edition; 1964, English edition)

Excerpted from chapter 4 “Technique and the State” under subsection, “Repercussions on the State”

Compiled by Ted Lewis as preparatory reading for the Spring 2023 IJES Zoom discussion groups.

Discussion focuses for three Saturdays: (10 AM to noon Central Time)

1. April 22 – Pages 1 & 2

2. May 6 – Pages 3 & 4

3. June 3 – Pages 5 & 6

Note: Each discussion will cover themes from all 6 pages, but will still unfold in three sections.

(Earlier paragraph from p. 248 re: consequences)

The first consequence of the conjunction of state and technique is the progressive transformation of the old techniques of the state after they have come in contact with the new techniques — formerly private but now becoming public. When a comparison is made between private and public techniques, it is noted that private techniques are incomparably more efficient. (I have already indicated certain reasons for this.) To the extent that techniques remain private, they lie outside the framework of the state. When they come under state control, however, the question inevitably arises why these techniques should not be incorporated into the traditional framework of the state.

(Proceeding on p. 252)

The Technical Organism. A second consequence of the penetration of the state by techniques is that the state as a whole becomes an enormous technical organism. Thus, nationalization of certain industrial plants not only makes the state an industrial “boss” or technician, but also compels it to revise its techniques of organization and administration. Indeed, in Great Britain, France, and even the United States the dimensions of the newer industrial organizations of the state far surpass those of private enterprise. We are witnessing the creation of technical bureaus of a new character and the creation of hitherto unknown types of organizations designed to redistribute power internally on the different levels. All this, unbeknown to the public, doubtless produces repercussions on the structure of the state, the effects of which are decisive but will only make themselves felt some years hence. It may be added that these changes are much more widespread in Great Britain than in France.

In order to gain some conception of the full range of techniques applied by the modern state, consider the following enumeration of techniques which lie outside the traditional domains already examined:

- Industrial and commercial techniques of all orders (the state becoming state-boss to an ever greater degree)
- Insurance and banking techniques, including social security, family allotments, and nationalized banks
- Organizational techniques, including coordinating commissions among all services, and new inspection systems
- Psychological techniques, including services of propaganda, vocational guidance, and psycho-techniques
- Artistic techniques, including radio, television, a more or less official motion-picture industry, city planning, and controlled tourism
- Scientific techniques, including the various centers of scientific research
- Planning techniques (with arbitrary objectives), including general economic planning, transport planning, and city planning
- Biological techniques (already a reality, although rare), including human stud-farms, euthanasia, obligatory vaccination and medical inspection, and social assistance
- Sociological techniques (for the management of the masses and the study of public opinion)

Each of these comprises various subsidiary techniques, complex mechanisms, and specialized methods. The state, since it applies these methods where necessary, can itself no longer be anything other than technical. Persons who become panic-stricken before such administrative proliferation and aggrandizement of state activities, who criticize social security, for example, because it employs too many civil servants, who hold that a return to liberalism would suppress this proliferation, show thereby that they have not understood the development of modern times. No deliberate choice on the part of the state, no theoretical decision, has brought about this growth of technique; its causes were independent of the personal or collective. The modern state could no more be a state without techniques than a businessman could be a businessman without the telephone or the automobile. The businessman does not employ these objects because he is particularly enamored of progress. The state does not employ propaganda or planning because it is socialist. The circumstances are such that the state cannot be other than it is. Not only does it need techniques, but techniques need it. [Jump to end of paragraph on 254.] Theoretically our politicians are at the center of the machinery, but actually they are being progressively eliminated by it. Our statesmen are impotent satellites of the machine, which, with all its parts and techniques, apparently functions as well without them. The state machine is, to be sure, not yet well adjusted, but we are only at the beginning, and its adjustment is already good enough to give the unmistakable impression that it will tolerate no outside influence.

The Conflict Between the Politicians and the Technicians. The intrusion of techniques into the machinery of the state involves the conflict of politicians and technicians. "Let the technicians speak" is a leitmotiv of all the journals of the opposition. [Jump to p. 256.]

In democratic regimes, there is indeed a conflict between politician and technician, but it is apparently much less acute. Two questions arise. First, how does it come about that the conflict is

greater in the dictatorships? Second, how does it come about that the technicians do not take the upper hand in a democracy and overwhelm the politicians, who possess no serious means of resistance? The answer to the second question enables us to dispose once and for all of the idea that there is a natural and inevitable hostility between politicians and technicians. As for the first question, there is an easy reply: in a dictatorship the politician is more demanding and makes his weight felt more heavily, so that the technicians find his decisions rather difficult to tolerate. But then how to explain the fact that dictatorships make the most of the technician, submitting everything to his judgment and integrating everything into the technical system?

The answer is that the conflict is not between politicians and technicians but among technicians of different categories. In the dictatorships, the politician aims, successfully or unsuccessfully, to comply with the demands of a political technique. In democratic systems, the politician complies only with the requirements of a technique for getting himself elected; he has an altogether inadequate grasp of the various technical services. He has no direct relation to any of the innumerable technical activities. The politician in a dictatorial system, on the other hand, tends to become a technician and ipso facto collides with other techniques.

The new political technique claims to be concerned with *all* techniques, indeed to effect a synthesis among them. Synthesis is very likely its real function. But synthesis cannot be achieved at the first attempt, and the claim is not easily accepted by the other technicians. We are witnessing a crisis of adaptation. Political technique is far from realization; it is only in its first stammering stages. Yet it claims to be the science of synthesis, as did theology in the Middle Ages or philosophy in the eighteenth century. When the engineer protests against the politician's decisions, he may be justified on the grounds that the politician is deceiving himself and in reality is quite ignorant. But the engineer may also be ignorant of the technical motives behind the politician's decision; the engineer has no conception of the elements necessary to judge political technique on the plane of synthesis. This is indeed a crisis of adaptation; but precisely because adaptation is involved, the conflict does not lead to the overthrow of the regime.

[After a UK example and introducing the US situation...] Unfortunately, the Americans do not consider the inverse problem, which is, objectively speaking, becoming more important. When the expert has effectively performed his task of pointing out the necessary ways and means, there is generally only one logical and admissible solution. The politician will then find himself obliged to choose between the technician's solution, which is the only reasonable one, and other solutions, which he can indeed try out at his own peril but which are not reasonable. At such a moment the politician is gambling with his responsibility since there are such great chances of miscarriage if he adopts technically deviant solutions. In fact, the politician no longer has any real choice; decision follows automatically from the preparatory technical labors. We must recognize that every advance made in the techniques of inquiry, administration, and organization in itself reduces the power and the role of politics.

Consequently, the opposition between technicians and politicians places the politician squarely before a truly decisive dilemma. Either the politician will remain what he is in a democracy, in which case his role is fated to become less and less important in comparison to the role of technicians of all sorts (a state of affairs already evident in the financial sphere); or the politician will take the road of political technique, in which case the crisis of adaptation will inevitably arise. If the politician really wishes to continue to exist, he must choose the second solution as the only

possible one. The existence of techniques in all other spheres forces him to this choice. Even so, little by little he is being stripped of any real power and reduced to the role of a figurehead. These techniques entail for him both the possibility and the obligation to devolve a political technique. This does not mean dictatorship, which is a provisional, trial form. It means, as we shall see, an inevitable and radical transformation of the political perspective. The Nazi dictatorship and Stalin's regime ought not to be completely identified. I have already stated that Lenin was the first man to create a political technique. For Lenin — and Stalin understood this in a remarkable way — the politician was neither a theoretician nor a chief of state in the traditional sense, but a technician.

[p. 260-4 discussion of Fascist and Communist, then Democratic contexts. Resuming on 265.]

The nation becomes the object of the technical state in that it furnishes all the different kinds of material substratum: men, money, economy, and so on. The state becomes a machine designed to exploit the means of the nation. The relation between state and nation is henceforth completely different from what it had been before. The nation is no longer primarily a human, geographic, and historical entity. It is an economic power whose resources must be put to work, and to which a "yield" must be returned. . . . Once the technician has commenced his operations, he cannot recognize any limits. He cannot esteem or respect anything in the nation except the "nature of things." This promotes the greater coherence of the state-nation which is so characteristic of our times.

What is true on the national level is also true on the level of international organization. In view of the radical setbacks experienced by the political organisms designed to foster international agreement, it was decided to entrust further exploration along these lines to a group of technicians. It was believed that international consideration of the areas to be exploited, rather than purely national interests, would be more propitious to an entente. Thus, in 1949 a great assemblage consisting of 550 scientists and technicians opened its deliberations at Lake Success to consider how best to exploit the world's natural resources. International projects of this kind are much less advanced than similar intra-national projects, and the reactions of politicians to the technicians are correspondingly more enthusiastic. This was evident at the 1949 Strasbourg assembly of the Organisation Européenne de Coopération Economique, a purely technical group. The Americans were of the opinion that this organization did not progress as quickly as the technical situation permitted. We are witnesses at the inception, on the international level, of the same "takeover" by the technicians which we have already observed on the national level.

The second element implied in the transformation of the state and the predominance of the technician is the progressive suppression of ideological and moral barriers to technical progress. The old techniques of the state were a compound of purely technical elements and moral elements such as justice. The moral elements are not completely negligible even today, although they by no means occupy the place of honor accorded them in official discourse. The techniques employed by private persons are usually techniques in a pure state, and contain no admixture of moral elements. (We shall see later on that this is no random fact, but the result of the very nature of technique.) The state is charged not only with maintaining respect for law and order but also with establishing just relations among its citizens. It therefore imposes limits on the pure technique of private persons. Thus, from the beginning, the liberal state forbade the free manufacture of explosives and

substances pernicious to health. On a higher plane, it struggled by means of antitrust laws (as in The United States) against the trust, an economic organization notorious for social injustice. It also established labor legislation limiting the abuse of the workers by mechanical techniques. In the area of justice, the state has been a barrier and a check against private technical abuses. But when technique became state technique, when technical instrumentalities passed into the hands of the state, did the state adhere to its old wisdom? Experience must answer in the negative. The techniques, to which the state opposed checks when they were in the hands of private persons, become unchecked for the state itself. There is no self-limitation in this respect.

[The following pages provide a variety of examples which underscores Ellul's main thesis as stated on p. 271 in italics.]

These examples help us grasp the fact *that the structures of the modern state and its organs of government are subordinate to the techniques dependent on the state. If we were to consider in turn each of the indispensable services of the modern state, we would find that they are becoming more and more alike, regardless of the theories of government under which they operate.* We must insist on the *more and more*; the final identity has not yet been achieved.

[Ellul later, in the section on Technique and Political Doctrines (p. 280f) addresses how all doctrines, Left and Right leaning, are overtaken by Technique.]

Doctrinal elements coincide exactly with the development of state techniques; doctrine expresses the social situation exactly and is therefore vital. It is believed in by a large number of citizens; it tends toward effective application and possesses a contagious force. On the other hand, the doctrines of traditional democracy — the rights of man, the abstract conception of the citizen, equality in voting, the clash between power and liberty — are not adapted to modern social reality. For this reason, we are witnessing the rapid sclerosis and obsolescence of these doctrines; and it is becoming harder and harder to defend them.

[Ellul wraps up his section on “The Repercussions on the State” with “The Totalitarian State” starting on p. 284.]

The Totalitarian State. Finally, technique causes the state to become totalitarian, to absorb the citizens' life completely. We have noted that this occurs as a result of the accumulation of techniques in the hands of the state. Techniques are mutually engendered and hence interconnected, forming a system that tightly encloses all our activities. When the state takes hold of a single thread of this network of techniques, little by little it draws to itself all the matter and the method, whether or not it consciously wills to do so. Even when the state is resolutely liberal and democratic, it cannot do otherwise than become totalitarian. [Jump to 287.]

The words *the totalitarian state* inevitably evoke clichés and passionate opinions. But these no longer represent anything but historical reminiscences. The totalitarian state we are discussing here is not the brutal, immoderate thing which tortured, deformed, and broke everything in its path, the

battleground of armed bullies and factions, a place of dungeons and the reign of the arbitrary. These things did certainly exist; but they represented transient traits, not real characteristics of the totalitarian state. It might even be said that they were the human aspects of the state in its inhumanity. Torture and excess are the acts of persons who use them as a means of releasing a suppressed need for power. This does not interest us here. It does not represent the true face of the completely technical, totalitarian state. In such a state nothing useless exists; there is no torture; torture is a wasteful expenditure of psychic energy which destroys salvageable resources without producing useful results. There is no systematically organized famine, but rather a recognition of the pressing necessity of maintaining the labor force in good condition. There is nothing arbitrary, for the arbitrary represents the very opposite of technique, in which everything "has a reason" (not a final but a mechanical reason). Irrationality might appear to exist — but only for the person who knows nothing of technique; it is like trying to tell a man who does not know the radio that there is music all around him although he cannot hear it.

The totalitarian state does not necessarily have totalitarian theories, nor does it necessarily even desire them. . . . There is, however, a great difference between the democracies and the so-called totalitarian states. All are following the same road, but dictatorial states have become conscious of the possibilities of exploiting technique. They know and consciously desire whatever advantage can be drawn from it. The rule, for them, is to use means without limitation of any sort. The democratic states, on the other hand, have not attained to this consciousness and are consequently inhibited in their development. Scruples concerning tradition, principles, judicial affirmations, the maintenance of a facade of public and private morality — all these still exist in the democratic state. It may be going too far to say that scruples concerning human beings also exist in democratic states; the democratic state is preoccupied most of all with a very special type of man: the voter.

All these scruples, in any case, are without force or reality. They are merely verbal smokescreens, and the democracies disregard them every time it is necessary to do so. This facade no longer corresponds in any way to a real community; it represents only vestiges of a community. Nevertheless, however without substance such talk may be, it still has great importance in democratic life, especially as it acts to prevent democratic governments from launching themselves along the road of technique without some other justification. Here, more than anywhere else, justification is necessary. Even so, democracies have a bad governmental conscience which no one has succeeded in dispelling. The state has not taken the decisive step of affirming that only technical necessity counts; it has therefore failed to do two things: to become conscious (of what the state can accomplish by exploiting techniques) and to sow its wild oats (by deciding that there are no compelling moral reasons to get in its way). Thus, at present every time the democratic state exploits a given technique, it must begin all over again to justify itself, to debate the necessity of the proposed measure, and to question everything. In the long run it will have to capitulate, but in the meantime its scruples act as a drag on it, if not in the actual application of techniques (which would, in any case, be impossible), at least in its enterprise. In order to force the democratic state to come to any decision there must always be a "present danger," some direct competition with the dictatorial state, in which action becomes a matter of life or death.

Appendix

Dwight Eisenhower's Farewell Speech of 1961 (Jan. 17)

[Bolded sections below highlight thematic connections to the Ellul excerpt above]

My fellow Americans:

I. (First section not included)

II.

We now stand ten years past the midpoint of a century that has witnessed four major wars among great nations. Three of these involved our own country. Despite these holocausts America is today the strongest, the most influential and most productive nation in the world. Understandably proud of this pre-eminence, we yet realize that America's leadership and prestige depend, not merely upon our unmatched material progress, riches and military strength, but on **how we use our power in the interests of world peace and human betterment.**

III.

Throughout America's adventure in free government, our basic purposes have been to keep the peace; to foster progress in human achievement, and to enhance liberty, dignity and integrity among people and among nations. To strive for less would be unworthy of a free and religious people. Any failure traceable to arrogance, or our lack of comprehension or readiness to sacrifice would inflict upon us grievous hurt both at home and abroad.

Progress toward these noble goals is persistently threatened by the conflict now engulfing the world. It commands our whole attention, absorbs our very beings. We face a hostile ideology -- global in scope, atheistic in character, ruthless in purpose, and insidious in method. Unhappily the danger it poses promises to be of indefinite duration. To meet it successfully, there is called for, not so much the emotional and transitory sacrifices of crisis, but rather those which enable us to carry forward steadily, surely, and without complaint the burdens of a prolonged and complex struggle -- with liberty the stake. Only thus shall we remain, despite every provocation, on our chartered course toward permanent peace and human betterment.

Crises there will continue to be. In meeting them, whether foreign or domestic, great or small, **there is a recurring temptation to feel that some spectacular and costly action could become the miraculous solution to all current difficulties. A huge increase in newer elements of our defense; development of unrealistic programs to cure every ill in agriculture; a dramatic expansion in basic and applied research -- these and many other possibilities, each possibly promising in itself, may be suggested as the only way to the road we wish to travel.**

But each proposal must be weighed in the light of a broader consideration: **the need to maintain balance in and among national programs** -- balance between the private and the public economy, balance between cost and hoped for advantage -- balance between the clearly necessary and the comfortably desirable; balance between our essential requirements as a nation and the duties imposed by the nation upon the individual; balance between actions of the moment and the national

welfare of the future. Good judgment seeks balance and progress; lack of it eventually finds imbalance and frustration.

The record of many decades stands as proof that our people and their government have, in the main, understood these truths and have responded to them well, in the face of stress and threat. **But threats, new in kind or degree, constantly arise. I mention two only.**

IV.

A vital element in keeping the peace is our military establishment. Our arms must be mighty, ready for instant action, so that no potential aggressor may be tempted to risk his own destruction.

Our military organization today bears little relation to that known by any of my predecessors in peacetime, or indeed by the fighting men of World War II or Korea.

Until the latest of our world conflicts, the United States had no armaments industry. American makers of plowshares could, with time and as required, make swords as well. But now we can no longer risk emergency improvisation of national defense; we have been compelled to create a permanent armaments industry of vast proportions. Added to this, three and a half million men and women are directly engaged in the defense establishment. We annually spend on military security more than the net income of all United States corporations.

This conjunction of an immense military establishment and a large arms industry is new in the American experience. The total influence -- economic, political, even spiritual -- is felt in every city, every State house, every office of the Federal government. We recognize the imperative need for this development. Yet we must not fail to comprehend its grave implications. Our toil, resources and livelihood are all involved; so is the very structure of our society.

In the councils of government, we must guard against the acquisition of unwarranted influence, whether sought or unsought, by the military-industrial complex (1). The potential for the disastrous rise of misplaced power exists and will persist.

We must never let the weight of this combination endanger our liberties or democratic processes. We should take nothing for granted. Only an alert and knowledgeable citizenry can compel the proper meshing of the huge industrial and military machinery of defense with our peaceful methods and goals, so that security and liberty may prosper together.

Akin to, and largely responsible for the sweeping changes in our industrial-military posture, has been the **technological revolution** during recent decades.(2)

In this revolution, research has become central; it also becomes more formalized, complex, and costly. A steadily increasing share is conducted for, by, or at the direction of, the Federal government.

Today, the solitary inventor, tinkering in his shop, has been overshadowed by task forces of scientists in laboratories and testing fields. In the same fashion, the free university, historically the fountainhead of free ideas and scientific discovery, has experienced a revolution in the conduct of research. Partly because of the huge costs involved, a government contract

becomes virtually a substitute for intellectual curiosity. For every old blackboard there are now hundreds of new electronic computers.

The prospect of domination of the nation's scholars by Federal employment, project allocations, and the power of money is ever present and is gravely to be regarded. Yet, in holding scientific research and discovery in respect, as we should, we must also be alert to the equal and opposite danger that public policy could itself become the captive of a scientific-technological elite (2).

It is the task of statesmanship to mold, to balance, and to integrate these and other forces, new and old, within the principles of our democratic system -- ever aiming toward the supreme goals of our free society.

V.

Another factor in maintaining balance involves the **element of time**. As we peer into society's future, we -- you and I, and our government -- must avoid the impulse to live only for today, plundering, for our own ease and convenience, the precious resources of tomorrow. We cannot mortgage the material assets of our grandchildren without risking the loss also of their political and spiritual heritage. We want democracy to survive for all generations to come, not to become the insolvent phantom of tomorrow.

VI.

Down the long lane of the history yet to be written America knows that this world of ours, ever growing smaller, must avoid becoming a community of dreadful fear and hate, and be instead, a proud confederation of mutual trust and respect.

Such a confederation must be one of equals. The weakest must come to the conference table with the same confidence as do we, protected as we are by our moral, economic, and military strength. That table, though scarred by many past frustrations, cannot be abandoned for the certain agony of the battlefield.

Disarmament, with mutual honor and confidence, is a continuing imperative. Together we must learn how to compose differences, not with arms, but with intellect and decent purpose. Because this need is so sharp and apparent I confess that I lay down my official responsibilities in this field with a definite sense of disappointment. As one who has witnessed the horror and the lingering sadness of war -- as one who knows that another war could utterly destroy this civilization which has been so slowly and painfully built over thousands of years -- I wish I could say tonight that a lasting peace is in sight.

Happily, I can say that war has been avoided. Steady progress toward our ultimate goal has been made. But, so much remains to be done. As a private citizen, I shall never cease to do what little I can to help the world advance along that road.

[Ted's note: Eisenhower did not include a similar section to forecast the perils of how a government-scientific technician complex might play out. But one can imagine how he might express his concerns.]

VII.

So -- in this my last good night to you as your President -- I thank you for the many opportunities you have given me for public service in war and peace. I trust that in that service you find some things worthy; as for the rest of it, I know you will find ways to improve performance in the future.

You and I -- my fellow citizens -- need to be strong in our faith that all nations, under God, will reach the goal of peace with justice. May we be ever unswerving in devotion to principle, confident but humble with power, diligent in pursuit of the Nation's great goals.

To all the peoples of the world, I once more give expression to America's prayerful and continuing aspiration:

We pray that peoples of all faiths, all races, all nations, may have their great human needs satisfied; that those now denied opportunity shall come to enjoy it to the full; that all who yearn for freedom may experience its spiritual blessings; that those who have freedom will understand, also, its heavy responsibilities; that all who are insensitive to the needs of others will learn charity; that the scourges of poverty, disease and ignorance will be made to disappear from the earth, and that, in the goodness of time, all peoples will come to live together in a peace guaranteed by the binding force of mutual respect and love.