INTRODUCTION

1. The Industrial Revolution and its consequences have been a disaster for the human race. They have greatly increased the life-expectancy of those of us who live in "advanced" countries, but they have destabilized society, have made life unfulfilling, have subjected human beings to indignities, have led to widespread psychological suffering (in the Third World to physical suffering as well) and have inflicted severe damage on the natural world. The continued development of technology will worsen the situation. It will certainly subject human beings to greater indignities and inflict greater damage on the natural world, it will probably lead to greater social disruption and psychological suffering, and it may lead to increased physical suffering even in "advanced" countries.

2. The industrial-technological system may survive or it may break down. If it survives, it MAY eventually achieve a low level of physical and psychological suffering, but only after passing through a long and very painful period of adjustment and only at the cost of permanently reducing human beings and many other living organisms to engineered products and mere cogs in the social machine. Furthermore, if the system survives, the consequences will be inevitable: There is no way of reforming or modifying the system so as to prevent it from depriving people of dignity and autonomy.

3. If the system breaks down the consequences will still be very painful. But the bigger the system grows the more disastrous the results of its breakdown will be, so if it is to break down it had best break down sooner rather than later.

4. We therefore advocate a revolution against the industrial system. This revolution may or may not make use of violence: it may be sudden or it may be a relatively gradual process spanning a few decades. We can't predict any of that. But we do outline in a very general way the measures that those who hate the industrial system should take in order to prepare the way for a revolution against that form of society. This is not to be a POLITICAL revolution. Its object will be to overthrow not governments but the economic and technological basis of the present society.

THE POWER PROCESS

33. Human beings have a need (probably based in biology) for something that we will call the "power process." This is closely related to the need for power (which is widely recognized) but is not quite the same thing. The power process has four elements. The three most clear-cut of these we call goal, effort and attainment of goal. (Everyone needs to have goals whose attainment requires effort, and needs to succeed in attaining at least some of his goals.) The fourth element is more difficult to define and may not be necessary for everyone. We call it autonomy and will discuss it later (paragraphs 42-44).

34. Consider the hypothetical case of a man who can have anything he wants just by wishing for it. Such a man has power, but he will develop serious psychological problems. At first he will have a lot of fun, but by and by he will become acutely bored and demoralized. Eventually he may become clinically depressed. History shows that leisured aristocracies tend to become decadent. This is not true of fighting aristocracies that have to struggle to maintain their power. But leisured, secure aristocracies that have no need to exert themselves usually become bored, hedonistic and demoralized, even though they have power. This shows that power is not enough. One must have goals toward which to exercise one's power.

SURROGATE ACTIVITIES

38. But not every leisured aristocrat becomes bored and demoralized. For example, the emperor Hirohito, instead of sinking into decadent
hedonism, devoted himself to marine biology, a field in which he became distinguished. When people do not have to exert themselves to satisfy their physical needs they often set up artificial goals for themselves. In many cases they then pursue these goals with the same energy and emotional involvement that they otherwise would have put into the search for physical necessities. Thus the aristocrats of the Roman Empire had their literary pretensions; many European aristocrats a few centuries ago invested tremendous time and energy in hunting, though they certainly didn't need the meat; other aristocracies have competed for status through elaborate displays of wealth; and a few aristocrats, like Hirohito, have turned to science.

41. For many if not most people, surrogate activities are less satisfying than the pursuit of real goals (that is, goals that people would want to attain even if their need for the power process were already fulfilled). One indication of this is the fact that, in many or most cases, people who are deeply involved in surrogate activities are never satisfied, never at rest. Thus the money-maker constantly strives for more and more wealth. The scientist no sooner solves one problem than he moves on to the next. The long-distance runner drives himself to run always farther and faster. Many people who pursue surrogate activities will say that they get far more fulfillment from these activities than they do from the "mundane" business of satisfying their biological needs, but that it is because in our society the effort needed to satisfy the biological needs has been reduced to triviality. More importantly, in our society people do not satisfy their biological needs AUTONOMOUSLY but by functioning as parts of an immense social machine. In contrast, people generally have a great deal of autonomy in pursuing their surrogate activities. have a great deal of autonomy in pursuing their surrogate activities.

AUTONOMY

42. Autonomy as a part of the power process may not be necessary for every individual. But most people need a greater or lesser degree of autonomy in working toward their goals. Their efforts must be undertaken on their own initiative and must be under their own direction and control. Yet most people do not have to exert this initiative, direction and control as single individuals. It is usually enough to act as a member of a SMALL group. Thus if half a dozen people discuss a goal among themselves and make a successful joint effort to attain that goal, their need for the power process will be served. But if they work under rigid orders handed down from above that leave them no room for autonomous decision and initiative, then their need for the power process will not be served. The same is true when decisions are made on a collective bases if the group making the collective decision is so large that the role of each individual is insignificant.

44. But for most people it is through the power process-having a goal, making an AUTONOMOUS effort and attaining the goal-that self-esteem, self-confidence and a sense of power are acquired. When one does not have adequate opportunity to go throughout the power process the consequences are (depending on the individual and on the way the power process is disrupted) boredom, demoralization, low self-esteem, inferiority feelings, defeatism, depression, anxiety, guilt, frustration, hostility, spouse or child abuse, insatiable hedonism, abnormal sexual behavior, sleep disorders, eating disorders, etc.

SOURCES OF SOCIAL PROBLEMS

45. Any of the foregoing symptoms can occur in any society, but in modern industrial society they are present on a massive scale. We aren't the first to mention that the world today seems to be going crazy. This sort of thing is not normal for human societies. There is good reason to believe that primitive man suffered from less stress and frustration and was better satisfied with his way of life than modern man is. It is true that not all was sweetness and light in primitive societies. Abuse of women and common among the Australian aborigines, transexuality was fairly common among some of the American Indian tribes. But is does appear that GENERALLY SPEAKING the kinds of problems that we have listed in the preceding paragraph were far less common among primitive peoples than they are in modern society.
46. We attribute the social and psychological problems of modern society to the fact that that society requires people to live under conditions radically different from those under which the human race evolved and to behave in ways that conflict with the patterns of behavior that the human race developed while living under the earlier conditions. It is clear from what we have already written that we consider lack of opportunity to properly experience the power process as the most important of the abnormal conditions to which modern society subjects people. But it is not the only one. Before dealing with disruption of the power process as a source of social problems we will discuss some of the other sources.

47. Among the abnormal conditions present in modern industrial society are excessive density of population, isolation of man from nature, excessive rapidity of social change and the break-down of natural small-scale communities such as the extended family, the village or the tribe.

51. The breakdown of traditional values to some extent implies the breakdown of the bonds that hold together traditional small-scale social groups. The disintegration of small-scale social groups is also promoted by the fact that modern conditions often require or tempt individuals to move to new locations, separating themselves from their communities. Beyond that, a technological society has to weaken family ties and local communities if it is to function efficiently. In modern society an individual's loyalty must be first to the system and only secondarily to a small-scale community, because if the internal loyalties of small-scale small-scale communities were stronger than loyalty to the system, such communities would pursue their own advantage at the expense of the system.

57. The difference, we argue, is that modern man has the sense (largely justified) that change is IMPOSED on him, whereas the 19th century frontiersman had the sense (also largely justified) that he created change himself, by his own choice. Thus a pioneer settled on a piece of land of his own choosing and made it into a farm through his own effort. In those days an entire county might have only a couple of hundred inhabitants and was a far more isolated and autonomous entity than a modern county is. Hence the pioneer farmer participated as a member of a relatively small group in the creation of a new, ordered community. One may well question whether the creation of this community was an improvement, but at any rate it satisfied the pioneer's need for the power process.

DISRUPTION OF THE POWER PROCESS IN MODERN SOCIETY

59. We divide human drives into three groups: (1) those drives that can be satisfied with minimal effort; (2) those that can be satisfied but only at the cost of serious effort; (3) those that cannot be adequately satisfied no matter how much effort one makes. The power process is the process of satisfying the drives of the second group. The more drives there are in the third group, the more there is frustration, anger, eventually defeatism, depression, etc.

60. In modern industrial society natural human drives tend to be pushed into the first and third groups, and the second group tends to consist increasingly of artificially created drives.

61. In primitive societies, physical necessities generally fall into group 2: They can be obtained, but only at the cost of serious effort. But modern society tends to guaranty the physical necessities to everyone in exchange for only minimal effort, hence physical needs are pushed into group 1. (There may be disagreement about whether the effort needed to hold a job is "minimal"; but usually, in lower- to middle-level jobs, whatever effort is required is merely that of obedience. You sit or stand where you are told to sit or stand and do what you are told to do in the way you are told to do it. Seldom do you have to exert yourself seriously, and in any case you have hardly any autonomy in work, so that the need for the power process is not well served.)

63. So certain artificial needs have been created that fall into group 2, hence serve the need for the power process. Advertising and marketing techniques have been developed that make many people
feel they need things that their grandparents never desired or even dreamed of. It requires serious effort to earn enough money to satisfy these artificial needs, hence they fall into group 2. Modern man must satisfy his need for the power process largely through pursuit of the artificial needs created by the advertising and marketing industry [11], and through surrogate activities.

65. Moreover, where goals are pursued through earning money, climbing the status ladder or functioning as part of the system in some other way, most people are not in a position to pursue their goals AUTONOMOUSLY. Most workers are someone else's employee as, as we pointed out in paragraph 61, must spend their days doing what they are told to do in the way they are told to do it.

66. Today people live more by virtue of what the system does FOR them or TO them than by virtue of what they do for themselves. And what they do for themselves is done more and more along channels laid down by the system. Opportunities tend to be those that the system provides, the opportunities must be exploited in accord with the rules and regulations [13], and techniques prescribed by experts must be followed if there is to be a chance of success.

67. Thus the power process is disrupted in our society through a deficiency of real goals and a deficiency of autonomy in pursuit of goals. But it is also disrupted because of those human drives that fall into group 3: the drives that one cannot adequately satisfy no matter how much effort one makes. One of these drives is the need for security. Our lives depend on decisions made by other people; we have no control over these decisions and usually we do not even know the people who make them. ("We live in a world in which relatively few people - maybe 500 or 1,000 - make the important decisions" - Philip B. Heymann of Harvard Law School, quoted by Anthony Lewis, New York Times, April 21, 1995.) Our lives depend on decisions made by government economists or corporation executives; and so forth. Most individuals are not in a position to secure themselves against these threats to more [than] a very limited extent. The individual's search for security is therefore frustrated, which leads to a sense of powerlessness.

69. It is true that primitive man is powerless against some of the things that threaten him; disease for example. But he can accept the risk of disease stoically. It is part of the nature of things, it is no one's fault, unless is the fault of some imaginary, impersonal demon. But threats to the modern individual tend to be MAN-MADE. They are not the results of chance but are IMPOSED on him by other persons whose decisions he, as an individual, is unable to influence. Consequently he feels frustrated, humiliated and angry.

84. Another way in which people satisfy their need for the power process is through surrogate activities. As we explained in paragraphs 38-40, a surrogate activity that is directed toward an artificial goal that the individual pursues for the sake of the "fulfillment" that he gets from pursuing the goal, not because he needs ... ball into a hole or acquiring a complete series of postage stamps. Yet many people in our society devote themselves with passion to bodybuilding, golf or stamp collecting. Some people are more "other-directed" than others, and therefore will more readily attach importance to a surrogate activity simply because the people around them treat it as important or because society tells them it is important. That is why some people get very serious about essentially trivial activities such as sports, or bridge, or chess, or arcane scholarly pursuits, whereas others who are more clear-sighted never see these things as anything but the surrogate activities that they are, and consequently never attach enough importance to them to satisfy their need for the power process in that way. It only remains to point out that in many cases a person's way of earning a living is also a surrogate activity. Not a PURE surrogate activity, since part of the motive for the activity is to gain the physical necessities and (for
some people) social status and the luxuries that advertising makes them want. But many people put into their work far more effort than is necessary to earn whatever money and status they require, and this extra effort constitutes a surrogate activity. This extra effort, together with the emotional investment that accompanies it, is one of the most potent forces acting toward the continual development and perfecting of the system, with negative consequences for individual freedom (see paragraph 131). Especially, for the most creative scientists and engineers, work tends to be largely a surrogate activity. This point is so important that deserves a separate discussion, which we shall give in a moment (paragraphs 87-92).

88. The "benefit of humanity" explanation doesn't work any better. Some scientific work has no conceivable relation to the welfare of the human race - most of archaeology or comparative linguistics for example. Some other areas of science present obviously dangerous possibilities. Yet scientists in these areas are just as enthusiastic about their work as those who develop vaccines or study air pollution. Consider the case of Dr. Edward Teller, who had an obvious emotional involvement in promoting nuclear power plants. Did this involvement stem from a desire to benefit humanity? If so, then why didn't Dr. Teller get emotional about other "humanitarian" causes? If he was such a humanitarian then why did he help to develop the H-bomb? As with many other scientific achievements, it is very much open to question whether nuclear power plants actually do benefit humanity. Does the cheap electricity outweigh the accumulating waste and risk of accidents? Dr. Teller saw only one side of the question. Clearly his emotional involvement with nuclear power arose not from a desire to "benefit humanity" but from a personal fulfillment he got from his work and from seeing it put to practical use.

92. Thus science marches on blindly, without regard to the real welfare of the human race or to any other standard, obedient only to the psychological needs of the scientists and of the government officials and corporation executives who provide the funds for research.

**THE NATURE OF FREEDOM**

93. We are going to argue that industrial-technological society cannot be reformed in such a way as to prevent it from progressively narrowing the sphere of human freedom. But because "freedom" is a word that can be interpreted in many ways, we must first make clear what kind of freedom we are concerned with.

94. By "freedom" we mean the opportunity to go through the power process, with real goals not the artificial goals of surrogate activities, and without interference, manipulation or supervision from anyone, especially from any large organization. Freedom means being in control (either as an individual or as a member of a SMALL group) of the life-and-death issues of one's existence; food, clothing, shelter and defense against whatever threats there may be in one's environment. Freedom means having power; not the power to control other people but the power to control the circumstances of one's own life. One does not have freedom if anyone else (especially a large organization) has power over one, no matter how benevolently, tolerantly and permissively that power may be exercised. It is important not to confuse freedom with mere permissiveness (see paragraph 72).

96. As for our constitutional rights, consider for example that of freedom of the press. We certainly don't mean to knock that right: it is very important tool for limiting concentration of political power and for keeping those who do have political power in line by publicly exposing any misbehavior on their part. But freedom of the press is of very little use to the average citizen as an individual. The mass media are mostly under the control of large organizations that are integrated into the system. Anyone who has a little money can have something printed, or can distribute it on the Internet or in some such way, but what he has to say will be swamped by the vast volume of material put out by the media, hence it will have no practical effect. To make
an impression on society with words is therefore almost impossible for most individuals and small groups. Take us (FC) for example. If we had never done anything violent and had submitted the present writings to a publisher, they probably would not have been accepted. If they had been accepted and published, they probably would not have attracted many readers, because it's more fun to watch the entertainment put out by the media than to read a sober essay. Even if these writings had had many readers, most of these readers would soon have forgotten what they had read as their minds were flooded by the mass of material to which the media expose them. In order to get our message before the public with some chance of making a lasting impression, we've had to kill people.

**RESTRICTION OF FREEDOM IS UNAVOIDABLE IN INDUSTRIAL SOCIETY**

114. As explained in paragraph 65-67, 70-73, modern man is strapped down by a network of rules and regulations, and his fate depends on the actions of persons remote from him whose decisions he cannot influence. This is not accidental or a result of the arbitrariness of arrogant bureaucrats. It is necessary and inevitable in any technologically advanced society. The system HAS TO regulate human behavior closely in order to function. At work, people have to do what they are told to do, otherwise production would be thrown into chaos. Bureaucracies HAVE TO be run according to rigid rules. To allow any substantial personal discretion to lower-level bureaucrats would disrupt the system and lead to charges of unfairness due to differences in the way individual bureaucrats exercised their discretion. It is true that some restrictions on our freedom could be eliminated, but GENERALLY SPEAKING the regulation of our lives by large organizations is necessary for the functioning of industrial-technological society. The result is a sense of powerlessness on the part of the average person. It may be, however, that formal regulations will tend increasingly to be replaced by psychological tools that make us want to do what the system requires of us. (Propaganda [14], educational techniques, "mental health" programs, etc.)

115. The system HAS TO force people to behave in ways that are increasingly remote from the natural pattern of human behavior. For example, the system needs scientists, mathematicians and engineers. It can't function without them. So heavy pressure is put on children to excel in these fields. It isn't natural for an adolescent human being to spend the bulk of his time sitting at a desk absorbed in study. A normal adolescent wants to spend his time in active contact with the real world. Among primitive peoples the things that children are trained to do are in natural harmony with natural human impulses. Among the American Indians, for example, boys were trained in active outdoor pursuits -- just the sort of things that boys like. But in our society children are pushed into studying technical subjects, which most do grudgingly.

117. In any technologically advanced society the individual's fate MUST depend on decisions that he personally cannot influence to any great extent. A technological society cannot be broken down into small, autonomous communities, because production depends on the cooperation of very large numbers of people. When a decision affects, say, a million people, then each of the affected individuals has, on the average, only a one-millionth share in making the decision. What usually happens in practice is that decisions are made by public officials or corporation executives, or by technical specialists, but even when the public votes on a decision the number of voters ordinarily is too large for the vote of any one individual to be significant. [17] Thus most individuals are unable to influence measurably the major decisions that affect their lives. There is no conceivable way to remedy this in a technologically advanced society. The system tries to "solve" this problem by using propaganda to make people WANT the decisions that have been made for them, but even if this "solution" were completely successful in making people feel better, it would be demeaning.
119. The system does not and cannot exist to satisfy human needs. Instead, it is human behavior that has to be modified to fit the needs of the system. This has nothing to do with the political or social ideology that may pretend to guide the technological system. It is the fault of technology, because the system is guided not by ideology but by technical necessity. [18] Of course the system does satisfy many human needs, but generally speaking it does this only to the extent that it is to the advantage of the system to do so. It is the needs of the system that are paramount, not those of the human being. For example, the system provides people with food because the system couldn't function if everyone starved; it attends to people's psychological needs whenever it can CONVENIENTLY do so, because it couldn't function if too many people became depressed or rebellious. But the system, for good, solid, practical reasons, must exert constant pressure on people to mold their behavior to the needs of the system.

THE 'BAD' PARTS OF TECHNOLOGY CANNOT BE SEPARATED FROM THE 'GOOD' PARTS

127. A technological advance that appears not to threaten freedom often turns out to threaten freedom often turns out to threaten it very seriously later on. For example, consider motorized transport. A walking man formerly could go where he pleased, go at his own pace without observing any traffic regulations, and was independent of technological support-systems. When motor vehicles were introduced they appeared to increase man's freedom. They took no freedom away from the walking man, no one had to have an automobile if he didn't want one, and anyone who did choose to buy an automobile could travel much faster than the walking man. But the introduction of motorized transport soon changed society in such a way as to restrict greatly man's freedom of locomotion. When automobiles became numerous, it became necessary to regulate their use extensively. In a car, especially in densely populated areas, one cannot just go where one likes at one's own pace one's movement is governed by the flow of traffic and by various traffic laws. One is tied down by various obligations: license requirements, driver test, renewing registration, insurance, maintenance required for safety, monthly payments on purchase price. Moreover, the use of motorized transport is no longer optional. Since the introduction of motorized transport the arrangement of our cities has changed in such a way that the majority of people no longer live within walking distance of their place of employment, shopping areas and recreational opportunities, so that they HAVE TO depend on the automobile for transportation. Or else they must use public transportation, in which case they have even less control over their own movement than when driving a car. Even the walker's freedom is now greatly restricted. In the city he continually has to stop and wait for traffic lights that are designed mainly to serve auto traffic. In the country, motor traffic makes it dangerous and unpleasant to walk along the highway. (Note the important point we have illustrated with the case of motorized transport: When a new item of technology is introduced as an option that an individual can accept or not as he chooses, it does not necessarily REMAIN optional. In many cases the new technology changes society in such a way that people eventually find themselves FORCED to use it.)

128. While technological progress AS A WHOLE continually narrows our sphere of freedom, each new technical advance CONSIDERED BY ITSELF appears to be desirable. Electricity, indoor plumbing, rapid long-distance communications . . . how could one argue against any of these things, or against any other of the innumerable technical advances that have made modern society? It would have been absurd to resist the introduction of the telephone, for example. It offered many advantages and no disadvantages. Yet as we explained in paragraphs 59-76, all these technical advances taken together have created world in which the average man's fate is no longer in his own hands or in the hands of his neighbors and friends, but in those of politicians, corporation executives and remote, anonymous technicians and bureaucrats whom he as an individual has no power to influence. [21] The same process will continue in the future. Take genetic engineering, for example. Few people will resist the introduction of a genetic technique that eliminates a hereditary
disease It does no apparent harm and prevents much suffering. Yet a large number of genetic improvements taken together will make the human being into an engineered product rather than a free creation of chance (or of God, or whatever, depending on your religious beliefs).

129. Another reason why technology is such a powerful social force is that, within the context of a given society, technological progress marches in only one direction; it can never be reversed. Once a technical innovation has been introduced, people usually become dependent on it, unless it is replaced by some still more advanced innovation. Not only do people become dependent as individuals on a new item of technology, but, even more, the system as a whole becomes dependent on it. (Imagine what would happen to the system today if computers, for example, were eliminated.) Thus the system can move in only one direction, toward greater technologization. Technology repeatedly forces freedom to take a step back -- short of the overthrow of the whole technological system.

133. No social arrangements, whether laws, institutions, customs or ethical codes, can provide permanent protection against technology. History shows that all social arrangements are transitory; they all change or break down eventually. But technological advances are permanent within the context of a given civilization. Suppose for example that it were possible to arrive at some social arrangements that would prevent genetic engineering from being applied to human beings, or prevent it from being applied in such a ways as to threaten freedom and dignity. Still, the technology would remain waiting. Sooner or later the social arrangement would break down. Probably sooner, given that pace of change in our society. Then genetic engineering would begin to invade our sphere of freedom, and this invasion would be irreversible (short of a breakdown of technological civilization itself). Any illusions about achieving anything permanent through social arrangements should be dispelled by what is currently happening with environmental legislation. A few years ago it seemed that there were secure legal barriers preventing at least SOME of the worst forms of environmental degradation. A change in the political wind, and those barriers begin to crumble.

**STRATEGY**

183. But an ideology, in order to gain enthusiastic support, must have a positive ideals as well as a negative one; it must be FOR something as well as AGAINST something. The positive ideal that we propose is Nature. That is, WILD nature; those aspects of the functioning of the Earth and its living things that are independent of human management and free of human interference and control. And with wild nature we include human nature, by which we mean those aspects of the functioning of the human individual that are not subject to regulation by organized society but are products of chance, or free will, or God (depending on your religious or philosophical opinions).

Note: The full text can be found online at [http://www.panix.com/~clays/Una](http://www.panix.com/~clays/Una) (or via a Google search)