8. Technology as Political Weaponry

The aim of this paper is to present some thoughts on the political meaning of technology and technological change within contemporary societal development. "Political meaning" here refers to the implications of technology for the full set of power relations between social classes within our present capitalist society. This paper will first present a series of general arguments about this question and then illustrate them by examining the case of those agricultural technologies generally grouped under the rubric of the Green Revolution.

By capitalism I understand a society organized by its managers (who effectively constitute a social class) on the basis of putting the vast bulk of the people to work in an endless process of growth and accumulation - growth of output and accumulation of both more capital and more working people. Those of us put to work constitute the other major social class. The resistance of most people to the reduction of life to work, to the effort to organize society around endless work to which all other social activities are subordinated, means that there is a social struggle between the managers who would impose this kind of social organization on society and those of us who are supposed. to work. It is in this sense that capitalist society is a class society whose basic social relations are those of conflict over work and social wealth. The fact that the managerial class is diverse and, with the exception of the "socialist" countries, does not engage in central planning, must not keep us from seeing that the main object of their management is imposed work and accumulation. At the same time-we must see that many of the most pernicious aspects of their rule - starvation, torture, war, and profits - are only means to the primary aim of perpetuating a certain kind of social order. The fact that those of us on whom work is imposed are divided through an income hierarchy and through being regrouped in many diverse industrial and nonindustrial activities must not be allowed to obscure our common struggle against the imposition of a kind of work-based society we do not want. It is within the context of this political struggle over the imposition of work that technology must be understood and confronted.

In discussing technology as political weaponry, especially in the struggle between managers and workers in capitalist society, we might begin with evident examples such as arms technology, which is developed and used for police functions-for the direct and coercive control of workers. This is an important but obvious role - despite the fact that even during the Vietnam War technologists often argued that the weapons they developed were "politically neutral." They, but not we, failed to examine the political role of the soldier who wielded the weapon. We could see for whom the weapons were developed and against whom they were destined to be used. The same thing was true for the riot control technology that blossomed in the late 1960s. At the same time we undertook to evaluate which weapons could be turned against their creators. We could see that rural and urban guerrillas could use rifles, grenades, mace, or teargas but not B-52 s, napalm, or artillery. However, what I am concerned with here are not such direct weapons, nor the technology that produces them and is embodied in them. It is rather the more subtle, less direct cases of virtually every other nonmilitary commodity and their production that I want to examine. Thus the question to be addressed here is how are the technologies embodied in and

used to produce such commodities as automobiles, food grains, or Hostess Twinkies "political weapons"?

As organization of social production, both of industrial output within the fields and factories and of human life as labor power in the larger society, technology always contains an element of power relations among producers - among those of us doing the work and between us and those who impose it on us. As a result, any substantial change in technology always involves a significant alteration in the distribution of political power. For those of us involved in the political struggle to abolish the imposition of capitalism as a way of life and to create a new kind of society, it is absolutely essential to evaluate how technology and changes in technology are used against us, and how they can be used by us in our struggles.

Technology is often defined simply as applied science. Generally it is recognized that the most important area of such application is that of industry, and so technology is often understood as systematic knowledge of the application of science in industry, of the "industrial arts." I think we should deal with technology as organization of "social" production because in contemporary capitalist society technology has been mobilized for social control not only in the factory but in the organization of the larger social sphere where life is shaped as labor power through housework, school work, church work, and recreational work. Basically technology develops within and as an integral part of the whole social fabric, and its content and structure can only be adequately grasped as such an integral part. I would also argue that this statement is equally true of the "science" of which technology is understood to be the application. Science is, as is sometimes said of various fields, what scientists do — that includes their thinking and writing. But what scientists do is shaped by the fact that they act within society. Both the content and structure of science as of technology reflect this situation. If we understand the basic social dynamics as being those of class conflict over work and accumulation, then we must recognize that directly, or indirectly via various mediations, the content and structure of science evolve as one moment of the larger social dynamic. Despite the pretensions of some scientists as to the "purity" and "abstractness" of their ideas and activities, we can see, through an analysis of their work, how this evolution occurs. Some aspects are obvious, such as the way the direction of the development of science is determined by the channeling of financial support for research and publication, and how the allocation of each support is often decided by sociopolitical institutions and forces outside of the scientific community. Politically there is no more neutrality in science than there is in its application: technological development. Technology and science exist only as moments of the political fabric and have meaning for us only in terms of their impact on our struggles. Exactly because we are involved in struggle, the intention of scientific and technological development is ultimately of only secondary importance; what matters is its positive or negative impact on our efforts to change the world.

As moments of the dynamic of political struggle, there are at least two general things that we can say about technology as organization of social production. The first is that indicated by the title of this paper: there is a continuous effort by both the managers of capitalist society, and by those of us they are trying to manage, to wield technology as a weapon in our political battles. Business tries to use technology to organize both production (as work in fields and factories) and consumption (as the work of converting life into labor power). That organization must invariably

become one basis of workers' attempts to change the nature of society. I will return to how we can analyze this process below.

The second thing which can be said is that, as a result of this fundamental character of technology, its development occurs within and is shaped by the larger political struggle. Indeed, it is often the failure of a given technology to serve its intended purpose of social control which gives rise on the part of capitalist managers to the demand for the development of new technologies and the funneling of resources into the appropriate fields. The development of technology is thus the immediate result of investment--by corporations and by the state as planner and entrepreneur. As with other forms of investment this means mobilizing workers with the proper skills (scientists, engineers, and other technologists) to develop and produce new technologies. Where such skills are not available or in short supply, a preliminary financing of the creation of labor power is necessary in the form of universities or technical schools. Technologists as well as those who train them can be here seen to constitute simply another group of skilled workers producing means of production as opposed to final consumption goods. The ability of business and government to develop and implement new technologies thus depends in part on their ability to mobilize and control these skilled workers during the production and diffusion of technology. The struggles of these workers vis-a-vis their own working conditions as well as vis-a-vis larger social issues can therefore constitute a serious obstacle to successful capitalist planning. The refusal of many energy scientists and technologists to work on nuclear projects and their efforts to develop alternative technologies giving more power to workers is one recent and dramatic example of the importance of the struggles of these skilled workers.

Once we can see technology as a weapon that can be used against us or by us, then we can organize our analysis of this phenomenon. We can begin by examining the role of technology as political weaponry in two related spheres: in the organization of industrial production--the shaping of work in fields and factories--and in the comsumption of the final product of technology--a product whose structure has been shaped by the technology used to produce it and which embodies new technological development. For business it is essential that this sphere of consumption be the sphere of the work of producing labor power. The technologies of consumption organize that work. On the other hand, the rejection of consumption as work includes all of those cases in which we are able to use these technologies designed by business for our own autonomous struggles and development. What is critical here is to see how the organization of work in both factory and community is not simply a technical matter but is profoundly political. From our point of view there can be no purely technical division of labor. Every division of labor is a division, and thus a weakening, of those of us who are being forced to work.

The division of labor in the factory is not simply the consigning of different tasks to different workers who then work side by side on the basis of mutual aid and equality. There is always a hierarchy. Tasks are organized to keep workers divided and pitted against one another. The hierarchy is sometimes associated with a skill division, but it is always organized by an income hierarchy up which workers are supposed to struggle.

The division of labor outside the factory repeats the pattern of industry — an income hierarchy of waged and unwaged workers in various work roles. The major role division of those engaged in the work of producing labor power include housework, (including subsistence domestic production), education, health, and recreation. Along with these divisions of work into various activities are those divisions internal to each activity--divisions which are again hierarchical. The traditional nuclear family structure is patriarchal with the husband/father overseeing and dominating the housework of wife who in turn has partial power over children. In domestic subsistence production, which may include farming, there is again an hierarchical division of power associated with the division of labor. In each case the organization of work shapes the division of power, and the organization of work embodies the technologies employed. A change in technology implies a change in power relations both among those of us who work and between us and those who are imposing work on us.

Understood as a particular division of political power, we can designate a given set of divisions that constitute the organization of social production as a particular *composition* of the class of workers. Such a class composition of political power corresponds to a given state of technology, which is to say, to the set of technologies being employed at the time in question. The managers of capitalist society seek a set of technologies which will contribute to a class composition that sufficiently divides workers against each other to guarantee social control with growth and accumulation.

Faced with a given class composition, our political problem as workers is either to use or to *overcome* the hierarchies that divide us, sufficiently to force changes we desire in the organization of society. For example, we seek to reduce the degree to which work is imposed on us by changing working conditions and by shortening the working day/week/year/life. Or we seek to use growing output for consumption that helps our struggle (that is, we convert growing profit into wages) rather than see it plowed back (via reinvested profits) into new systems of control and new areas of imposed work. *Using* divisions (related to the state of technology) can mean many things. One well-known form of struggle has been the rigidifying of divisions to such an extent that the labor force loses its maleability and becomes difficult for business to employ efficiently. This has long been one strategy of skilled workers divided by crafts. *Overcoming* divisions often means organizing political struggle in such a way that the divisions are neutralized. For example, the organization of industrial (teachers) unions are aimed at overcoming both plant (school) and shopfloor (disciplinary) divisions. On a broader level the growth of the student and women's movements represented the overcoming of a great variety of divisions--many based or reinforced by technologies embodied in the structures of education and the family. We can designate such processes of using or overcoming the technological (and other) based divisions politically a *political recomposition* of the class. Such a recomposition may be carried out on a small scale within a given industrial process or on a large scale across industries or society as a whole.

It is the success of such political recomposition that undermines the political usefulness of a given technology or set of technologies and the class composition associated with it. It is this political failure which is often at the base of investment in the development of new technologies. (There are obviously many other reasons, such as a change in the character of raw materials available for processing, the technical failure of an experimental process, and the like. But even

in these cases the political implications of both old and new technologies must be analyzed, especially since such "natural" or "technical" causes may provide the opportunity for business to reorganize production in ways politically useful to itself.) These attempts by business to use a re-organization of social production politically we can call attempts to achieve a *decomposition* of the class. In other words, the business or other managers of capitalist society seek to undermine the political power achieved by workers through their own recomposition by changing the underlying division of labor.

There is another, extremely important way in which technological change serves as a weapon for business in dealing with those of us it forces to work in its factories, but this weapon is one, as we shall see, that has two edges. This weapon involves the raising of labor productivity, often by replacing struggling workers by more easily controlled machinery. To the degree that labor productivity is raised (that is, the output per labor hour) the per unit costs of production are reduced. This means that, other things being equal, profits rise and there is more surplus to plow back into investment and more work (employment). It also means that to the degree that productivity rises, workers' demands for higher wages or other forms of social wealth can be met to some degree without impinging on profits, investment, and growth. Therefore in the struggle between classes, investment in technological change that raises productivity can provide the basis for a two-sided production (which often involves displacing workers) and partially acceding to workers' demands. This is the beauty of growth for the managers of capitalist society and a major reason why technological development has had such high priority in the post-World War II period.

This aspect of technological development, just like its role in reorganizing work, also has great importance for those of us who are expected to accept the inevitability of work as the basis of society and societal development. What we can see is that rising productivity, or rising output per hour of labor, makes possible, by definition, the simultaneous *increase* of production and the *reduction* of work. The twoedged character of technology is that it reduces the need for work in production at the same time that business tries to use it to impose work. The longer this contradictory process goes on, the more obvious it becomes that work as labor necessary to meet people's needs is declining and that the primary role of work today is as social control. Our struggles for more social wealth together with less work effectively constitutes a political demand for realizing the promise of technological development: more for less work. But in a society based on the imposition of work this demand is subversive and tends to undermine the power of those managing the imposition of capitalism. The efforts of business to convert technological change into higher profits and more work is the desire to maintain its control over society. Our efforts to use technological change to divorce income from work and to reduce the role of work in society and to expand the amount of time and resources available for our own development is the subversive attempt to change fundamentally the character of society — whether we always recognize our motive as such or not.

In the light of the foregoing analysis we can understand how and why our attitudes toward technological change are often contradictory. On the one hand we are always interested in raising productivity so that we can get the consumption goods we want with less work and more time free to enjoy the consumption, to develop new forms of social interaction, and the like. On the other hand we can see how technological change can be used against us--to reorganize us and to

break our power or to provide partial responses designed to preserve the basic characteristics of the system. It is precisely because of this contradictory political character of technology as organization of social production that we must understand as clearly as possible the political implications of particular situations in order to calculate how best to deal with them.

Before turning to the discussion of the Green Revolution technologies within the context of the analysis presented above, I would make one final important point. The kind of political analysis laid out above can never be done "in general." It must always be carried out with historical specificity. We must always be primarily interested in the present, for our struggles are occurring now, but whether we are learning from the past or involved in the present we must analyze the question of the political role of technology within a given historical context. A given technology is never the same when it is implemented in different historical and political contexts. As organization of social production, technology organizes the existing social relations, and those shift and change according to the changing composition of political power.

In examining the Green Revolution technologies within the context of the analysis presented above it would seem natural to begin with considering the political role of the final product the technologies were to produce: food grains. In general within capitalist society food is a fundamental weapon for the managers of that society. Control over food gives control over work. Basically most of us are forced to work for business as a condition for acquiring food, and this is possible only because business controls the access to food by controlling the means of producing it. But historically the development of the Green Revolution technologies can be understood far more specifically. The experience of the Rockefeller Foundation in China in the 1920s and 1930s led to the view that an increased output of food, coupled with institutional changes such as land reform, and the various components of community development, was absolutely essential in order to stabilize rural China and to undercut the growing peasant revolution. In the 1950s this understanding become generally accepted, and there was for a long time an open discussion of "rice politics" in Asia. Food was clearly recognized as a political weapon in the efforts to thwart peasant revolution in many places in Asia.

As a result of this understanding, there grew up the associated strategy of trying to raise food output so that increased availability of food would tend to undermine unrest. That strategy included both the institutional changes mentioned above, especially land reform, but also community development (of the Jimmy Yen variety), and the development of higher yielding grain crops via either selection or genetic manipulation. This history makes it very clear that from its beginning the development of the Green Revolution grains constituted mobilizing science and technology in the service of counterrevolution. From the handful of Cornell plant breeders and their students working at Nanking University in China through to the development of the International Rice Research Institute in the Philippines, the pattern of development of technology via the mobilization of skilled workers (plant breeders and the like) in order to develop a political weapon is clear. over time the rhetoric changed from the overtly political to the humanitarian, but the goal never changed. In China, with very little military technology being mobilized as backup, the agricultural work was carried on quietly within the context of building an elite and a Third Force. In postWorld War II Asia, vast amounts of military technology were mobilized during the anti-guerrilla campaigns (in Vietnam, Malaysia, Thailand, Philippines) to create the conditions under which the plant men could breed longer-term solutions to

sociopolitical instability. During that period of pacification, the foundations and U.S. aid agencies carried out the kind of prerequisite investment in institution building-mainly agricultural colleges — necessary to create the local skilled labor power to carry out the development of new, higher yielding technologies. All of this was done with the aim of stabilizing the peasants in order to convert them into a pliable, available labor force--first in the fields and ultimately in the factories.

It is important to remember that the preoccupation with new agricultural technologies occurred within a larger strategy that included institutional change. It is often asserted by critics of the Green Revolution that its creators were preoccupied with raising production at the expense of institutional change. While this might have been the case for some plant breeders or other technologists mobilized in the production of the technology, it was not the case for the real architects of the Green Revolution: the social-planners within the foundations and associated government agencies. From the days of China on, men as diverse as John Lossing Buck, Wolfgang Ladejinsky, John D. Rockefeller III, and William O. Douglas were clearly aware of the pressing need to use social reforms as complements to agricultural technology. The great lesson of the "loss of China" drawn by these planners and their associates in 1949 was that they had been "too late with too little" and that they should push other policy makers to support both social and technical changes in order to avoid the spread of peasant revolution in Asia. Indeed, in those areas where western power prevailed such social changes were implemented, especially land reform in Taiwan, South Korea, and Japan. If this kind of change was not pursued in many other areas, it was not because these social planners failed to understand the political need. It was rather because either they or the local elites they had created believed that it would be impossible to carry out land reform or other changes without losing control of the process. The community development efforts which complemented the building of agricultural colleges in the pre-Green Revolution days of the 1950s were merely pale shadows of the kinds of institutional changes which everyone knew were needed but which they were afraid to carry out. To be sure, the Green Revolution's high yielding varieties consisted of technological packages of seeds, fertilizer, controlled irrigation, pesticides, and so forth. But these technologies were conceived by western sponsors as part of an even larger package of social reorganizing changes — changes aimed at breaking up the political structure of the countryside in such a way as to stabilize it. It was the failure to be able to implement the entire gamut of changes, the failure to be able to reengineer the countryside totally, that led to the introduction of the new grains into largely uncontrolled social situations and to the rapid emergence of difficult "contradictions." As always, the major unplannable element of capitalist social planning turned out to be the workers and peasants.

In the terms of the analysis presented above, the Green Revolution (and the other changes that were often not carried out) was designed to change the political composition of the countryside in Asia. It was designed to decompose the existing social divisions which were giving rise to guerrilla warfare in the rural areas and to unrest in the cities. Increased food output could improve nutritional standards for both urban and rural workers, and the new investments in agriculture required by the technologies could provide a new focus of work in rural areas. In the early, optimistic days of the Green Revolution it was thought that the successful introduction of the new technologies by increasing output would create new markets for industrial goods,

stimulate investment, and raise employment, that is, make it possible to put more people to work in the cities as well as in the countryside. It did not, of course, turn out that way.

Decomposition there was, without a doubt. But the inability of the planners to control all the social variables meant that the process of decomposition very quickly became the basis of a new round of political recomposition on the part of the peasantry and others. Most of what is normally discussed under the rubric of "contradictions" or unintended results of the Green Revolution can be understood politically to constitute elements of this poorly controlled decomposition and the reactions of workers to it.

The introduction of the technologies, partly because of the policies of the foundations and research institutes, partly because of the economic structure in rural areas, occurred unevenly and tended to widen wealth and income differentials, both across regions and across the income hierarchy of farmers. Those owning land in the regions with controlled irrigation had the physical possibility to profit, and those farmers who could afford the package of inputs did so — regions and individuals without the physical and financial means sank relatively further behind. The political composition of the countryside changed--there was a widening and deepening of the divisions within the hierarchy. Similarly, as is well known, the increased profits from the new grain yields that were plowed into farm machinery, together with the eviction of tenants as land prices rose, led to the creation of large numbers of landless, jobless peasants. The reserve army grew, putting more pressure on these with jobs. Again there was a decomposition and widening of differentials. Furthermore, the very creation of institutions devoted to developing specialized agricultural technology acted to separate control over technology from its traditional location on the farm — a further division of labor and a new political division for the countries of Asia. Where the technologies were introduced successfully there was an inevitable reorganization of the actual production process. There was new organization of the work involved in irrigation control, weeding, pesticide application, and the like. Although it has been little studied, this new organization certainly led to changed relationships among the workers who continued to have jobs — including changes in the division of labor within the family.

The Green Revolution in short did indeed achieve a large amount of social reorganization in the process of raising food output. But the key political question must remain whether it achieved its fundamental political goal of pacifying the countryside and contributing to the creation of a labor force that could be mobilized by business. We know today that it did not. Moreover, we can go further and say that the Green Revolution not only failed as a political strategy, but that it was defeated. The political defeat of the Green Revolution and of the whole development decade of which it was a part was the product of the struggles of all of those workers who refused to accept the decomposing changes it wrought.

From the very beginning there was political struggle over the new technologies. Rockefeller Foundation photographs show armed guards patrolling research stations to prevent theft of new grains — presumably by peasants refusing to accept the foundation's distribution priorities which favored the rich. In the dramatic case of Vietnam the U.S. sought to use the Green Revolution to contribute to its war effort, while workers smuggled HYV information and materials to the guerrillas and to the North Vietnamese to aid the other side's war effort by increasing food production. Where the introduction of the new grains led to widening income differentials and to

dispossession from the land, growing numbers of unemployed peasants fought back, refusing to accept their reduced status. A whole cycle of struggle began to emerge in Asia as peasants together with other workers (such as politicized students from the cities) moved to protect their position. In India local peasant groups as well as the Naxalities and other Marxist-Leninist organizations were active. Even the conservative CPI(M) led land seizures in West Bengal. In the Philippines new rural unrest blossomed. Exactly how directly the struggles were related to the introduction of Green Revolution technologies is often difficult to determine in specific cases. But what is certain is that the Green Revolution was the most publicized new development during this period of agrarian change, and its specter, if not its material manifestations, was to be found in every rice paddy and wheat field of Asia. In the United States students discovered the relationship between social engineering and revolution, saw the relationship to the draft and to analogous struggles at home, and used their understanding to fight American intervention overseas — both military and social — and to challenge capitalist domination of education and technology at home. In these student struggles the analyses of the Green Revolution provided one example among others of the kind of business control over science and education that needed to be abolished. In short the new technologies were one part of a social reorganization that became the starting point for a whole new international cycle of struggle against that reorganization — a cycle of struggle that circulated far beyond the rice paddies of Asia and plunged the global capitalist system into a crisis from which it has not yet emerged.

In the narrow case of the Green Revolution this crisis was reflected in a huge flood of literature of social engineers trying to figure out what was going wrong. By the time of the spreading famines of the mid-1970s it was widely being judged that not only had the Green Revolution been turning red but it was rapidly turning brown. In place of the optimistic new frontier of the development decade, we found an underdevelopment decade of crisis: the international monetary crisis, the aid crisis, the Gandhian Emergency, the energy crisis, the fertilizer crisis, the reemergence of malaria, the food crisis of rising prices and widespread famine, the global recession of 1974-75 followed by continuing stagnation and inflation. For the Third World the changes have been dramatic. In the 1960s, against the usual background of imperial exploitation, money, aid, and investment flowed in to support development policies of social stabilization. In the 1970s the people of those areas have found these inflows dramatically reduced and the repayment outflows increased. Through many of the crises named above resources have been drawn off massively. The collapse of international exchange reserves through the dollar crisis, the increased energy import charges, the reduction of aid flows, the rising prices of all imports, have all vastly expanded the burden of Third World international debt and brought continuous fiscal crises to the governments involved. These governments in turn have sought to relieve these pressures by imposing austerity on workers. This austerity in general, combined with the passive response of both local governments and international agencies to the droughts and floods which helped create famines in the 1970s, clearly demonstrated that times had changed.

Now we come to the current juncture and to the question of evaluating the political meaning of the Green Revolution technologies during their current revival after a decade characterized more by crisis than by development. What is the present meaning of the new interest in raising agricultural production at all costs? What are the political implications? Why after all the discussion of the political failures of the 1960s does the Trilateral Commission call for full speed ahead on irrigation and HYVs and damn the social consequences? Furthermore, to all

appearances, the much publicized World Bank initiatives to spread agricultural development to small and hitherto neglected farmers has been mostly talk and very little appropriate action. In fact there are indications that World Bank food crop development loans continue to be used primarily to finance technological changes (tubewells, mechanization) that benefit more wealthy farmers--thus continuing the Green Revolution pattern of earlier years. Why? Under these circumstances the meaning of Green Revolution "development" cries out for a redefinition. The "same" technologies certainly have new political meaning. What that meaning is, in general and in particular circumstances, can not be answered quickly. But for those affected, directly or indirectly, by a renewed Green Revolution push, a new political analysis is now necessary. Given the past association of the Green Revolution technologies with rural destabilization rather than with stability, what is going on? Has it been judged by the social planners of business and government that a decade of crises and of attack on workers' income and organizations has been enough to permit a more controlled labor-intensive development in the countryside? Or, is the countryside to be developed despite labor displacement and the excess population to be encouraged to migrate to the cities where they can, perhaps, be better controlled?

And what of our side? The point of view of workers? What strategies are now appropriate for dealing with this new push? For rural workers, which strategies have worked best and should be renewed? Which have been defeated and should be abandoned? The questions have been too little analyzed by critical commentators of the Green Revolution. As usual rural workers will have to draw mainly on their own experiences in evaluating the present situation. As for the skilled scientists and technologists working to produce and modify the HYV technologies, they can now benefit from a decade of research and observation on the impact of their work in evaluating their future course of action. To what degree will they continue to work for business or confine their struggles within the institutions whose role they have been taught is neutral and humanitarian but which we have seen to be harshly political? Or, to what degree will they follow the path of so many energy technologists, break with such institutions of social control, and seek alternative forms of work more at odds with their old masters and more conducive to reinforcing their own and other workers' struggles? For the rest of us, who are neither Third World rural workers nor specialized technologists, what tactics and strategies must we choose vis-a-vis the new initiatives? Should we not redouble our opposition to all such forms of social engineering and business intervention in Third World agriculture? But what forms of opposition have been most effective in reducing such intervention? How do they relate to our own present situation in this post-Vietnam, but still critical, situation? Here are many questions yet to be answered. But in the light of the foregoing analysis we can at least see some of the questions to be asked and some elements of a methodology for answering them.

In this period of capitalist restructuring aimed at overcoming the crisis posed by workers' struggles against development, we must insist on the starkest possible political questioning of all technological change. We must not become sidetracked as others have in the never-never world of philosophical debates over choosing among competing ideologies (Gramsci), traditions (Feyerabend), research programs (Lakatos), or paradigms (Kuhn). As workers we are faced with the immediate pressing need to evaluate how any given technological or scientific development may be used against us as part of capitalist restructuring. Simultaneously we must respond to the question of how we can undermine or use such development to our own advantage. To see that it has been our own struggles for more income and less work that precipitated the crisis of existing

structure of social production is to recognize the possibility of sabotaging current attempts at changing those structures. To attack scientific and technological developments aimed at perpetuating the link between the production of social wealth and work, to attack these attempts to *continue to* reduce life to work, is to assert the radical *distinction between* technological change and technological progress from the point of view of workers. Progress for us can only be understood as movement that abolishes business' control over life in general and over science and technology in particular. What we have to destroy is a capitalist science and technology devoted to the endless structuring and unification of life around work. What our struggles must continue to develop is a new science and new technologies, technologies geared to abolishing work and maximizing time and resources available for the fullest development of all individuals within an increasingly diverse and variegated society.

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