In these pages it is argued that continued scientific and technical progress will inevitably result in the extinction of individual liberty. I use the word "inevitably" in the following sense: One night--possibly--imagine certain conditions of society in which freedom could coexist with (UI) technology, but these conditions do not actually exist, and we know of no way to bring them about, so that, in practice, scientific progress will result in the extinction of individual liberty. Toward the end of this essay we propose what appears to be the only thing that bears any resemblance to a practical remedy for this situation.

I hope that the reader will bear with me when I recite arguments and facts with which he may already be familiar. I make no claim to originality. I simply think that the case for the thesis stated above is convincing, and I am attempting to set forth the arguments, new and old, in as clear a manner as possible, in the hope that the reader will be persuaded to support the solution here suggested--which certainly is a very obvious solution, but rather hard for many people to swallow.

The power of society to control the individual person has recently been expanding very rapidly, and is expected to expand even more rapidly in the near future. Let us list a few of the more ominous developments as a reminder.

(1) Propaganda and image-making techniques. In this context we must not neglect the role of movies, television, and literature,

which commonly are regarded either as art or as entertainment, but which often consciously adopt certain points of view and thus serve as propaganda. Even when they do not consciously adopt an explicit point of view they still serve to indoctrinate the viewer or reader with certain values. We venerate the great writers of the past, but one who considers the matter objectively must admit that modern artistic techniques have developed to the point where the more skillfully constructed movies, novels, etc. of today are (UI) viewer or reader, far more psychologically potent than, say Shakespeare ever was. The best of them are capable of gripping and involving the reader very powerfully and thus are presumably quite effective in influencing his values. Also note the increasing extent to which the average person today is "living in the movies" as the saying is. People spend a large and increasing amount of time submitting to canned entertainment rather than participating in spontaneous activities. As (UI) and rules and regulations entail opportunities for spontaneous activity, and as the developing techniques of entertainment make the canned product ever more attractive, we can assume that people will live more and more in the world of mass entertainment.

(2) A growing emphasis among educators on "guiding" the child's emotional development, coupled with an increasingly scientific attitude toward education. Of course, educators have always in some degree attempted to mold the attitudes of their pupils, but

formerly they achieved only a limited degree of success, simply because their methods were unscientific. Educational psychology is changing this.

(3) Operant conditioning, after the manner of B. F. Skinner and friends. (Of course, this cannot be entirely separated from item (2).)

(4) Direct physical control of the emotions via electrodes and "chemitrodes" inserted in the brain. (See Jose N. R. Delgado's book "Physical Control of the Mind".)

(5) Biofeedback training, after the manner of Joseph Kamiya and others.

(6) Predicted "memory pills" or other drugs designed to improve memory or increase intelligence.

(The reader possibly assumes that items (5) and (6) present no danger to freedom because their use is supposed to be voluntary, but I will argue that point later. See page 15.)

(7) Predicted genetic engineering, eugenics, related techniques.

(8) Marvin Minsky of MIT (one of the foremost computer experts in the country) and other computer scientists predict that within fifteen years or possibly much less there will be superhuman computers with intellectual capacities far beyond anything of which humans are capable. It is to be emphasized that these computers will not merely perform so-called "mechanical" operations; they will be capable of creative

thought. Many people are incredulous at the idea of a creative computer, but let it be remembered that (unless one resorts to supernatural explanations of human thought) the human brain itself is an electro-chemical computer, operating according to the laws of physics and chemistry. Furthermore, the men who have predicted these computers are not crackpots but first-class scientists.

It is difficult to say in advance just how much power these computers will put into the hands of what is vulgarly termed the establishment, but this power will probably be very great. Bear in mind that these computers will be wholly under the control of the scientific, bureaucratic, and business elite. The average person will have no access to them. Unlike the human brain, computers are more or less unrestricted as to size (and, more important, there is no restriction on the number of computers that can be linked together over long distances to form a single brain), so that there is no restriction on their memories or on the amount of information they can assimilate and correlate. Computers are not subject to fatigue, daydreaming, or emotional problems. They work at fantastic speed. Given that a computer can duplicate the functions of the human brain, it seems clear in view of the advantages listed above that no human brain could possibly compete with such a computer in any field of endeavor.

(9) Various electronic devices for surveillance. These are being used. For example, according to newspaper reports, the

police of New York City have recently instituted a system of 24-hour television surveillance over certain problem areas of the city.

These are some of the more strikingly, (UI) facets of scientific progress, but it is perhaps more important to look at the effect of technology as a whole on our society. Technological progress is the basic cause of the continual increase in the number of rules and regulations. This is because many of our technological devices are more powerful and therefore more potentially destructive than the more primitive devices they replace (e.g. compare autos and horses) and also because the increasing complexity of the system makes necessary a more delicate coordination of its parts. Moreover, many devices of fundamental importance (e.g. electronic computers, television broadcasting equipment, jet planes) cannot be owned by the average person because of their size and costliness. These devices are controlled by large organizations such as corporations and governments and are used to further the purposes of the establishment. A larger and larger proportion of the individual's environment--not only his physical environment, but such factors as the kind of work he does, the nature of his entertainment, (UI) comes to be created and controlled by large organizations rather than by the individual himself. And this is a <u>necessary</u> consequence of technological progress, because to allow technology to be exploited in an

unregulated, unorganized way would result in disaster.

Note that the problem here is not simply to make sure that technology is used only for good purposes. In fact, we can be reasonably certain that the powers which technology is putting into the hands of the establishment will be used to promote good and eliminate evil. These powers will be so great that within a few decades virtually all evil will have been eliminated. But, of course, "good" and "evil" here mean good and evil as interpreted by the social mainstream. In other words, technology will enable the social mainstream to impose its values universally. This will not come about through the machinations of power-hungry scoundrels, but through the efforts of socially responsible people who sincerely want to do good and who sincerely believe in freedom(UI) concept of freedom will be shaped by their own values, which will not necessarily be the case as your values or my values.

The most important aspect of this process will perhaps be the education of children, so let us use education as an example to illustrate the way the process works. Children will be taught--by methods which will become increasingly effective as educational psychology develops--to be creative, inquiring, appreciative of the arts and sciences, interested in their studies--perhaps they will even be taught nonconformity. But of (UI) this will not be merely random nonconformity but "creative" nonconformity. Creative nonconformity simply means

nonconformity that is directed toward socially desirable ends. For example children may be taught (in the name of freedom) to liberate themselves from the irrational prejudices of their elders, "irrational prejudices" being those values which are not conducive to the kind of society that most educators choose to regard as healthy. Children will be educated to be racially unbiased, to abhor violence, to fit into society without excessive conflict. By a series of small steps--each of which will be regarded not as a step toward behavioral engineering but as an improvement in educational technique--this system will become so effective that hardly any child will turn out to be other than what the educators desire. The educational system will then have become a form of psychological compulsion. The means employed in this "education will be expanded to include methods which we currently would consider disgusting, but since these methods will be introduced in a series of small steps, most people will not object--especially since children trained to take a "scientific" or "rational" attitude toward education will be growing up to replace their elders as they die off.

For instance, chemical and electrical manipulation of the brain will at first be used only on children considered to be insane, or at least severely disturbed. As people become accustomed to such practices, they will come to be used on children who are only moderately disturbed. Now, whatever is on the furthest fringes of the abnormal generally comes to be

regarded with abhorrence. As the more severe forms of disturbances are eliminated, the less severe forms will come to constitute the outer fringe; they will thus be regarded as abhorrent and hence as fair game for chemical and electrical manipulation. Eventually, all forms of disturbance will be eliminated--and anything that brings an individual into conflict with his society will make him unhappy and therefore will be a disturbance. Note that this whole process does not presuppose any antilibertarian philosophy on the part of educators or psychologists, but only a desire to do their jobs more effectively.

Consider: Today, how can one argue against sex education? Sex education is designed not simply to present children with the bold facts of sex, it is designed to guide children to a healthy attitude toward sex. And who can argue against that? Think of all the misery suffered as a result of Victorian repressions, sexual perversions, frigidity, unwanted pregnancies, and venereal disease. If such of this can be eliminated by instilling "healthy" (as the social mainstream interprets that word) sexual attitudes in children, who can deny it to them? But it will be equally impossible to argue against any of the other steps that will eventually lead to the complete engineering of the human personality. Each step will be equally humanitarian in its goals.

There is no distinct line between "guidance" or "influence"

and manipulation. When a technique of influence becomes so effective that it achieves its desired effect in nearly every case, then it is no longer influence but compulsion. Thus influence evolves into compulsion as a science improves techniques.

Research has shown that exposure to television violence makes the viewer more prone to violence himself. The very existence of this knowledge makes it a foregone conclusion that restrictions will eventually be placed on televised violence, either by the government or by the TV industry itself, in order to make children less prone to develop violent personalities. This is an element of manipulation. It may be that you feel an end to television violence is desirable and that the degree of manipulation involved is insignificant. ([UI] it is [UI] against an end to television violence.) But science will reveal, one at a time, a hundred other factors in entertainment that have a "desirable" or "undesirable" effect on the personality. In the case of each one of these factors, knowledge will make manipulation inevitable. When the whole array of factors has become known, we will have drifted into large-scale manipulation. In this way, research leads automatically to calculated indoctrination.

By way of a further example, let us consider genetic engineering. This will not come into use as a result of a conscious decision by the majority of people to introduce

genetic engineering. it will begin with certain "progressive" parents who will voluntarily avail themselves of genetic engineering opportunities in order to eliminate the risk of certain gross physical defects in their offspring. Later, this engineering will be extended to include elimination of mental defects and treatment which will predispose the child to somewhat higher intelligence. (Note that the question of what constitutes a mental "defect" is a value-judgement. Is homosexuality, for example, a defect? Some homosexuals would say (UI). But there is a no objectively true or false answer to such a question.) As methods are improved to the point where the minority of parents who use genetic engineering are producing noticeably healthier, smarter offspring, more and more parents will want genetic engineering. When the majority of children are genetically engineered, even those parents who might otherwise be antagonistic toward genetic engineering will feel obliged to use it so that their children will be able to compete in a world of superior people--superior, (UI) relative to the social milieu in which they live. In the end, genetic engineering will be made compulsory, because it will be regarded as cruel and irresponsible for a few eccentric parents to produce inferior offspring by refusing to use it. Bear in mind that this engineering will involve mental as well as physical characteristics; indeed, as scientists explain mental traits on the basis of physiology, neurology, (UI) biochemistry, it will

become more and more difficult to distinguish between "mental" and "physical" traits.

Observe that once a society based on psychological, genetic, and other forms of human engineering has come into being, it will presumably last forever, because people will all be engineered to favor human engineering and the totally collective society, so that they will never become dissatisfied with this kind of society. Furthermore, once human engineering, the linking of human minds with computers, and other things of that nature have come into extensive use, people will probably be altered so much that it will no longer be possible for them to exist as independent beings, either physically or psychologically. Indeed, technology has already made it impossible for us to (UI) as physically independent beings, for the skills which enabled primitive man to live off the country have been lost. We can survive only by acting as components of a huge machine which provides for our physical needs; and as technology invades the domain of the mind, it is safe to assume that human beings will become as dependent psychologically on technology as they now are physically. We can see the beginning of this already in the inability of some people to avoid boredom without television (UI) in the need of others to use tranquilizers in order to cope with the tensions of modern society.

The foregoing predictions are supported by the opinions of

at least some responsible writers. See especially Jacques Ellul's "The Technological Society" and the section titled: "Social Controls" in Kahn and Weiner's "The Year 2,000."

Now we come to the question: What can be done to prevent all this? Let us first consider the solution sketched by Perry London in his book "Behavior Control." This solution makes a convenient example because its defects are typical of other proposed solutions. London's idea is, briefly, this: Let us not attempt to interfere with the development of behavioral technology, but let us all try to be as aware of and as knowledgeable about this technology as we can; let us not keep this technology in the hands of a scientific elite, but disseminate it among the population at large; people can then use this technology to manipulate themselves and protect themselves against manipulation by others. However, on the grounds that "there must be some limits" London advocates that behavior control should be imposed by society in certain areas. For example, he suggests that people should be made to abhor violence and that psychological means should be used to make businessmen stop destroying our forests. (NOTE: I do not currently have access to a copy of London's book, and so I have had to rely on memory in describing his views. My memory is probably correct here, but in order to be honest I should admit the possibility of error.)

My first objection to London's scheme is a personal one. I

simply find the sphere of freedom that he favors too narrow for me to accept. But his solution suffers from other flaws.

He proposes to use psychological controls where they are not necessary, and more for the purpose of gratifying the liberal intellectual's esthetic sensibilities than because of a practical need. It is true that "there must be some limits"--on violence, for example--but the threat of imprisonment seems to be an adequate limitation. To read about violence is frightening, but violent crime is not a significant cause of mortality in comparison to other causes. Far more people are killed in automobile accidents than through violent crime. Would London also advocate psychological elimination of those personalities that are inclined to careless driving? The fact that liberal intellectuals and many others get far more excited over violence than they do over careless driving would seem to indicate that their antagonism toward violence arises not primarily from a concern for human life but from a strong emotional antipathy toward violence itself. Thus it appears that London's proposal to eliminate violence through psychological control results not from practical necessity but from a desire on London's part to engineer some of his own values into the public at large.

This becomes even clearer when we consider London's willingness to use psychological engineering to stop businessmen from destroying our forests. Obviously, psychological

engineering cannot accomplish this until the establishment can be persuaded to carry out the appropriate program of engineering. But if the establishment can be persuaded to do this, then they can equally well be persuaded to pass conservation laws strict enough to accomplish the same purpose. And if such laws are passed, the psychological engineering is superfluous. It seems clear that here, again, London is attracted to psychological engineering simply because he would like to see the general public share certain of his values.

When London proposes to use systematic psychological controls over certain aspects of the personality, with the intention that these controls shall not be extended to other areas, he is assuming that the generation following his own will agree with his judgement as to how far the psychological controls should reach. This assumption is almost certainly false. The introduction of psychological controls in some areas (which London approves) will set the stage for the later introduction of controls in other areas (which London would not approve), because it will change the culture in such a way as to make people more receptive to the concept of psychological controls. As long as any behavior is permitted which is not in the best interests of the collective social organization, there will always be the temptation to eliminate the worst of this behavior through human engineering. People will introduce new controls to eliminate only the worst of this behavior, without

intending that any further extension of the controls should take place afterward; but in fact they will be indirectly causing further extensions of the controls, because whenever new controls are introduced, the public, as it becomes used to the new controls, will change its conception of what constitutes an appropriate degree of control. In other words, whatever the amount of control to which people have been accustomed, they will regard that amount as right and good, and they will regard a little further extension of control as a negligible price to pay for the elimination of some form of behavior that they find shocking.

London regards the (UI) dissemination of behavioral technology among the public as a means by which people can protect themselves against psychological manipulation by the established powers. But if it is really true that people can use this knowledge to avoid manipulation in most areas, why won't they also be able to use it to avoid being made to abhor violence, or to avoid control in other areas where London things they should be controlled? London seems to assume that people will be unable to avoid control in just those areas where he thinks they should be controlled, but that they will be able to avoid control in just those areas where he thinks they should not be controlled.

London refers to "awareness" (UI) relating to the mind) as the individual's "sword and buckler" against manipulation by the

establishment. In Roman times a man might have a real sword and buckler just as good as those of the emperor's legionaries, but that did not enable him to escape oppression. Similarly, if a man of the future has a complete knowledge of behavioral technology it will not enable him to escape psychological control any more than the possession of a machine-gun or a tank would enable him to escape physical control. The resources of an organized society are just too great for any individual to resist no matter how much he knows.

With the vast expansion of knowledge in the behavioral sciences, biochemistry, cybernetics, physiology, genetics, and other disciplines which have the potential to affect human behavior, it is probably already impossible (and, if not, it will soon become impossible) for any individual to keep abreast of it all. In any case, we would all have to become, to some degree, specialists in behavior control in order to maintain London's "awareness." What about those people who just don't happen to be attracted to that kind of science, or to any science? It would be agony for them to have to spend long hours studying behavioral technology in order to maintain their freedom.

Even if London's scheme of freedom through "awareness" were feasible, it could, or at least would, be carried out only by an elite of intellectuals, businessmen, etc. Can you imagine the members of uneducated minority groups, or, for that matter, the

average middle-class person, having the will and the ability to learn enough to compete in a world of psychological manipulation? It will be a case of the smart and the powerful getting smarter and more powerful while the stupid and the weak get (relatively) stupider and weaker, for it is the smart and the powerful who will have the readiest access to behavioral technology and the greatest ability to use it effectively.

This is one reason why devices for improving one's mental or psychological capabilities (e.g. biofeedback training, memory pills, linking of human minds with computers) are dangerous to freedom even though their use is voluntary. For example, it will not be physically possible for everyone to have his own full-scale computer in his basement to which he can link his brain. The best computer facilities will be reserved for those whom society judges most worthy: government officials, scientists, etc. Thus the already powerful will be made more powerful.

Also, the use of such mind-augmentation devices will not remain voluntary. All our modern conveniences were originally introduced as optional benefits which one could take or leave as one chose. However, as a result of the introduction of these benefits, society changed its structure in such a way that the use of modern conveniences is now compulsory; for it would be physically impossible to live in modern society without extensively using devices provided by technology. Similarly,

the use of mind-augmenting devices, though nominally voluntary, will become in practice compulsory. when these devices have reached a high development and have come into wide use, a person refusing to use them would be putting himself in the position of a dumb animal in a world of supermen. He would simply be unable to function in a society structured around the assumption that most people have vastly augmented mental abilities.

By virtue of their very power, the devices for augmenting or modifying the human mind and personality will have to be governed by extensive rules and regulations. As the human mind comes to be more and more an artifact created by means of such devices, these rules and regulations will come to be rules and regulations governing the structure of the human mind.

An important point: London does not even consider the question of (UI) engineering in infancy (let alone genetic engineering before conception). A two-year-old obviously would not be able to apply London's philosophy of "awareness; yet it (UI) possible in the future to engineer a young child so that he will grow up to have the type of personality that is desired by whoever has charge of him. What is the meaning of freedom for a person whose entire personality has been planned and created by someone else?

London's solution suffers from another flaw that is of particular importance because it is shared by all libertarian solutions to the technology problem that have ever come to my

attention. The problem is supposed to be solved by propounding and popularizing a certain libertarian philosophy. This approach is unlikely to achieve anything. Our liberty is not deteriorating as a result of any antilibertarian philosophy. Most people in this country profess to believe in freedom. Our liberty is deteriorating as a result of the way people do their jobs and behave on a day-to-day basis in relation to technology. The system has come to be set up in such a way that it is usually comfortable to do that which strengthens the organization. When a person in a position of responsibility acts to eliminate that which is contrary to established values, he is rewarded with the esteem of his fellows and in other ways. Police officials who introduce new surveillance devices, educators who introduce mere advanced techniques for molding children, do not do so through disrespect for freedom; they do so because they are rewarded with the approval of other police officials or educators and also because they get an inward satisfaction from having accomplished their assigned tasks not (UI), but creatively. A hands-off approach toward the child's personality would be best from the point of view of freedom, but this approach will not be taken because the most intelligent and capable educators crave the satisfaction of doing their (UI) creatively. They want to do more with the child, not less. The greatest reward that a person gets from furthering the ends of the organization may well be simply the opportunity for

purposeful, challenging, important activity--an opportunity that is otherwise hard to come by in this society. For example, Marvin Minsky does not work on computers because he is antagonistic to freedom, but because he loves the intellectual challenge. Probably he believes in freedom, but since he is a computer specialist he manages to persuade himself that computers will tend to liberate man.

The main point here is that the danger to freedom is caused by the way people work and behave on a day-to-day basis in relation to technology; and the way people behave in relation to technology is determined by powerful social and psychological forces. To oppose to these forces a comparatively weak force like a body of philosophy is simply hopeless. You may persuade the public to accept your philosophy, but most people will not significantly change (UI) as a result. They will invent rationalizations to reconcile their behavior with the philosophy, or they will say that what they do as individuals is too insignificant to change the course of events, or they will simply confess themselves too weak to live up to the philosophy. Conceivably a school of philosophy might change a culture over a long period of time if the social forces tending in the opposite direction were weak. But the social forces guiding the present development of our society are obviously strong, and we have very little time left--another three decades likely will take us past the point of no return.

Thus a philosophy will be ineffective unless that philosophy is accompanied by a program of concrete action of a type which does not ask people to voluntarily change the way they live and work--a program which (UI) little effort or willpower on the part of most people. Such a program would probably have to be a political or legislative one. A philosophy is not likely to make people change their daily behavior, but it might (with luck) induce them to vote for politicians who support a certain program. Casting a vote requires only a casual commitment, not a strenuous application of willpower. So we are left with the question: What kind of legislative program would have a chance of saving freedom?

I can think of only two possibilities that are halfway plausible. The discussion of one of these I will leave until later. The other, and the one that I advocate, is this: In simple terms, stop scientific progress by withdrawing all major sources of research funds. In more detail, begin by withdrawing all or most federal aid to research. If an abrupt withdrawal would cause economic problems, then phase (UI) practical. Next, pass legislation to limit or phase out research support by educational institutions which accept public funds. Finally, one would hope to pass legislation prohibiting all large corporations and other large organizations from supporting scientific research. Of course, it would be necessary to eventually bring about similar changes throughout the world,

but, being Americans, we must start with the United States, which is just as well, since the United States is the world's most technologically advanced country. As for economic or other disruption that might be caused by the elimination of scientific progress--this disruption is likely to be much less than that which would be caused by the extremely rapid changes brought on by science itself.

I admit that, in view of the firmly entrenched position of Big Science, it is unlikely that such a legislative program could be enacted. However, I think there is at least some chance that such a program could be put through in stages. Over a period of years, if one or more active organizations were formed to make the public aware of the probable consequences of continued scientific progress and to push for the appropriate legislation. Even if there is only a small chance of success. I think that that chance is worth working for, since the alternative appears to be the loss of all human freedom.

This solution is bound to be attached as "simplistic," but this ignores the fundamental question, namely: Is there any better solution or indeed any other solution at all? My personal opinion is that there is no other solution. However, let us not be dogmatic. Maybe there <u>is</u> a better solution. But the point is this: If there is such a solution, no one at present seems to know just what it is. Matters have progressed to the point where we can no longer afford to sit around just

waiting for something to turn up. By stopping scientific progress now, or at any rate slowing it drastically, we would at least give ourselves a breathing space during which we could attempt to work out another solution, if one is possible.

There is one putative solution the discussion of which I have reserved until now. One might consider enacting some kind of bill of rights designed to protect freedom from technological encroachment. For the following reasons I do not believe that such a solution would be effective.

In the first place, a document which attempted to define our sphere of freedom in a few simple principles would either be too weak to afford real protection, or too strong to be compatible with the functioning of the present society. Thus, a suitable bill of rights would have to be excessively complex, and full of exceptions, qualifications, and delicate compromises. Such a bill would be subject to repeated amendments for the sake of social expedience; and where formal amendment is inconvenient, the document would simply be reinterpreted. Recent decisions of the Supreme Court, whether one approves of them or not, show how much the import of a document can be altered through reinterpretations. Our present Bill of Rights would have been ineffective if there had been in America strong social forces acting against freedom of speech, freedom of worship, etc. Compare what is happening to the right to bear arms, which currently runs counter to basic social

trends. Whether you approve or disapprove of that "right" is beside the point--the point is that the constitutional guarantee cannot stand indefinitely against powerful social forces.

If you are an advocate of the bill-of-rights approach to the technology problem, test yourself by attempting to write a sample section on, say, genetic engineering. Just how will you define the term "genetic engineering" and how will you draw the line, in words, between that engineering which is to be permitted and that which is to be prohibited? Your law will either have to be too strong to pass; or so vague that it can be readily reinterpreted as social standards evolve; or excessively complex and detailed. In this last case, the law will not pass as a constitutional amendment, because for practical reasons a law that attempts to deal with such a problem in great detail will have to be relatively easy to change as needs and circumstances change. But then, of course, the law <u>will</u> be changed continually for the sake of social expedience and so will not serve as a barrier to the erosion of freedom.

And who would actually work out the details of such a bill of rights? Undoubtedly, a committee of congressmen, or a commission appointed by the president, or some other group of organization men. They would give us some fine libertarian rhetoric, but they would be unwilling to pay the price of real, substantial freedom--they would not write a bill that would sacrifice any significant amount of the organization's power.

I have said that a bill of rights would not be able to stand for long against the pressure for science, progress, and improvement. But laws that bring a halt to scientific research would be quite different in this respect. The prestige of science would be broken. With the financial basis gone, few young people would find it practical to enter scientific careers. After, say, three decades or so, our society would have ceased to be progress-oriented and the most dangerous of the pressures that currently threaten our freedom would have relaxed. A bill of rights would not bring about this relaxation.

This, by the way, is one reason why the elimination of research merely in a few sensitive areas would be inadequate. As long as science is a large and going concern, there will be the persistent temptation to apply it in new areas; but (UI) pressure would be broken if science were reduced to a minor role.

Let us try to summarize the role of technology in relation to freedom. The principal effect of technology is to increase the power of society collectively. Now, there is a more or less unlimited number of value-judgements that lie before us; for example: whether an individual should or should not have puritanical attitudes toward sex; whether it is better to have rain fall at night or during the day. When society acquires power over such a situation, generally a preponderance of the

social forces look upon one or the other of the alternatives as right. These social forces are then able to use the machinery of society to impose their choice universally; for example, they may mold children so successfully that none ever grows up to have puritanical attitudes toward sex, or they may use weather engineering to guarantee that rain falls only at night. In this way there is a continual narrowing of the possibilities that exist in the world. The eventual result will be a world in which there is only one system of values. The only way out seems to be to halt the ceaseless extension of society's power.

I propose that you join me and a few other people to whom I am writing in an attempt to found an organization dedicated to stopping federal aid to scientific research. I realize that you will probably reject this suggestion, but I hope that you will not reject it on the basis of some vague dogma such as knowledge is good (UI) the hope of (UI). Okay, knowledge is good, but how high a price, in terms of freedom, are we going to pay for knowledge? You may be understandably reluctant to join an organization about which you know nothing but you know as much about it as I do. It hasn't been started yet. You would be one of the founding members. I claim to have no particular qualifications for trying to start such an organization, and I have no idea how to go about it. I am only making the attempt because no better-qualified person has yet done so. I am simply trying to bring together a few highly intelligent and thoughtful

people who would be willing to take over the task. I would prefer to drop out of it personally because I am unsuited to that kind of work; in fact I dislike it intensely.

Note from James R. Fitzgerald, MS,
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Criminal Profiler, Forensic Linguist:

This document is a re-keyboarded and slightly reformatted version of an original typewriter-created document forwarded to the UTF by David Kaczynski in February 1996. He claimed at the time it was written in 1971 by his brother, Theodore J. Kaczynski (TJK).
The aforementioned original document is 23 pages long. Shortly after receiving it, clerical staff at the FBI's Unabom Task Force (UTF) re-keyboarded it into a Word version for full searchability purposes. It was thusly reformatted into this now-27 page document.
At the UTF, it was categorized by me as Document "T-2," of the 178 other "T" documents known to have been written by TJK which were provided by his family.
The language in this present version matches exactly the language in the original document, to include paragraph breaks. If words/phrases are unintelligible, they are noted with "(UI)."