

UTOPIA WITHOUT WORK? MYTH, MACHINES AND PUBLIC POLICY

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Technology, some predict, will one day make it possible to have all necessary work done without any direct human intervention. And that is more than enough reason to recall a very old bit of advice: be wary of the Trojans, especially when they come bearing gifts!

Over the centuries, working people have dreamed about living in a world in which work would be either non-existent or at least reasonably enjoyable. Over the same centuries, others who exercised control over workers have espoused ideologies that would encourage workers to work all the harder. Recently, however, the value commitments on this subject seem to have shifted significantly. Working people tend more and more to associate happiness with having work, and the managerial class is proclaiming the imminent arrival of a utopia without work. Unlike its predecessors, this utopia is supposed to come about not through the effort and dedication of participants but as the result of technology.

What is not being taken into consideration by the prophets of this new utopia are three unexamined presuppositions: (1) that the end itself, a workless world, is desirable; (2) that technology alone constitutes a sufficient means to its at-

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tainment; and, of most immediate concern, (3) that the end anticipated justifies the social consequences of utilizing the means in the present.

By utopia I mean a proposed happiness-inducing state of affairs.¹ By happiness I mean at least self-satisfaction if not self-actualization. And by work I mean employment as the sine qua non of remuneration, understood distributively as jobs.²

I shall conclude that anticipation of a workless utopia does not justify displacing human workers in the present, especially because of the unexamined presupposition about social consequences. In support of this conclusion, I contend that utopian visions with regard to work function in society as ideologies; and I offer in evidence an analysis of past utopian visions with regard to work. I will first look briefly at the role assigned to human work (1) in non-industrial fantasies and (2) in industrial, especially managerial, fantasies including the fantasy of a workless utopia.

I. THE PLACE OF WORK IN NON-INDUSTRIAL FANTASIES

Present day attitudes towards work can be traced to attitudes articulated in antiquity at least from the time that people began to recognize work as only a part of their lives. And, at least until the time that machines of various kinds began to reduce the number of hours of physical toil that most tasks required, work tended to be looked upon as something that needed to be done, but preferably by someone else. Whence the origin of slavery, which some believe first took the form of males "lording it" over females.³ Whence also the development of fantasies about how it might be, or might have been, to live in a world in which work is not necessary or, if necessary, is either fairly enjoyable or well compensated or equitably distributed or else is done by others. These are the utopian options.

There are two utopian traditions with regard to work. Each assumes that much work is quite unappealing but still socially necessary, at least in the present state of affairs. Where they differ is in what they propose to do about aversion to work. The *authoritarian* tradition, which is typically elitist, gives first priority to the work that needs to be done, and looks for ways to get people to do it, notably by appeals in one way or another to fear and/or duty: the "stick" approach. The stick in question might be a set of ideas, e.g., the work ethic; or, in the extreme, forced labor.

The other, or *communitarian*, tradition gives first priority to people, and looks for ways to make the work that needs to be done less painful if not actually enjoyable: the "carrot" approach. To achieve the desired state of affairs a follower of this tradition might, for example, seek to restructure the kinds and quantities of work people have to do by encouraging collaboration, lowering expectations, and manipulating motivation.⁴

Many utopian proposals involve some sort of intermingling of these two traditions. In particular, the technophile utopian vision is a hybrid: it looks to technology to satisfy both authoritarian concerns about productivity and the communitarian quest for enjoyment.

In a world in which at least some human beings work in order that their kind can survive and occasionally even prosper, it is difficult for a utopian planner not to take work into account. But there are at least two ways to take work into account: by thinking of it (1) as inherently undesirable or (2) as undesirable only circumstantially, i.e., as presently organized. The communitarian tradition plays on the latter theme; the authoritarian, to be considered first, on the former. Linked together as complementary themes of the authoritarian tradition are (a) the claims of an elite to exemption from some or all work and (b) some rationale to justify imposing the burdens of work on a subservient class or classes of people. The typical reasons given for requiring work of others is that people are being punished for something or other and/or are preparing the way for a less demanding life ahead. The typical reason given for excusing oneself from work that one requires of others is that one has more (socially) important things to do. Consider first the punishment/preparation rationalization.

The idea of a life without work undoubtedly appeals to people in direct proportion to the severity of working conditions to which they are subject. Historically, at any rate, there seems to have been a direct correlation between people's actual involvement in work and their projection into the past or future of a workless way of life.

Remembrances of leisure past are to be found in a number of different cultures. The Hebrew myth of Adam and Eve in the Garden, and of hard agricultural labor being imposed on Adam for his disobedience, is well known. A comparable story is told on ancient Sumerian tablets.⁵ The Greeks also taught one another that work is a curse, due indirectly to the upstart behavior of Prometheus, and that once upon a time it was otherwise. Hesiod, in his *Works and Days* (c. 700 B.C.), describes five races, one being a "golden race" of people who lived before the curse of work in a place where food grew bountifully without cultivation. Later tradition recalled this as a golden age, and divided into a modified version that some work was required and the no-holds-barred mainstream version that nature did it all without assistance.

Because some readers of a "history" by Diodorus Siculus took his account of the labor-free and fun-filled life of the Hyperboreans at face value, the temporal dream became for some only a problem of geography. But it was Ovid in Book I of his *Metamorphoses* who set down the mainstream myth in the form in which it inspired subsequent utopian visions. An earlier statement of this version will be found in *Life of Greece*, by Dicaearchus of Mersana, a pupil of Aristotle.⁶ Aristotle himself perpetuated the curse-theory of work, agreed in principle with Plato that it is necessary for society as a whole, and inserted an elitist wedge in the form of exemption for intellectuals, who are by definition capable of ex-

plotting leisure to attain fully human happiness in the form of wisdom.⁷ Thus is set forth explicitly an idea already implicit in Plato's "job description" of the philosopher, namely, that *what was once lost can yet be regained*, at least by a fortunate few.

As for Plato, he expected everyone except the philosophical elite to act in accord with his or her less elevated sort of nature. When he laid out plans for an ideal society in his *Republic* the only concession he saw fit to make with regard to work is that each individual be assigned to the type of work for which he or she is by nature best suited. This arrangement, critics have argued, is most advantageous to those whose natures incline them to the meditative life-style that leisure abetted by the labor of slaves makes possible. The point here, however, is that in Plato's utopia, if such it is, most people would definitely be put to work.

That this is an elitist approach to work assignments can be learned, for example, from Aristophanes' satires of the Athenian dream of idleness: *The Parliament of Women* (a dystopia), *Plautos* (on the hardships of the poor), the *Birds* (about a kind of "petty bourgeois" utopia); from Xenophon's warning that the mechanical arts cause deterioration of both body and soul and accordingly are illegal for citizens in the more warlike cities; and from Plutarch's warning that being a sculptor, like Phidias, has distinct disadvantages in that one may become both dusty and sweaty.⁸

As for a workless future, in Jewish Talmudic lore there are glorious promises of a World to Come in which everyone will have ample harvest without effort. More broadly stated in apocalyptic literature: "For men there will be inner sincerity and freedom from care, no unwilling engagement with practical things, and no forced labor."⁹ One of Vergil's *Eclogues* projects a similarly work-free future.¹⁰

When first articulated, such dreams were plausible only if one believed in miraculous intervention. The rise of technology, as we shall see, has led some to believe that the miraculous has been rendered operational—but not necessarily to the benefit of the worker.

What distinguishes the communitarian tradition from its authoritarian counterpart is the twofold belief that work (a) should be shared more or less equally by all and (b) can in fact be ennobling.

In the sixth century A.D., Saint Benedict established a monastic way of life that required in addition to prayer and meditation at least six hours of manual labor a day. During the Middle Ages, however, more tedious manual labor tended to be done by serfs attached to a monastery as to any other suzerain. In any event, Benedict is customarily credited with freeing labor both from Aristotle's denigration and from the biblical curse.¹¹

When Thomas More wrote the book that gave the name utopia to the world (1516), he set all the Utopians, men and women alike, to work both at agriculture and at one or another socially advantageous craft—all, that is, except an annually

elected group of “syphogrants,” about whom More declares: “The chief and almost the only business of the syphogrant is to see that no one sits around in idleness, and that everyone works hard at his trade.”¹² This hard work, in turn, was to occupy them but six hours a day, presumably six days a week.

A century later the Dominican monk Tommaso Campanella proposed a *City of the Sun* (1623) as a communitarian alternative to the lazy ways of the Genoa of his day. Reversing the attributions of noble and ignoble customary in Genoa, where all but 50,000 inhabitants lived either in impoverished idleness or in luxury, Campanella says that in the City of the Sun those who work hardest are deemed most noble, except that the speculative arts are considered more honorific than the mechanical arts. They work two hours less a day than do More’s Utopians.¹³

In the eighteenth century a Huguenot utopia written by Denis Vairasse d’Allais described the happy lot of the Severambians (1702), who work eight hours a day without coercion because they like to work.¹⁴ And in 1767 the Edinburgh Calvinist Adam Ferguson warned against wanting to be done with labor, because, he said, the activity itself is “the source from which most of our present satisfactions are really drawn.”¹⁵

Communitarian proposals, or experiments, in the nineteenth century differ significantly from all that had gone before in that they are drawn against the background of the Industrial Revolution. For their insightful criticism of capitalist excesses bourgeois reformers Pierre Saint-Simon and Francois Fourier and above all worker-oriented Joseph Owen won the praise of Marx and Engels.¹⁶ To overcome the evils of industrialization and urbanism, Saint-Simon encouraged workers to work hard and obey their superiors. Fourier in principle and Owen in practice looked nostalgically to small agrarian-based communities in which the desire for domination would be overcome by rotating workplace roles (Fourier), labor would be seen as ennobling and the source of all value, and all would accordingly participate (Owen).¹⁷ Meanwhile, communitarian experimenters in the United States (other than Owen) looked forward to agrarian settings where congenial intellectuals could enjoy “work without drudgery” (Brook Farm) or where work would just somehow get done (Oneida).¹⁸

The rules of the game of planning work relationships were irrevocably altered by the dramatic intrusion of Marxism into the debate. As noted above, the Marxists did praise the early socialist utopians; but having done so they ruled out small-scale utopian enterprises as ineffective answers to capitalism, thereby adding the very word “utopian” to their list of obsolete ideas. A few writers have, however, consciously taken up this challenge in defense of a communitarian utopia. For example, William Morris in his *News from Nowhere* (1891) looked to aesthetics as a solution. Inhabitants of Nowhere would produce not for a world market but only to provide for themselves what is genuinely necessary. Their labor would be free of drudgery thanks to an artistic imperative according to which humans are to do only work that is pleasurable, leaving the rest to ma-

chines.¹⁹ About the same time, the geologist Kropotkin appealed to the group behavior of wolves and other beasts to defend a kind of anarchist communism that would count on communal sentiment rather than productivity to determine how goods are to be distributed, a tenet espoused a half century earlier by Proudhon.²⁰

By the time behavioral psychologist B. F. Skinner took up the utopian challenge in 1948 in his book *Walden Two*, he dared commit the inhabitants of his ideal community to only four hours work a day, presumably for only five days a week. Moreover, he has community leader Frazer proclaim that all "unwanted" work has been eliminated. This state of affairs is said to be due to a system in which the number of exchange credits awarded for a task is inversely proportional to its desirability (high points for undesirable sewer cleaning, low for desirable gardening); opportunities to learn many different jobs and move from one to another are consciously encouraged; and leisure time is culturally stimulating and enriching.²¹

II. WORK IN INDUSTRIAL MANAGEMENT FANTASY

In recent times the authoritarian view of work has been embodied principally in the doctrines of industrial management. Entrepreneurial strategy with regard to the workforce has long been characterized by an interim rule and an ultimate rule. The interim rule is: do what you must to get productivity out of your workers. The ultimate rule is: whenever possible, replace people with machines. The chief ideological instrument of the interim rule has been the work ethic. The replacement rule, the object of which is production without payrolls, is a version of the technological fix. Each will be considered briefly.

Max Weber identified the making of money as the single-minded, joyless, and ultimately irrational goal of the work ethic.²² And as described in his *The Protestant Ethic and the Spirit of Capitalism* this ethic could be interiorized only by the actual or would-be entrepreneur. The Calvinist-based corollary to this principle is no less mischievous in that it serves to explain poverty not as circumstantial but as a direct result of its victim's failure or refusal to work. In this latter form, the work ethic has been applied even to the unpropertied wage laborer as an incentive to greater productivity, e.g., by the device of piece work. It is in this secondary sense that the work ethic has served as an interim strategy of the authoritarian philosophy of work. Its appeal, however, transcends ideological boundaries.

Andrew Ure, the Calvinist ideologue of the Industrial Revolution, explained the need for hard work by associating its pain with that of the crucifixion of Christ.²³ Joseph Proudhon, by contrast, developed an anarchist glorification of labor around the idea that the value of work is directly proportional to how hard it is.²⁴ Karl Marx himself did not have a comparable love affair with work, as

will be noted below. But André Gorz, a contemporary Marxist, says that “after the communist revolution we will work more, not less.”²⁵ The problem with all of these encomia of work, whatever their ideological roots, was neatly identified by Thorstein Veblen, who noted that even if a society depends in every way on the work of some, that work will not be held in esteem, either by the workers or by their beneficiaries, if something else, notably ownership, is considered more honorific.²⁶ But the point here is simply that a work ethic serves the purpose of encouraging whatever is deemed to be appropriate productivity.

Almost from the onset of the Industrial Revolution, with its characteristic centralization of workers in capitalist-controlled plants, forces were set in motion that made the idea of production without payrolls attractive to the entrepreneurial class. Skilled workers who had previously enjoyed relative autonomy in their work life chafed at the impoverishing terms offered to them by the factory owners. The response of the owners, as often as not, was to look for a technological substitute for such irrefragable employees. Thus, for example, did a certain Mr. Roberts respond to British textile entrepreneurs by developing a spinning automaton known as “the Iron Man” to displace high-wage skilled spinners. In this way, noted Andrew Ure in 1835, “when capital enlists science in her service, the refractory kind of labour will always be taught docility.”²⁷ The century and a half since then has been characterized by a variety of strategies with regard to the use of workers in manufacture, beginning with Ure’s ominous advice that women and children are more manageable in a factory setting, continuing with Frederick Taylor’s preference for the stupid type who can be counted on to be docile, advancing to various managerial theories of “job enrichment” to pacify the ever more demanding workers of the twentieth century, and culminating in an all-out effort to design workers right out of production processes entirely.²⁸ Even where such displacement of workers by machines is prohibitively expensive if not still technically unfeasible, the very threat of doing so sometimes dissuades workers from demanding higher compensation.²⁹

A pro-automation policy does not commit one necessarily to the idea of a utopia without work. (As we shall see, even some proponents of alternative or intermediate technology endorse automation as one component of a complex system of small labor-intensive communities.) But if to the quest for workerless production is added an ideology that would intensify commitment to the work ethic while blaming the unemployed for their plight,³⁰ the implicit desired result is a particular sort of utopia without work. For, as Veblen noted, those in control of the means of production despise not only work but those who work and even those who only keep watch over machines.³¹ So if this anti-worker animus found in managerial strategy from time immemorial should ever discover a way to carry its premises to their full logical conclusion, the longed-for culmination would be some sort of world in which there would exist only an “acceptable” remnant of humans (however chosen) and enough totally docile machines to satisfy every imaginable need of the most fastidious hedonist. Yet dedicated

efficiency experts and system designers somehow persuade themselves that worker displacement will somehow turn out well for all concerned. Thus Frederick Winslow Taylor, in between worries about managerial misuse of his methods, rhapsodized:

Think of the increase, both in the necessities and luxuries of life, which becomes available for the whole country, of the possibility of shortening the hours of labor when this is desirable, and of the increased opportunities for education, culture, and recreation which this implies.³²

This dream of a capital-intensive nirvana is an elitist version of extreme egoism. It is intentionally self-serving; but it also happens to be short-sighted. As Plato realized when he described the creative potential of the Demiurge, matter, however cleverly organized, imposes limits on a maker's imagination. That is why there will always be a need for somebody to fix something; and if the past is any clue to the future, what will need fixing first is probably something thought to be the most perfectly constructed, infinitely redundant, gadget that the human mind can devise. This thought surely occurred to underwriters at Lloyd's of London in February, 1984, when a super-scientific space lab failed twice in succession to launch a multi-million dollar satellite into orbit.³³

Such notable glitches notwithstanding, the entrepreneurial expectation of salvation through science is as alive today as it was when Francis Bacon first proclaimed that the path to his New Atlantis would be by way of scientists in the House of Solomon. It can be seen not only in the pages of magazines such as *Fortune* and *Business Week* but in the variety of proposals before state and federal governments to reinvigorate the economy through that fashionable panacea known as "high technology."

Whatever else high technology may be (typical examples are genetic engineering and microelectronics), it is labor-intensive only in the short run, in Third World countries. How, then, will this latest technological fix help with such recalcitrant problems as unemployment? Obviously, not much. Once given a limited amount of corporate and/or governmentally provided severance pay and perhaps some retraining, the displaced worker in the United States is held responsible for his or her own future in the labor force.³⁴ Reemployment, if any, is likely to be in the form of a minimum-wage job in the service sector. This job, in turn, is likely to be taken from a woman or youth, because a government program pays the "retrained" worker's wages for a month or two. Even such jobs, however, will be phased out as quickly as the technical problems can be solved. This has already happened in dockloading, warehousing and inventory, and retail sales, and is well underway in banking, betting, and billing. In time it is likely to affect such seemingly automation-immune services as education, fast-food restaurants, and even surgery. And it will all happen in spite of anecdotes about temporary set-backs along the way, such as Don Ihde's consoling thoughts about what computers still cannot do.³⁵ The science fiction assessment

of such eventualities is typically dystopian. But some analysts of these changing times, such as Frijthof Bergmann, see at the end of the tunnel a light as bright as the ancient dream of a workless utopia.³⁶

Already in the 1950s Georges Friedmann joined with other analysts of work to worry about a possible world without work. He did not consider it a likely eventuality, but complained that the implications of its happening had not even been studied and noted that if "new technology" should bring it about the profits must be fairly distributed.³⁷ Melvin Kranzberg and Joseph Gies conclude a recent history of work and its attendant miseries by speculating that "the oncoming army of robots" might bring it about that in the future as in the distant past man "will have no word for work because he no longer needs to do any."³⁸ These concessions to the possibility of a workless world, even if expressed without great conviction, show little advancement in thought over the view of William Morris almost a century earlier. In his novel *Nowhere* he simply had people do whatever work was enjoyable and left the rest to machines.

Robert Boguslaw, on the other hand, has taken the possibility of a workless world to be deserving utterly serious consideration. Writing before microelectronics had made the computer revolution as awesome as it has since become in its ramifications, he portrays electronics-assisted systems designers as being engaged in an authoritarian perversion of utopian planning in that they focus not on people but on "people-substitutes." The problem with their agenda, according to Boguslaw, is that they assign humans only marginal utility in any given "operating unit," tend to exclude them from decision-making, and leave it to others to clean up the social mess after the new technology has become an established fact.³⁹ In a word, he complains that "the new utopians" have replaced humanitarianism with efficiency.⁴⁰

III. WORK ON THE HUMAN AGENDA: CUI BONO?

Three conclusions can be drawn from the preceding considerations: (1) work has gotten mixed reviews throughout recorded history; (2) opponents of work have typically been among the hardest working of their fellow human beings; and (3) proponents of work have typically expected others actually to do the work. In short, work has been rather unpopular. That is the bad news. The good news, allegedly, is that it is obsolescent. But even if this prediction is accurate, is it in principle desirable? Should it be encouraged in present day public policy? Should employers be able to justify displacing workers by appeal to the technoutopian notion that all work will eventually be phased out and we will all be better off because of it?

What complicates any evaluation of work on the human agenda is that until very recently it has been discussed in the belief that, at least in this life, work is really inevitable. So the politics and the ideology of work was centered around the question of who would do the work; and once that question was settled in

a particular socio-economic setting, it was up to those doing the work and those sympathetic with their plight to build dream worlds in which work would be, if not eliminated, then at least fun and/or fulfilling.

As such a dream world becomes increasingly plausible, this once merely imaginative play emerges as an issue that requires a response in public policy. Do we want the communitarian *elan* to carry us into the future? Is there something of lasting value in the stolid rigors of authoritarian rule?

Recall in this connection Abraham Maslow's view that work ought to provide not only a means of survival but respect and even self-actualization. But the very title of the work in which that theory was articulated, *Eupsychian Management*, shows it assumes that some human beings are working under the direction of others.

By contrast, Karl Marx in his youth envisioned a future in which machines would be doing the work and the only question would be who was going to reap the benefits. He did not, to be sure, think of the road to such a state of affairs as one to be easily traversed. In contrast to nineteenth-century escapist approaches to dignity in a world being transformed by industry, Marx and Engels sought to confront the new monster head-on to salvage a future for the vast majority of human beings who make up the working class. On this view, labor, however valuable in the capitalist setting, has no intrinsic value. Machines are welcome as a means to the eventual liberation of human beings from dehumanizing drudgery. Lenin in the interim welcomed even Taylorism as an appropriate device for increasing productivity.⁴¹ Workers are alienated from their work in the typical factory system, but this is due not to rationalization of work but to capitalist ownership. Scientific socialism promises the surmounting of alienation, first by assuring workers that collectively they own the means of production, and in time perhaps by freeing them of responsibility for production and handing this over to machines. Marxism, then, does not romanticize work but rather socializes the work ethic for the duration of our dependence on human labor for productivity. Offering no solace to escapist communitarians, it insists that the battle for human fulfillment must be fought in and with regard to the industrialized centers of the world.

A more recent Marxist view of work, that of Herbert Marcuse, is consistent with its origins inasmuch as it welcomes automation in spite of the short-range concerns of workers. These concerns, says Marcuse, are legitimate in the absence of "compensating employment." But, he insists, over the mid-range of time such opposition to technical progress prevents "more efficient utilization of capital," "hampers intensified efforts to raise the productivity of labor," and leads to economic crisis and exacerbation of class conflicts. That is bad enough. What is worse is that opposition to automation stands in the way of eventual attainment of a liberating utopia based on technology.⁴²

That Marcuse placed so much trust in the eventual blessings of technology for the working class is due in part to his attraction to Marx's earlier writings.⁴³

This is surprising in view of Marcuse's reliance on Freud for his interpretations of Marx. Although Freud had seldom addressed the subject of work directly, one footnote in his *Civilization and Its Discontents* states explicitly what elsewhere is only implicit. Work, he says here, is the best means of tying an individual to the community and, if it is work at a profession, is an excellent instrument of sublimation. But, he regrets,

as a path to happiness, work is not highly prized by men. They do not strive after it as they do after other possibilities of satisfaction. The great majority of people only work under the stress of necessity, and this natural human aversion to work raises most difficult social problems.⁴⁴

Thus is suggested the view that work, even if eventually unnecessary for economic productivity, is nonetheless an important vehicle of human creativity. This view underlies the concerns of Erich Fromm about the possible demise of work.⁴⁵ And, as intimated above, it is basic to William Morris's aesthetic of work and to Proudhon's glorification of work as having intrinsic dignity.⁴⁶ It was important to William Wordsworth and to John Ruskin as they watched cottage industries giving way to dehumanizing division of labor in factories. And in our own day it is finding eloquent expression in the works of novelist and poet Marge Piercy.

This view of the human need for work is a key feature of E. F. Schumacher's insistence that we move towards "appropriate technology." As he once expressed his ideological assumption, at least for the poor man, "the chance to work is the greatest of all needs, and even poorly paid and relatively unproductive work is better than idleness."⁴⁷ Schumacher himself tried to incorporate this pro-work view into a kind of Buddhist economics that stresses the importance of work to the individual and to the community. But it obviously would not be difficult for a proponent of the prevailing technophile ideology to coopt such gentle theorizing for ends quite unrelated to anything that Schumacher wanted for the world.

Another proponent of the lasting value of work as against the quest to automate is anarchist Murray Bookchin, who sees labor as "the personalized work of a man" and a tool as something that "amplifies the powers of the craftsman as a human."⁴⁸ Such nostalgia for craftsmanship, seen today in such works as Tracy Kidder's *The Soul of a New Machine* and a century ago in the writings of Morris and Ruskin, was characterized by Thorstein Veblen as a leisure class preference for "honorific crudeness" that would set their goods apart from mass produced items available to all.⁴⁹ If such an explanation still accounts for interest in and prices paid for "hand made" items, the technocratic ideal of a machine-serviced economy would seem futile from the start. Or might humans one day learn to be content with having only what everyone else has, without exception and without refinement?

Robin Clarke has no answer to this question. But he does anticipate the possibility of a "soft" technology society that would replace our present "hard" technology society; and work in the former he envisions as being quite different from that in the latter. Instead of high specialization, there would be low specialization; instead of being capital-intensive it would be labor-intensive. Work would be undertaken primarily not for income, as at present, but for satisfaction; and the current strong distinction between work and leisure would be weak or non-existent. Finally, the concept of unemployment would simply be invalid in this AT future society.⁵⁰ Details aside (there is little here that has not been said by countless utopian writers), the bottom line is a commitment to the value of human-scale work—a commitment that characterizes the alternative technology movement as a whole.

This and other related movements are contemporary continuations of the communitarian tradition. And as such they share the concern for human values that until recently has played so important a part in the industrial policy of the People's Republic of China. Technology developed in the West is being introduced into that great country, but ordinarily only as transformed by "reverse engineering" the purpose of which is to safeguard rather than undermine the role of the people in productivity. By this device, together with a stringent policy of population control, is the value of work being retained in a land inhabited by a quarter of the earth's population.⁵¹

But in most developed countries and in developing countries still unable to resist their power and influence, the authoritarian tradition dominates decisions regarding work, the cumulative effect of which is intended to be the eventual realization of production without payrolls.

For purposes of propaganda, both unions and multinational corporations cite statistics to support their respective claims that plant relocations do or do not increase the total number of workers in the world. The debate, however, is of only temporary significance, because the agenda of corporate decision-makers includes the ultimate elimination at least of all private sector jobs. Whence the kinds of concerns now being expressed in the United Nations that research and development aimed at application of technology be done in the countries where the technology is to be introduced.⁵²

The final stage towards which these forces are tending is anything but the communitarian ideal of people working together harmoniously in groups of appropriate size and complexity. Rather would it be, if carried to its logical extreme, a mechano-maniacal technocracy in which people not only no longer work but no longer even exist. Such an endpoint goes quite beyond the expectations of those who long for attainment of the authoritarian ideal. It does so, however, only because this ideal assumes that the elite whose needs have been served by human workers will continue to be served by whatever machines come to replace those workers. But there is no logical reason to suppose that the process of automation should come to a respectful halt when it reaches the elite.

This very flaw in the logic of authoritarian automation policy is already being brought home to middle management personnel whose roles, once thought so necessary, are being phased out by computers programmed for that very purpose. Beyond this point lies somewhere in the future the science fiction scenario of societies being run entirely by computers and, beyond that, of a world returned to entropy.

What needs to be questioned about this quest for productivity without payrolls is both the end and the means. For, as noted above, it is not obvious either that humans will be better off without work or that the pursuit of such a goal itself justifies worker displacement in the present. But to challenge these assumptions one must apostasize from the religion of progress. Difficult though that may be, it is not impossible, as workers in West Germany have been suggesting. To create jobs for 2.2 million unemployed in that country, the metal-workers' union, IG Metall, went on strike in 1984 to win a 35-hour work week. They eventually settled for less of a reduction, partly because management insisted this might damage the country's economic growth and even cause a depression. The union believed that employers could pay for the change out of the double-digit profits they have been earning in recent years.⁵³ But such a redistribution of wealth is something that the myth of progress is meant to avoid. So the West German metalworkers have given management yet another reason to long for the machine that replaces the last worker in the world. Just as the workers, dreaming ever more frequently of worker control, long for the buyout that will replace the last manager in the world.

Neither side can by wishing make the other disappear, except in dreams. In reality, at least the functions of each are needed. But it is late in human history to continue treating one class or the other as a means to be used only till a way is found to reach one's end without it. People, be they classified or classless, are the end. It is progress and profits that are but means. The time has surely come to modify our policies and our institutions accordingly, if in fact we really want to leave posterity a world in which survival is worth the bother.

NOTES

1. See Martin Buber, *Paths in Utopia*, trans. R. F. C. Hull (Boston: Beacon, 1959), p. 7.
2. Citing I. Meyerson and L. S. Hearnshaw, Georges Friedmann considers constraint, obligation, and discipline as essential to a definition of work: *The Anatomy of Work: Labor, Leisure, and the Implications of Automation*, trans. Wyatt Rawson (New York: Free Press, 1964), p. 108.
3. See, for example, Thorstein Veblen, *The Theory of the Leisure Class* (New York: Modern Library, 1934; original, 1899), pp. 22, 53–55, 83.
4. This distinction between an authoritarian and a communitarian tradition with regard to work, though developed independently of, is nonetheless parallel in some respects to Ferdinand Tönnies' distinction between two types of social organization, *Gemeinschaft* and *Gesellschaft*. See *Community and Society*, trans. and ed. Charles P. Loomis (New York: Harper and Row, 1963; original 1887).
5. Frank E. Manuel and Fritzie P. Manuel, *Utopian Thought in the Western World* (Cambridge, MA: Harvard/Belknap, 1979), p. 36.

6. *Ibid.*, pp. 67–73, 83–84.
7. This view is exploited by Joseph Pieper, *Leisure: The Basis of Culture* (New York: NAL, 1963; original, 1952).
8. Xenophon, *Oeconomicus*, IV, 2, 3, in *Socratic Discourse*, with a new literal translation of the *Oeconomicus* by Carnes Lord (Ithaca, NY: Cornell, 1970); and *Plutarch's Lives* (New York: Modern Library, 1932), p. 183; quoted by Melvin Kranzberg and Joseph Gies, *By the Sweat of Thy Brow* (New York: Putnam's, 1975), pp. 27, 28.
9. *The Apocrypha and Pseudepigrapha of the Old Testament in English*, ed. R. H. Charles (Oxford: Oxford University Press, 1913), vol. 2, p. 578.
10. Manuel and Manuel, *op. cit.*, pp. 73–74.
11. Kranzberg and Gies, *op. cit.*, p. 58; David Dickson, *The Politics of Alternative Technology* (New York: Universe, 1975), pp. 68–69.
12. Thomas More, *Utopia*, trans. H.V.S. Ogden (New York: Appleton-Century-Crofts, 1949), p. 34.
13. Manuel and Manuel, *op. cit.*, p. 274.
14. *Ibid.*, p. 372.
15. *An Essay on the History of Civil Society*, Part I, Sections I and VII, in the ed. by D. Forbes (Edinburgh, 1966), pp. 7, 42; quoted by John Passmore, *The Perfectibility of Man* (New York: Scribner, 1970), p. 48. See also Passmore, pp. 297–298.
16. Friedrich Engels, *Socialism Utopian and Scientific*, trans. Edward Aveling (Chicago: Charles H. Kerr, 1908; original, 1880), pp. 51–75; Manuel and Manuel, *op. cit.*, pp. 684, 697–716.
17. Manuel and Manuel, *op. cit.*, pp. 594, 601, 632, 647 (Saint-Simon); 658, 667, 681 (Fourier); 680, 681, 686, 690 (Owen).
18. Payton E. Richter, ed., *Utopias: Social Ideals and Communal Experiments* (Boston: Holbrook, 1971), pp. 54 and 125 (Ripley and Emerson on Brook Farm), 143 (Charles Nordhoff on Oneida). Ideology notwithstanding, the organization of work in these communities was as often as not a class-based authoritarianism. See Mark Holloway, *Heavens on Earth: Utopian Communities in America, 1680–1880* (2nd ed.; New York: Dover, 1966), pp. 111–112, 191–192.
19. Manuel and Manuel, *op. cit.*, p. 769.
20. *Ibid.*, pp. 743, 746.
21. B. F. Skinner, *Walden Two* (New York: Macmillan, 1976; original, 1948), pp. 45–59, 147–148, 150–151, 159, 160, 165, 203–206, 213.
22. Max Weber, *The Protestant Ethic and the Spirit of Capitalism*, trans. Talcott Parsons (New York: Scribner, 1958; original, 1904–1905), p. 53.
23. Andrew Ure, *The Philosophy of Manufactures or an Exposition of the Scientific, Moral and Commercial Economy of the Factory System of Great Britain* (London: C. Knight, 1835), p. 423.
24. Manuel and Manuel, *op. cit.*, p. 771.
25. André Gorz, "The Tyranny of the Factory: Today and Tomorrow," in André Gorz, ed., *The Division of Labour: The Labour Process and Class-Struggle in Modern Capitalism* (Sussex, England: Harvester, 1976), p. 58.
26. Veblen, *op. cit.*, pp. 92–95, 231.
27. Ure, *op. cit.*, p. 368. For Ure's advice regarding women and children, see Kranzberg and Gies, *op. cit.*, pp. 94–95, 100.
28. See Edmund F. Byrne, "Robots and the Future of Work," in Howard F. Didsbury, Jr., ed., *The World of Work*, (Bethesda, MD: World Future Society, 1983), pp. 30–38.
29. Dickson, *op. cit.*, pp. 72–73, 181–182.
30. A recent example of this Ure-like authoritarian view is that of David J. Charrington, *The Work Ethic* (New York: AMACOM, 1980).
31. Veblen, *op. cit.*, p. 231.
32. Frederick Winslow Taylor, *Scientific Management* (New York and London: Harper, 1947; original, 1911), p. 142.

33. *Business Week*, February 20, 1984, pp. 30–31, 77.
34. See Edmund F. Byrne, "Displaced Workers: America's Unpaid Debt," *Journal of Business Ethics*, forthcoming.
35. Don Ihde, "Technology, Utopia and Dystopia," in Paul T. Durbin, ed., *Research in Philosophy and Technology*, vol. 6 (Greenwich, CT: JAI Press, 1983), p. 114.
36. Frithjof Bergmann, lecture, South Bend, Indiana, October 22, 1982. See his *On Being Free* (South Bend, IN: University of Notre Dame Press, 1979).
37. Friedmann, *op. cit.*, pp. 119, 155.
38. Kranzberg and Gies, *op. cit.*, p. 218.
39. Robert Boguslaw, *The New Utopians: A Study of System Design and Social Change* (Englewood Cliffs, NJ: Prentice-Hall, 1965), especially pp. 2–4, 114, 126. Comparable concerns have been expressed, e.g., by Buber, *op. cit.*, pp. 8–9; Gorz, *op. cit.*, pp. xi, 56; and Gordon Rattray Taylor, *Rethink* (Baltimore: Penguin/Pelican, 1974), pp. 324 and 327. Dickson goes beyond Boguslaw to say that even life-style is subject to design, *op. cit.*, p. 100. For a more sceptical interpretation of Boguslaw's "stern warning," see Langdon Winner, *Autonomous Technology* (Cambridge, MA: MIT Press, 1977), p. 143.
40. Boguslaw, *op. cit.*, p. 202.
41. Dickson, *op. cit.*, pp. 55–56 and, in general, pp. 41–62. See also Bernard Gendron, *Technology and the Human Condition* (New York: St. Martin's, 1977).
42. Herbert Marcuse, *One-Dimensional Man* (Boston: Beacon, 1964), pp. 35–37. See also *ibid.*, pp. 44–45, 59, 231–232, 235. Marcuse bases his view here on a passage from Marx's *Grundrisse der Kritik der politischen Oekonomie* in which Marx declares that labor time will eventually cease to be the measure of wealth.
43. Adam Schaff explains Marx's early dream of "end of labor" as "youthful folly" categorically rejected in *Capital*. According to Schaff, "utopian prophecies" about what automation might accomplish "do not take us a single step further in the organization of our life today." Cf. *Marxism and the Human Individual*, trans. Olgierd Wojtasiewicz, ed. Robert S. Cohen (New York: McGraw-Hill, 1970), pp. 124–126, 134–135.
44. Sigmund Freud, *Civilization and Its Discontents*, trans. James Strachey (New York: Norton, 1962; original, 1930), p. 2, n. See Friedmann, *op. cit.*, p. 126; Philip Rieff, *Freud: The Mind of the Moralist* (3rd ed.; Chicago and London: University of Chicago Press, 1979), p. 245.
45. Erich Fromm, *The Sane Society* (New York: Rinehart, 1955), pp. 288–289; quoted by Friedmann, *op. cit.*, pp. 154–155.
46. Manuel and Manuel, *op. cit.*, pp. 745–747, 769. Note in particular authors' comments about nineteenth-century debate regarding the value of work, p. 745.
47. E. F. Schumacher, "Social and Economic Problems Calling for the Development of Intermediate Technology," mimeograph (undated), quoted by David Dickson, *op. cit.*, p. 153.
48. *Post-Scarcity Anarchism* (Berkeley, CA: University of California Press, 1971), p. 132.
49. Veblen, *op. cit.*, pp. 158–159, 160, 162; Kidder, *The Soul of a New Machine* (New York: Avon, 1981).
50. Dickson, *op. cit.*, pp. 103–104. By means of what policies or practices this invalidation of the notion of unemployment would represent anything other than a Newspeak way of ignoring the chronic poverty of a New Delhi or a Lima-Callao is not specified. A comparable utopia by fiat is proclaimed by Robert Theobald, "Toward Full Unemployment," in *The World of Work*, *op. cit.*, p. 54. Such modish projections render quaint the kind of distinctions made by Paul Weiss in his "A Philosophical Definition of Leisure," in James C. Charlesworth, ed., *Leisure in America: Blessing or Curse?* (Philadelphia: American Academy of Political and Social Science, 1964), p. 21. See also Bernard Lefkowitz, *Breaktime: Living Without Work in a Nine-to-Five World* (Baltimore: Penguin, 1980).
51. See Richard J. Barnet and Ronald E. Muller, *Global Reach: The Power of Multinational*

Corporations (New York: Simon & Schuster, 1974), p. 171; Derek Llewellyn-Jones, *Human Reproduction and Society* (New York/Toronto/London: Pitman, 1974), pp. 377-379.

52. See United Nations Economic and Social Council, *Trans-national Corporations: Issues in the Formulation of a Code of Conduct* (New York: United Nations, 1976), p. 27, n. 110.

53. *Business Week*, March 26, 1984, p. 108; June 18, 1984, p. 36; July 9, 1984, p. 36.