MARX AND THE LABOR PROCESS: AN INTERPRETATION

DAVID GARTMAN

Introduction

As both a resource and a topic of academic investigation, Marxism has come into its own in the United States. Despite this interest, until recently a key concept in Marx's theoretical arsenal has been largely neglected—the labor process. Marxist economists have generally focused upon issues of *distribution* in capitalism—employment and unemployment, income and wealth distribution, concentration and centralization of capital, economic crises. Less attention has been given to a critical analysis of capitalism as a mode of *production*. All too often even Marxists have uncritically accepted the modern capitalist factory as the inevitable if perfectable form of the organization of the labor process.¹

Recently, however, there has been a renewal of interest in capitalism as a specific organization of the labor process. Such scholars as Harry Braverman,² Stephen Marglin,³ Stanley Aronowitz,⁴ Andre Gorz,⁵ and Katherine Stone⁶ have reached the conclusion that one major determinant of the labor process is the conflict of social classes. The way work is organized in capitalist society is not a neutral productive instrument but a political instrument. The organization of work is molded by the attempts of capitalists and their managerial representatives to exert control over recalcitrant workers on the shop floor.

Although drawing on Marx's monumental analysis of the capitalist labor process in the first volume of *Capital*, much of the current work in this area attempts to go beyond Marx, to supplement and in some cases to refute his original analysis. This is, of course, admirable. After all, Marxism is not a static, universal theory but a historical theory that must be revised in the light of historical change.

In order to go beyond Marx in our analysis of the labor process in contemporary capitalist societies, we must first have an accurate, clear knowledge of Marx's original analysis. The purpose of this paper, then, is to let *Marx* speak on the labor process so that we may go forward with him and not merely leave him behind.

The Labor Process

In his writings Marx uses the concept "labor process" to denote the general, historically transcendent process whereby humans interact with nature to produce use values to meet their needs. This process is composed of three elements: (1) purposeful human activity, that is, work itself; (2) the object of that work, the object that humans modify to meet their own needs; and (3) the instrument of that work. The last two elements Marx groups together and calls variously "means of production" and "productive forces." He also calls them the "objective conditions of production," distinguishing these two elements from work itself, the subjective condition of production.⁷

The specific manner in which these objective and subjective factors of the labor process combine provides the basis of Marx's classification of social structure. "Whatever the social form of production, labourers and means of production always remain factors of it. But in a state of separation from each other either of these factors can be such only potentially. For production to go on at all they must unite. The specific manner in which this union is accomplished distinguishes the different economic epochs of the structure of society from one another." Marx labels these "economic epochs" which form the basis for all the rest of social life "modes of production."

Each mode of production is defined by two types of combinations of or connections between the subjective and objective elements of the labor process—"appropriation through labour, the real economic process of making something one's own [Zueigen-Machen], and ownership of objectified labour, [in which] what appeared previously as a real process is here recognized as a legal relation..."

More often Marx calls this first connection between labor and the means of production the "real appropriation" of the means of production. By this he means the actual physical process whereby workers come into contact with instruments and raw materials in order to produce useful products. The extent to which direct producers "really appropriate" means of production is determined by their ability or skill in using them. As Marx states, "the act of really appropriating the instrument, of handling it as an instrument of labour, appears as the worker's particular skill...." In other words, this first connection between the elements of the labor process is actually the *extent of control over direct production* of use values exercised by workers themselves.

As Marx notes, the extent of this control varies among modes of production. For example, under the feudal mode of production, the direct

producers, the peasants, actually retain control over agricultural production. Despite the legal ownership of the feudal lords, peasants are largely left to determine the manner in which they produce; that is, they really appropriate the means of production. Similarly, artisans in the feudal mode of production appropriate the means of production because of their skills. On the other hand, under the capitalist mode of production it is not the direct producers, the wage laborers, but the capitalist who appropriates the means of production. As we shall see later, the workers are separated from their skills, and the labor process is controlled by the iron fist of the capitalist.

The second connection between the factors of the labor process that defines a mode of production is property, i.e., the relation of ownership by humans of the means of production. In his mature works Marx refers to this connection as the "relations of production." This category actually embodies a dual relationship—one between humans and the means of production, and another between humans themselves, which is mediated by the former. On the one hand, relations of production are the manner in which the means of production are distributed among the different human subjects or agents of production. This is the wellknown relation of ownership. On the other hand, relations of production are social relations engendered by the relations between human agents and the means of production. All sharing a particular relation to the means of production are called a class. 11 Because of its ownership of the means of production, the owning class is able to exploit the class of expropriated laborers, appropriating their surplus product. Thus relations of ownership directly imply social relations of dominance and subservience, both within and beyond the sphere of production.

Although the property connection (relations of production) is a combination of the objective and subjective elements of the labor process, it differs from the real appropriation connection in that it is not part of the labor process *per se.* It is not part of the actual physical production of use values. Rather, the property connection is the class structure within which the material process of production takes place. (As we will see shortly, however, this class structure to a large extent determines the development of the labor process.)

Thus the two different connections occupy distinct conceptual positions within Marx's mode of production. The real appropriation of the means of production forms part of the labor process. The property connection forms the distinct category of "relations of production." The mode of production is defined for Marx by the specific combination of these two constituent categories. For example, the feudal mode of

production is defined by a labor process in which the direct producers really apppropriate (control) the means of production, but are separated from ownership. The capitalist mode of production is defined by a labor process in which direct producers are separated from real appropriation of the means of production, and are similarly separated from ownership. Upon the basis of the economic mode of production arises the rest of the social structure, labeled the superstructure. The superstructure, however, is not merely a simple reflection of the material base but actually interacts to constitute and contradict the latter.¹³

The Labor Process and Social Change

Marx's theory of society seeks to understand and explain the dynamics of societies, the emergence of a certain structure and its destruction by its own contradictions. The main dynamic element in Marx's theory is the interaction of an element of the labor process, the productive forces, with the relations of production. Marx and Engels state that "all collisions in history have their origin, according to our view, in the contradiction between the productive forces and the form of intercourse." "At a certain stage of their development, the material productive forces of society come into conflict with the existing relations of production, or—what is but a legal expression for the same thing—with the property relations within which they have been at work hitherto. From forms of development of the productive forces these relations turn into their fetters. Then begins an epoch of social revolution. With the change of the economic foundation the entire immense superstructure is more or less rapidly transformed." ¹⁵

All Marxists agree that herein lies the basis for social change. There has however been much debate over the exact nature of the interaction of these elements. On one side stand technological determinists who see the productive forces within the labor process developing according to their own peculiar logic. These forces directly determine the nature of both the real appropriation (control) of means of production and the property connection (relations of production). Yet there is a lag in this determination, so that newly developed productive forces come into conflict with surviving, anachronistic forms of real and property appropriation. This conflict is translated into the struggle of opposing classes, one representing the fettering relations of production and the other representing the progressive productive forces and the new relations required by them. This class struggle produces change.¹⁶

On the other side of the issue are the more complex, dialectical thinkers who contend that the labor process develops within conditions determined by the relations of production. These property relations engender class conflict which provides the impetus for the development of the organization of the labor process and the productive forces within it. Yet the labor process that was intended to consolidate the rule of a particular class against other classes nevertheless comes into contradiction with that rule, strengthening subordinate classes which create change.¹⁷

While there are certain passages in the writings of Marx and Engels which lean toward technological determinism, it is my belief that these dialectical thinkers hold the correct interpretation of Marx. It is clear from an examination of the entire corpus of Marx's work that for him it is the antagonistic relations of production—class struggle—which provide the impetus for the development of the productive forces.

The development of the productive forces always takes place within the context of a particular class society, and has imposed upon it the imperative of reproducing that society and the domination of its ruling class over the laboring class. But while a particular direction of development reproduces the relations of production, at the same time this development comes to contradict and undermine these relations. The productive forces determine the development of new relations of production, which are realized through class struggle.

In the remainder of this paper, I wish to examine this contradictory, mutually-determinative interaction between the labor process (and its productive forces) and the relations of production, as set forth in the works of Marx. It is by closely examining the way Marx uses his general theory of historical materialism to interpret real historical societies—not by pulling this or that programmatic statement out of context—that we may come to an understanding of the place of the labor process in Marx. I will focus on the capitalist labor process, its emergence, development, and decline, because this is the most thoroughly developed part of Marx's scientific project.

The Labor Process in the Transition to Capitalism

An analysis of the development of capitalism must begin with feudalism. According to Marx, feudalism is a mode of production based mainly on agriculture. The basic relations of production are characterized as follows: The feudal lords constitute the ruling class by virtue of their ownership of the land and the peasants are the direct producers who cultivate the land and transfer the surplus product to the ruling class. Thus relations between lords and peasants are those of dominance based on land ownership, although feudal codes ensure peasants access to this means of production. Often these codes are so strict that peasants are the virtual proprietors of the land.¹⁸

Although separated from legal ownership of the means of production, the peasants are actually very much in control of the actual process of agricultural production. Marx stresses this point by labeling the peasants "possessors" of the means of production. The lord of the manor still exacts surplus however. The various forms of peasants political unfreedom enforced by the lords' control of means of violence ensure surplus appropriation in feudalism.¹⁹

Within the predominantly agricultural feudal mode of production, Marx also recognizes the existence of urban handicraft or artisan production. This is distinguished from feudal agriculture in that the property connection is one of unity, not separation, of the direct producers with the means of production. Craft workers relate to the instruments of production as their own, as their "self-earned private property." The relations of production of handicraft production are not marked by relations of economic dominance. Because the direct producers own their own means of production, their social relations are relations of equal exchange of commodities in a market in which all are on an equal footing.

Besides being owners of their means of production, these feudal craftsmen are, according to Marx, in firm control of the labor process (i.e., they really appropriate the means of production). Therefore, feudal handicraft production is marked by the unity of the direct producers with the ownership *and* real appropriation of the means of production.

It is from this feudal mode of production that capitalism, marked by a separation of direct producers from ownership of the means of production, grows. Thus the transformation of feudalism into capitalism is the process by which direct producers, peasants and craftsmen are expropriated and the means of production concentrated into the hands of non-laborers. Marx calls this process primitive accumulation.

The process . . . that clears the way for the capitalist system, can be none other than the process which takes away from the labourer the possession of his means of production . . . The so-called primitive accumulation, therefore, is nothing else than the historical process of divorcing the producer from the means of production. It appears as primitive, because it forms the pre-historic stage of capital and of the mode of production corresponding with it.²⁰

In agricultural production, this process of primitive accumulation is the expropriation of the land from the peasants. In urban handicraft production, the primitive accumulation is the expropriation from the craftsmen of their means of production—raw materials, tools, customers, workshop. The legal separation of workers from the ownership of the means of production, however, is only the first step in the transition from feudalism to capitalism. Marx makes this clear by distinguishing between *formal and real subsumption of labor under capital*. By the formal subsumption of labor under capital, Marx means the process whereby, due to concentration of ownership of the means of production into the hands of capital, the labor process and the workers in it fall under the control of capital. But the type of subordination exercised here is merely formal. It rests on the formal, legal separation of workers from the ownership of the means of production (property connection).

On the basis of this formal subsumption (property connection), however, there develops a real subsumption, resting on the real labor process (real appropriation).²² Capital seizes hold of the labor process itself and develops new forces of production guided by the imperative of transforming the subordination of workers from a formal process, taking place in the market, to a real process taking place in the workshop itself. Capital develops the productive forces in such a way as to ensure its control over workers. "Capitalist production is the first to develop the conditions of the labour process, both its objective and subjective ones, on a large scale—it tears them from the hands of the individual independent worker, but develops them as powers that control the individual worker and are alien to him."²³

The Emergence of the Specifically Capitalist Labor Process

According to Marx, the first step toward the creation of the specifically capitalist labor process, or the real subsumption of labor under capital, is the emergence of what he calls "manufacture," the gathering of a relatively large number of workers under one roof and under the employ of one capitalist. Manufacture puts an end to the individualized, isolated production of feudalism by assembling a large number of cooperating workers.

The first step in the development of manufacture is the mere gathering into one place of workers, all of whom perform the same tasks. That is, there is as yet no division of labor within the workshop. Marx calls this simple cooperation. The capitalists' motive in initiating this change is clear—simple cooperation increases the productiveness of labor

and consequently increases the rate of surplus value.²⁴ The benefits of this increased productiveness accrue to capital gratuitously, for it is capital that is responsible for bringing these laborers into cooperation. The social nature of production is not developed by the will of the workers but by the external, alien, coercive force of capital.

But Marx states that simple cooperation has another effect on the labor process besides increasing productiveness. It alters the balance of power in the class struggle for real control (real appropriation) of the means of production. The introduction of simple cooperation in the labor process enhances the capitalists' control over the real material production of values.

All combined labor on a large scale requires a directing authority, Marx states, to ensure the harmonious working and coordination of the various individual activities. This is true regardless of the social relations of production under which production is carried out. Naturally, under capitalism it is the capitalist who emerges as the directing, superintending, and adjusting authority, for it is he who is responsible for gathering workers together. But Marx notes that the capitalist uses the position of authority assigned to him to introduce an element of control above and beyond that necessitated solely by the cooperative nature of the labor process. An element of authority arises which is necessitated not by the cooperative production of use values but by the antagonistic relations of production under which use values are produced.²⁵

Marx does not proceed to develop conceptually this two-fold nature of capitalist control of the labor process. However, the distinction is important for understanding his treatment of the development of the capitalist labor process. For the sake of clarity, let us conceptually distinguish Marx's two types of control. The first type I will call *basic control*. This type of authority is necessary in any large-scale production of use values, regardless of the relations of production under which production takes place. A certain amount of control is necessary to coordinate and direct the actions of individual workers, no matter who appropriates the surplus, or how this is done. This basic control is a neutral instrument which helps to realize the potential for greater productiveness embodied in large-scale, cooperative labor.

The second type of control label *surplus control*. It is not necessitated by the productiveness of labor *per se* but by the antagonistic relations of production under which use values are produced. Under capitalism, the capitalist class owns the means of production and is therefore able to exploit the labor of workers for its own benefit. Consequently, a struggle between the two classes emerges over the rate of exploitation.

The greater the workers' control over the labor process—i.e. the greater the extent to which they *really appropriate* the means of production—the greater is their power to resist attempts to increase the rate of surplus value. Capitalist production, based necessarily on the drive continually to expand surplus value, demands that this resistance be overcome. Capitalists must wrest control of the detailed, second-by-second work process from workers.

This surplus control increases the rate of surplus value, but *only under conditions of conflictual relations of production*. In a society without classes, in which production is controlled by and benefits all, workers would voluntarily produce in such a manner as to ensure the common good, in which they by definition share. Such control would not increase the surplus at society's disposal one bit, and hence would be useless. This is clearly Marx's meaning when he states that the discipline or control enforced by the capitalist on combined labor "will become superfluous under a social sytem in which the labourers work for their own account. . . ."²⁷

This formulation of the two types of control over production clarifies the drive behind the transition that Marx notes from the formal to the real subsumption of labor under capital. Capitalists must transform the labor process in order better to produce surplus value. One of these transformations is the passing of the real appropriation of the means of production, their real control, from labor to capital. Capitalists turn their formal control of labor into a real control in order to suppress the resistance of workers and consequently to raise the rate of surplus value. On the basis of this transformation, the specifically capitalist mode of production emerges.²⁸

The next stage that Marx distinguishes in the development of this specifically capitalist mode of production is the division of labor in manufacture. Almost from the beginning of the concentration of workers under one roof, tasks start to be divided into isolated detail operations assigned to individual workers as their exclusive functions. What was once a unified craft practiced by versatile and knowledgeable workers becomes a fragmented mass of detail operations performed by one-sided automatons.

Marx makes it clear that this division of labor, like simple cooperation, increases the productiveness of labor and, consequently, the rate of surplus value.²⁹ He shows however that this division of labor also has the purpose of giving capital greater control over the real appropriation of the means of production and hence over the direct producers themselves. Therefore, there is also an element of surplus control in this

change in the production process, which allows capital to increase its exploitation of workers by suppressing their resistance.

According to Marx, the division of labor increases capitalist control over the labor process by removing much of the knowledge and discretion from workers and centralizing it in the hands of capital. Previously, skilled craft workers were required to be able to perform all of the varied tasks fo their trade. This required considerable skill and knowledge and left capital largely dependent upon workers to get out production. Workers made important decisions about when and how work was done. But when capital shatters crafts into thousands of detail operations, the knowledge, skill, and consequently the control of workers is wrested away. Broad knowledge of the work process is no longer necessary when workers perform the same task day in and day out. Capital centralizes this knowledge; to it falls the task of planning and executing the integration of the fragmented, detail tasks into a productive whole. Thus Marx writes that "Division of labour within the workshop implies the undisputed authority of the capitalist over men, that are but parts of a mechanism that belongs to him."30

The division of labor centralizes into the hands of capital the intelligence and control of work that once belonged to workers. By doing so, it leaves workers largely powerless to resist increased exploitation. It thus allows an increase in the rate of surplus value completely apart from its effect on productiveness *per se*. The division of labor even leaves workers powerless to resist capitalist exploitation by quitting the factory for independent employment. Unlike the craftsman, the detail laborer cannot independently produce commodities for sale. His or her detail labor is useful only within the context of the social organization of labor in the capitalist workshop.³¹

The changes introduced in the labor process by simple cooperation and by the division of labor in manufacture are steps in the process of creating a really unique capitalist mode of production—that is, in creating a specific *real* appropriation of the means of production to match the *formal* appropriation embodied in the property connection. This process, however, is completed only with the advent of the large-scale use of machinery, i.e., modern industry. Before this, the means of production are separated from workers largely in form only, by virtue of their ownership by capital. In the real material production process, workers continue to a certain extent to really appropriate these tools as their won, due to their knowledge and skills, even though the latter are diluted by the division of labor. Therefore, capital's rule over labor is largely formal.

But with the advent of machinery, the separate, alien nature of the

means of production take on the real material form of the machine. The rule of capital over labor is materialized, *realized*, in the rule of the machine over workers.

The appropriation of living labour by objectified labour—of the power or activity which creates value by value existing for itself—which lies in the concept of capital, is posited, in production resting on machinery, as the character of the production process itself, including its material elements and its material motion. The production process has ceased to be a labour process in the sense of a process dominated by labour as its governing unity.³²

For Marx, machinery is defined as "a mechanism that, after being set in motion, performs with its tools the same operations that were formerly done by the workman with similar tools." Machines incorporate into an inanimate, objective mechanism the workers' tools to use in production. The mechanization of production thus marks the end of the *subjective* organization of work, based on human workers, and the beginning of the *objective* organization of work, based on the inanimate motions of machines. The substitution of natural forces for human forces means that now production may be analyzed and organized *scientifically*, i.e., in accordance with the laws of the natural world.

What are the motives behind this transformation? Marx notes that on the one hand, machinery is introduced because, like simple cooperation and the division of labor, it increases the productiveness of labor per se. It increases the amount of use value that may be produced by a given quantity of labor in a given time under any relations of production. Machinery thereby lowers the value of workers' means of subsistence and so raises the rate of surplus value relatively. Machinery produces relative surplus value in another way also, when it is introduced for the first time by a specific capitalist. In this period of transition, before the use of this machinery becomes widespread, the individual value of the innovator's product falls below its general social value, thus enabling him to replace the value of a day's labor power by a smaller portion of the value of a day's product. But on the other hand, capitalists replace hand labor with machinery in order to exert a greater control over the labor process and the direct producers in it. Again, this greater control also increases the rate of surplus value. But it does so only by repressing the struggle of workers against capitalist exploitation.

Therefore, Marx states generally that "[t]he automation, as capital, and because it is capital, is endowed, in the person of the capitalist,

with intelligence and will; it is therefore animated by the longing to reduce to a minimum the resistance offered by that repellent yet elastic natural barrier, man."³⁴ He goes on to state specifically that the control afforded capital by machinery allows it to intensify labor. As long as workers are skilled, it is they who control the intensity at which work is performed. But when their skills are incorporated into machinery, capitalists can control work intensity by controlling the speed of machinery and the number of machines the worker must tend. At one point, Marx goes so far as to state that the very direction of development of machine design is partly determined by capital's efforts to intensify labor.³⁵ Workers de-skilled by machinery are largely powerless to resist this increased exploitation within the shop.

Marx also shows that machinery provides capital with an effective weapon against working class struggle outside the shop, vis., strikes. Machines eliminate the dependence of capital on the small supply of skilled workers, replacing them with unskilled labor, which is in abundant supply. The power of the strike is thus broken. Workers must submit to all the atrocities of a labor process under the full control of capital, which is able to increase exploitation almost at will.³⁶

Marx states that capitalist relations of production are realized—i.e., come into being really, as opposed to formally—only with this stage of modern industry and its machinery.³⁷ He does not however conclude from this that machinery is in and of itself the culprit and must be destroyed to build a truly socialist society. Marx is no Luddite. For him it is not machinery itself that facilitates class domination and oppression, but its historically specific use and development by capitalism. In all possible societies, machinery results in the objectification of human knowledge and skills into a material mechanism. But it is only under the social relations of production of capitalism that this objectification also becomes alienation—that is, only in capitalism does machinery confront workers as an alien force controlled by an exploiting class. Under capitalism, machinery becomes a tool in the class struggle, and hence evidences an element of surplus control. It allows capital to wrench knowledge and skills away from workers and concentrate these into its hands. Capital controls machinery, and the science by which it is produced and regulated, and uses it to exploit workers.

But Marx holds that it is possible for workers to control this machinery under different relations of production, given the proper education.³⁸ The alien nature of machinery is due solely to its development and use by capital.

The emphasis comes to be placed not on the state of [the productive powers of labor] being objectified, but on the state of being alienated, dispossessed, sold...; on the condition that the monstrous objective power which social labour itself erected opposite itself as one of its moments belongs not to the worker, but to the personified conditions of production, i.e., to capital.... But obviously this process of inversion is a merely historical necessity, a necessity for the development of the forces of production solely from a specific historic point of departure, or basis, but in no way an absolute necessity of production.... It requires no great penetration to grasp that, where e.g. free labour or wage labour arising out of the dissolution of bondage is the point of departure, their machines can only arise in antitheses to living labour, as property alien to it, and as power hostile to it; i.e. that they must confront it as capital. But it is just as easy to perceive that machines will not cease to be agencies of social production when they become e.g. property of the associated workers.³⁹

I do not think that Marx means by this that certain specific machines or aspects of technology developed under capitalism do not have to be discarded in a socialist society. It seems to me evident that certain such means of production (e.g., the assembly line) have the capitalist imperative to dominate and exploit labor built right into their nuts and bolts. He means to stress, I think, that machinery as such, as a general type of productive force, is not inherently exploitative and may form an integral part of a socialist process of production.

The Contradictory Nature of the Capitalist Labor Process

I have attempted to show above that for Marx the labor process specific to capitalism emerges only *after* capitalist relations of production, and is fundamentally determined by the class struggle entailed by these relations. This is only one side, however, of the process of mutual determination between the relations of production and the labor process.

The labor process that emerges under capitalism also shapes and determines capitalist relations of production. And Marx shows, of course, that this determination is contradictory in nature. While the capitalist labor process constitutes the relations of production by turning capitalist appropriation of labor and the means of production from a formal to a real relation, it also serves to undermine this appropriation and to create the basis of new relations of production. "On the one hand, it [the capitalist revolution in the labor process] creates the real conditions for the domination of labour by capital, perfecting the process and providing it with the appropriate framework. On the other hand, by

evolving conditions of production and communication and productive forces of labour antagonistic to the workers involved in them, this revolution creates the real premises of a new mode of production, one that abolishes the contradictory form of capitalism. It thereby creates the material basis of a newly shaped social process and hence of a new social formation."⁴⁰

Three contradictions between the labor process (including its forces of production) and the relations of production of capitalism are well developed in Marx are relevant here. One is the law of the tendency of the rate of profit to fall. By replacing workers with machinery in their struggle against them, capitalists diminish the only value-creating element of production. The rate of profit consequently falls. The second contradiction is that between the increasingly socialized labor process and *private* appropriation. The particular forces of production introduced by capital can only be really appropriated by a group of cooperative laborers. This social imperative of production contradicts the private character of capitalist ownership (formal appropriation). A third, lesserknown, contradiction is that between the technical requirements of labor under modern industry and capitalist domination. The continual displacement and shifting of workers caused by mechanization demands workers who are versatile and multifaceted, in contradiction to the need of capital for easily-dominated detail laborers.⁴¹

For Marx, however, social change ultimately hinges on class struggle. The broad economic contradictions of capitalism noted above await their resolution in the victory of the proletariat in its struggle against the bourgeoisie. And Marx shows that while the capitalist labor process economically debilitates the working class, at the same time it strengthens workers in their political struggle. The same measures that render workers virtually powerless in the shop also turn them into a class-for-itself, a conscious, active class struggling against its oppressors.

Under earlier stages of the development of the capitalist labor process, workers have economic power on the shop floor due to their skills—but they are politically divided and weak. Simple cooperation merely brings carft workers together under one roof. These workers remain divided, however, into separate crafts, each jealously guarding its privileges. Within each craft, remnants of the apprenticeship system divide apprentices, journeymen, and masters.

The rise of the division of labor in manufacture does not change the political situation much. Workers become a bit more concentrated geographically. And many crafts are shattered into a plethora of detail tasks. Skills, however, cannot be entirely eliminated. Consequently, a labor hierarchy based on skill gradations develops and serves to keep the workers divided and politically weak.⁴²

But the transition to modern industry works great changes on the political strength of workers. Mechanization largely breaks down the skill differences separating the interests of workers. All are more or less reduced to a homogenous mass of machine tenders, according to Marx. Geographical divisions are overcome by the concentration of huge masses of workers demanded by modern industry. Further, the nature of work in the modern factory requires the organization and disciplining of workers, thereby preparing them for organized and disciplined political action. For the first time workers begin to see their common interests and to articulate them. They form a class-for-itself which challenges the existence of the class relations of capitalism. Thus, Marx shows that the same developments in the labor process introduced to enhance capitalist domination of society ultimately undermine it. 44

Unfortunately, Marx's prognosis has not yet been realized in any advanced capitalist society. Many recent scholars stress the importance of capitalist-devised labor hierarchies in splitting the working class and delaying revolution. Other aspects of Marx's theory of the labor process and its development in capitalism also need re-examination in the light of contemporary social developments. It is my contention, however, that contemporary Marxist analysis must go forward with a thorough knowledge of Marxist theory. I hope that this paper has served to further this knowledge in one area.

Notes

The original version of this article appeared in *The Insurgent Sociologist* 8:2 & 3 (Fall, 1978) pp. 97–108.

- 1. For an analysis of the historical decline and recent revival of interest in Marx's critique of the capitalist labor process, see Harry Braverman, **Labor and Monopoly Capital** (New York: Monthly Review Press, 1974), pp. 8–14.
 - 2. **Ibid.**
- 3. "What Do Bosses Do? The Origins and Functions of Hierarchy in Capitalist Production," **Review of Radical Political Economics** 6(2). Summer 1974, pp. 60–112.
 - 4. False Promises (New York: McGraw-Hill, 1973).
- 5. "Technical Intelligence and the Capitalist Division of Labor," **Telos**, No. 12, Summer 1972, pp. 27–41.
- 6. "The Origin of Job Structures in the Steel Industry," **Review of Radical Political Economics** 6(2), Summer 1974, pp. 113–73.
- 7. Karl Marx, "Results of the Immediate Process of Production" [the unpublished "Chapter Six" of the first volume of **Capital**], *in* Marx, **Capital** (New York: Vintage, 1977), I, p. 980. On Marx's exposition of the concept of "labor process", see also **Capital** (New York: International Publishers, 1967), I, pp. 177–85.
 - 8. Capital, II, p. 34. (Hereinafter International Publishers edition).

- 9. Karl Marx, Grundrisse (New York: Vintage, 1973), p. 514.
- 10. Marx, Grundrisse, p. 499.
- 11. This is, of course, a very *objectivistic* definition of class, adopted because I am concerned mainly with economic relations here. It corresponds to what Marx calls a "class-in-itself." The broader, more complex "class-for-itself" cannot be reduced to such simple objective definitions. It involves cultural and political factors as well as economic ones. Marx has this broader definition of class in mind when, in **The Eighteenth Brumaire**, he writes, "In so far as millions of families live under economic conditions of existence that separates their mode of life, their interests and their culture from those of the other classes, and put them in hostile opposition to the latter, they form a class" (*in* Karl Marx and Frederick Engels, **Selected Works**, 3 volumes [Moscow: Progress Publishers], I, p. 479).
- 12. Note that this interpretation of Marx's categories differs from that of the structuralists.
- 13. On the dialectical interaction of base and superstructure, see especially Karl Marx and Frederick Engels, **The German Ideology** (New York: International Publishers, 1970), p. 58.
 - 14. **Ibid.**, p. 89.
- 15. Karl Marx, A Contribution to the Critique of Political Economy (New York: International Publishers, 1970), p. 21.
- 16. For such an interpretation of Marx, see Nikolai Bukharin, **Historical Materialism** (Ann Arbor: University of Michigan Press, 1969). Although this simplistic view of Marx is still widely held by bourgeois interpreters, few contemporary Marxists remain technological determinists. However, within the Soviet Union and its sphere of influence this view is still widely held as it is in Third World countries adopting this model of development. On the nature and development of the Soviet model, see Charles Bettelheim, **Class Struggles in the USSR: First Period, 1917–23** (New York: Monthly Review Press, 1976), esp.
- 17. A large number of contemporary Marxists have developed this view (see works cited in footnotes 1–6).
 - 18. Marx, Capital, I, pp. 717, 718.
 - 19. **Capital**, III, pp. 790–91.
- 20. **Capital**, I, pp. 714–15. For a discussion of this process that is more extensively theoretical than that in **Capital**, see Marx, **Grundrisse**, pp. 497–515.
- 21. Although this distinction does appear in the final form of the first volume of **Capital** (p. 510), its main development is confined to the unpublished "Chapter Six" of the same work, entitled "Results of the Immediate Process of Production" (op. cit.).
 - 22. "Results of the Immediate Process of Production," pp. 1034-35.
 - 23. **Ibid.**, p. 1056.
- 24. For a detailed discussion of the role of surplus value, see Gartman's original Insurgent Sociologist article. For an analysis of the reasons why simple cooperation increases the productiveness of labor, see Marx, **Capital**, I, pp. 322–29.
- 25. **Ibid.**, pp. 331–32. For basically the same statement about the nature of capitalist control over production, see also Marx, **Capital**, III, pp. 383–85, and **Theories of Surplus Value** (Moscow: Progress Publishers, 1971), III, pp. 505–07.
- 26. The basic concepts of basic and surplus control are adapted from Herbert Marcuse's study of Freud. **Eros and Civilization** (Boston: Beacon Press, 1955), pp. 34–40. After reading Marcuse I became aware that Marx actually uses the same type of distinction in his analysis of the labor process.
 - 27. Capital, III, p. 83.
- 28. My interpretation differs from two other scholars working on this problem of efficiency versus control, viz., David Gordon and Stephen Marglin. In his paper, "Capitalist Efficiency and Socialist Efficiency" (Monthly Review 28(3) July-August 1976), and Gordon draws a rigid distinction between the motives of class control and productive efficiency

in the capitalist labor process. The first he labels qualitative efficiency; the latter, quantitative efficiency. He states that the two may come into conflict, in which case capitalists sacrifice quantity (productive efficiency) to quality (class control). In his paper, "What Do Bosses Do?" (op. cit.) Marglin makes a similarly rigid distinction between the motives of class control and efficiency of production in the development of the capitalist labor process. In examining the history of the industrial revolution, he finds that some of the basic changes in the labor process—division of labor, rise of the factory—do not make production more efficient but merely allow greater capitalist control. My interpretation of Marx differs in that it holds that class domination of the production process is intimately bound up with productive efficiency, as measured by the rate of surplus value. Capitalist control of the labor process does increase the efficiency of production under conditions of class struggle because it overcomes workers resistance to exploitation.

- 29. Marx generally follows the reasoning of Adam Smith here. See **Capital**, I, pp. 399-42.
 - 30. **Ibid.**, p. 356.
 - 31. **Ibid.**, pp. 360–61.
 - 32. Marx, Grundrisse, p. 693. See also Capital, I, p. 423.
 - 33. Capital, I, p. 374.
 - 34. Ibid., 403.
- 35. **Ibid.**, p. 410. Note that the specific type of exploitation here is the production of *absolute* surplus value, not relative surplus value. Thus the production of absolute surplus value exists in the stage of the real subsumption of labor, as well as in the formal subsumption stage.
- 36. Ibid., pp. 435–37. See also Marx to P.V. Annenkov in Paris, December 28, 1846, Marx-Engels, **Selected Correspondence**, p. 33.
 - 37. Grundrisse, p. 297, and "Results," pp. 1024, 1035.
- 38. And machinery itself provides the free time necessary for all to develop the skills and knowledge to really appropriate these productive forces (see **Grundrisse**, pp. 711–12).
 - 39. **Grundrisse**, pp. 831–33.
 - 40. Marx, "Results," p. 1065.
 - 41. Capital, I, pp. 486-88.
 - 42. On labor hierarchies, see **Ibid.**, pp. 349-50.
- 43. Karl Marx and Frederick Engels, "Manifesto of the Communist Party," in Marx and Engels, **Selected Works**, pp. 114–17.
- 44. For a development of Marx's view of proletarian strength and the labor process, see Paul Sweezy, "Marx and and the Proletariat," in his **Modern Capitalism and Other Essays** (New York: Monthly Review Press, 1972), pp. 147–65.
- 45. See Stone, **op. cit.**; and Richard C. Edwards, "The Social Relations of Production in the Firm and Labor Market Structure," and Howard M. Wachtel, "Class Consciousness and Stratification in the Labor Process," both *in* Richard C. Edwards, Michael Reich, and David M. Gordon (eds.), **Labor Market Segmentation** (Lexington, Mass.: Heath, 1973), pp. 3–26 and 95–122, respectively.