The Nature of Labor Exchange and the Theory of Capitalist Production*

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ABSTRACT: This article compares the neoclassical and Marxian theories of the firm. The neoclassical, interpreting the social relations in the production process, in particular the relations of authority and inequality, as flowing from the nature of technology and atomistic preferences, is shown to be incorrect. The Marxian theory which interprets the social relations of the production process as the outcome of class struggle, is supported theoretically and empirically. The Marxian analysis presented herein starts with the labor/labor-power distinction, and derives the relations of authority, control, and forms of inequality in the capitalist firm from the dynamic of extraction of surplus value.

Introduction

This paper contrasts two perspectives on the organization and structure of the production process, neoclassical and Marxist, defending the latter as a more accurate portrayal of capitalist production. Neoclassical theory, in capsule form, views the organization of the capitalist enterprise as the solution to the problem of finding a least-cost technique of production given an array of factor prices. Marxist theory views this organization, rather, as the outcome of a struggle (albeit an unequal struggle) between capital and labor over the rate of exploitation of labor.

For neoclassical economics, the essence of capitalism is its sphere of exchange relations. Capitalism reduces all essential economic relations to independent exchanges among freely acting and mutually benefitting firms and households. These firms and households are in turn treated as “black boxes” whose internal structures (production functions and preference structures) are determined outside economic theory by the state of science and the psychology of the individual. Thus the neoclassical analysis of capitalism reduces to the examination of market relations among technologically and psychologically determinate actors. Were this methodology valid, the neoclassical theory of production would follow as a matter of course.

In Marxist theory, however, the social relations of capitalism cannot be reduced to exchange relations. The essence of capitalism is the exploitation of labor through the private ownership and control of capital on the one hand, and the system of wage-labor on the other. The key concept in Marxist theory delineating the essential non-exchange relations of the capitalist economy is the labor/labor-power distinction. This concept is the methodological basis of Volume One of Capital and was developed by Marx in Theories of Surplus Value as the prime weapon in the critique of classical political economy.

According to this conception, there is no quarrel with treating goods, services, raw materials and capital goods as commodities. But labor cannot be so treated: the commodity which is

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exchanged on the market (labor-power) is not the entity which enters into the production process (labor). Labor-power is a commodity whose material attributes include the capacity to perform certain types and intensities of productive activity. Labor itself, however, is the active, concrete, living process carried on by the worker; its expression is determined not only by labor-power but also by the ability of the capitalist to exploit it. Surplus value appears when the capitalist is able to extract more labor from the worker than that embodied in the value of labor-power (the wage).

If labor cannot be analysed as an exchange relation, neither can it be subsumed under the category of technological data. The labor forthcoming from a worker depends, in addition to his/her biology and skills, on states of consciousness, degrees of solidarity with other workers, labor market conditions and the social organization of the work process. Thus labor can be reduced neither to commodity relations nor technology alone; rather it must be accorded a separate status as a social relationship. Thus there is a fundamental gap in any economic theory which attempts to abstract from productive relations in an effort to comprehend capitalist development. Nor can the dynamics of class struggle be relegated to the political sphere, however extensive the impact of state activity or the cohesiveness of the workers movement.

Indeed, Marx argues, the basic categories of profit and wages cannot be understood outside the social relations between capitalist and worker in the production process itself. The sphere of exchange, which appears to condition all economic activity, actually masks the underlying structural relations embodied in the social relations of production.

From the labor/labor-power distinction, it follows that the organization of production in the capitalist firm must reflect essential elements of class struggle. Work organization is the historical product of a dynamic interaction between technology and class relations. Not only must such traditional issues as the length of the workday and the division of revenue between capitalist and workers be understood in terms of the extraction of surplus value, but also the structure of hierarchical authority, job fragmentation, wage differentials, racism and sexism as basic characteristics of the capitalist firm. In this paper I shall sketch such an analysis.

The Marxist theory of work organization, which in modern corporate capitalism shades into a theory of bureaucracy, is by no means adequately developed. In addition to Chapters 13-15 of Marx’s Capital, there have been several important contributions, historical, heuristic, or speculative in nature [12, 21, 28, 29, 32, 33, 45, 51, 64]. What is needed as well is a structural theory which explicitly links the development of worker consciousness at the point of production to the organizational means of reproducing capitalist hegemony. I shall here offer such a theory by introducing two conceptual elements: the structure of influence in work relationships and the dynamics of legitimation.

The Marxist approach begins by affirming that we cannot abstract from labor as a social process. From this critical perspective, the neoclassical theory is a failure indeed. The order it imposes on reality is a reification of human relationships which reduces the rich variety of social relations in production to triviality and assigns to residual categories fundamental aspects of modern society whose understanding is crucial to the prospects for human liberation. The reification imposed in neoclassical theory is not simply arbitrary and short-sighted, but rather follows the actual process of reification imposed by the capitalist mode of production — the reduction of all social relationships to exchange relations. In the words of Marx [47, p. 120]:

The value of the worker as capital rises according to demand and supply, and even physically his existence, his life, ... is looked upon as the supply of a commodity like any other.

Marxist theory recognizes at the same time, however, that the worker is not a commodity, and that the contradiction between worker as commoditized object and conscious, human subject is the driving force of class struggle in capitalist society. Thus the capitalist economy both is and is not reduced to exchange relations, in a dialectic we must capture. The principal contradiction in capitalist production is between capital and labor, between labor as the object of profit and domination and labor as self-actualizing subject. The firm as an organization can only be understood as an institution mediating this contradiction in the interests of profit, and reproducing when possible the forms of consciousness and social relations upon which the integrity of capital is based.
The Neoclassical Description of Production: Empirical Anomalies

The neoclassical theory of capitalist production views each worker both as endowed with a preference ordering over all jobs in the economy and as capable of performing at higher or lower levels of productivity in each. These preferences are aggregated into supply curves for each possible job, in terms of which the entrepreneur chooses a cost-minimizing job structure using one of the available techniques of production. Labor is thus treated as a commodity like any other factor of production. Through the consequent blurring of the labor/labor-power distinction, three implications are derived of basic socio-political importance. First, the resulting job structure will be efficient. That is, any alternative to the observed job structure which increases both output and worker satisfaction must also increase costs. Second, wage differentials reflect relative job desirability and unequal skill requirements. In particular, wage differences between two workers (say a black and a white) reflect differences in either their level of skills or their individual job preferences.

Third, worker sovereignty will obtain in the same sense, and under the same conditions, as the more traditional consumer sovereignty.[28] That is, the overall constellation of jobs will reflect the trade-off of workers between wages and job satisfaction. For instance, if a group of workers desired more satisfying work, they would offer their services at a lower wage. A profit-maximizing capitalist would search for a job structure embodying this type of work which would become profitable at the lower wage rates. Thus the supply would increase to meet the demand at the lower equilibrium wage.2

These three propositions illuminate some of the most fundamental perspectives of neoclassical theory on capitalist society. The first implies that the sphere of production is socially neutral in the sense that it is independent of property relations, class structure, and the mode of social control of economic life. The second implies that wage inequality results from the difference in technically-relevant attributes of individuals. In particular, capitalism exhibits a strong tendency toward “meritocracy,” whereby individuals attain economic positions based on their “achievements” alone, and independent of such ascriptive characteristics as race, sex, social class background, ethnic origin, etc. Thus persistent differences in economic outcomes across ascriptively distinct groups are due to differences in tastes, abilities, or opportunities of skill-acquisition. The third implies that the historical development of work corresponds, within the limits imposed by science and technology, to the preferences of workers. If work is less than satisfying, it is because most workers prefer higher incomes to more satisfying jobs.

Is the capitalist firm technically efficient? A fundamental characteristic of modern capitalist production is the hierarchical division of labor, according to which ultimate power is vested in the apex of the organizational pyramid and radiates downward. Associated with this is the specialization, fragmentation, and routinization of tasks, and the development of a finely articulated pattern of pay, prerogatives, and status. This organizational pattern is usually explained in terms of efficient technology, which in turn dictates strongly centralized control mechanisms for purposes of coordination. The experimental literature in industrial social psychology and sociology is, however, considerably more circumspect, and indicates a mutual interdependence of control mechanisms and the division of tasks. Thus Vroom reviews an extensive body of literature, concluding:

[the evidence indicates that] decentralized structures have an advantage for tasks which are difficult, complex, or unusual, while centralized structures are more effective for those which are simple and routinized. [65, p. 243]

Hence task-fragmentation and routinization cannot be taken as the cause of the hierarchical control structures of the enterprise. However the hierarchical structure of power fits into the logic of profit-maximization, task fragmentation will follow as a result. All that we can derive from this experimental literature is that if centralized control is posited, then the “minute division of labor” will be relatively productive.[63]

Indeed it appears that in the course of development of capitalist enterprise, the hierarchical division of labor preceded technical innovation, and accounted for the early success of the factory system over its traditional rivals [45] in the course of the British Industrial Revolution. Early factories employed the same techniques of production as putting-out and craft organization, and there were no technological barriers to applying them to these more traditional forms. The superior position of the capitalist factory system in this...
period seems to derive not from its efficiency sense, but its ability to control the work-force: costs were reduced by drawing on child and female labor, minimizing theft, increasing the pace of work, and lengthening the work-week.[45] Of course, given the hierarchical structure of control as a temporal antecedent, the minute division of labor follows, and as new technologies are developed, they may be tailored to this division of labor. Thus prima facie observation cannot determine that the organization of the enterprise is an adaptation to superior technology.

Finally, there have been numerous attempts to replace the hierarchical division of labor by systems of worker control, team production, and job expansion. Fairly intensive attempts in China, Yugoslavia, Italy, Cuba, and Chile demonstrate higher productivity and work satisfaction.[11; 33] More moderate experiments have taken place in capitalist countries themselves.3 \[11; 66; 67\] As Blumberg concludes:

> There is scarcely a study in the entire literature which fails to demonstrate that satisfaction in work is enhanced or . . . productivity increases accrue from a genuine increase in worker’s decision-making power. Findings of such consistency, I submit, are rare in social research . . . the participative worker is an involved worker, for his job becomes an extension of himself and by his decisions he is creating his work, modifying and regulating it.

Yet a shift toward participatory relationships is scarcely apparent in capitalist production \[67\] and small moves in this direction are generally interpreted as attempting to avoid severe labor antagonisms, rather than to increase profit under normal conditions of operation. [33; 60] These observations are not compatible with the neoclassical assertion as to the efficiency of the internal organization of capitalist production.

If profit-maximization does not entail efficiency, clearly the wage may represent the worker’s “marginal contribution to profit” without representing his or her “productivity.” Indeed, the very concept of marginal productivity is theoretically dubious, as it cannot be easily disengaged from the total neoclassical framework. Empirically, we may obtain various indices of skills and abilities, supervisor ratings and behavior records. But these are distressingly indirect. Even when precise output measures are available (e.g., salespeople, taxicab drivers, baseball players), they do not capture the effect of the individual or the productivity of other members of the group. Moreover, individuals with widely varying “productivities” in this sense will often occupy the same positions at the same wage.[8; 12; 66] In this situation, evidence bearing on the adequacy of the marginal productivity assertion must be critically interpreted. Nevertheless, evidence does seem to contradict the theory where the two intersect.

To begin, as we have noted, the marginal productivity doctrine implies that over time differences in the economic attainment of workers with distinct ascriptive traits should decline, unless attributable to differences in acquired skills. Yet available evidence indicates that differences in economic success based on race, sex, and social class background have not significantly declined over time.[3; 5; 12; 31; 36; 39; 69] and cannot be explained by differences in innate ability [13] or the acquisition of marketable skills.[10; 34; 36; 56; 59]. This suggests that skills may not adequately capture the value of a worker to the employer. This seems to be the case. Neither IQ, nor measured cognitive skills, have much independent explanatory value in income determination [12; 29; 36; 59] and only a small portion of the association of education with economic position can be accounted for by the contribution of schooling to cognitive skills.[29] Within occupational categories, moreover, these attributes do not go far in explaining either supervisor ratings or observed promotions.[8; 21]

Indeed, hiring and promotion involve far more than the assessment of skills.[12, 51]. Capitalists assess in addition to possession of adequate skills, (a) ascriptive characteristics, (b) work-relevant personality traits, (c) modes of “self-presentation,” including manner of dress, speech, and personal interaction, self-concept and social class identifications, and (d) credentials, of which formal education is the most salient. How these factors relate either to profits or productivity is complex, and will be discussed in the sequel. As a whole, however, their prominence tends to contradict a simplistic marginal productivity theory and indicates massive deviations from “meritocratic principle.”

Additional evidence can be gleaned from investigations of the wage and hiring policies within individual firms.3 [For instance, 20] First, marginal productivity theory suggests that wage rates should adjust flexibly to changing market conditions. This
is not the case. Within a firm the wage structure is quite rigid and ordinarily well-buffered from market forces.[20, Part I, pp. 13-90] Clear preference is ordinarily given to existing workers for filling job openings, as opposed to reliance on the market. A well-articulated “internal labor allocation process” arises in which worker productivity is but one factor. In particular there is a tendency for the number of individuals qualified for a position to exceed the number of jobs available, in which case seniority and other administrative rules are used to determine promotion. Hardly do workers compete for the job by bidding down its wage. Finally, job ladders artificially isolate individuals from skill learning opportunities which might lead them to challenge their existing positions in the organization[32].

Of course, if profit maximization does not entail technical efficiency, and if the doctrine of the equality between wages and marginal productivity is false, then worker sovereignty will not obtain. That is, the historical development of work will not conform to the manifest preferences of workers, even when weighted by skill differentials among workers. If the hierarchical division of labor is necessary to the extraction of surplus value, then worker preferences for jobs threatening capitalist control will not be implemented. In addition, there is to my knowledge no evidence that the historical evolution of work is brought into conformity with individual preferences via the wage structure mechanism. Rather, this evolution seems due to changes emanating from the demand side of the labor market (shift from entrepreneurial and craft organization to corporate enterprise, the expansion of the state sector), to which supply is brought into conformity.

In sum, the neoclassical theory of production generates fundamental propositions which seem controverted in fact. This, I shall argue, is due to its faulty handling of the labor exchange.

**The Nature of the Labor Exchange**

The neoclassical theory of production is based on the crucial assumption that the labor exchange (the social process whereby the worker exchanges his or her labor for a wage) can be treated solely as an exchanges of commodities. This treatment appears most clearly in mathematical formulations of general equilibrium theory. Thus in Debreu’s *Theory of Value* [18], labor services and goods differ only in the algebraic sign of the variables quantifying them. Other mathematical formulations (e.g., [2]) are only slightly more complicated. The standard micro-economic textbook presentation differs but in degree of sophistication.

This assumption is *prima facie* incorrect. In fact, the hallmark of the capitalist firm is its reliance on the authoritative rather than the market allocation of activity. As Coase noted in his classic article “The Nature of the Firm” [15, p. 333]:

> If a workman moves from department Y to department X, he does not go because of a change in relative prices, but because he is ordered to do so . . . Outside of the firm, price movements direct production, which is coordinated through a series of exchange transactions on the market . . . Within the firm . . . is substituted the entrepreneur-coordinator, who directs production.

Indeed, Coase proceeds to argue that the efficiency of the profit-maximizing firm rests securely on the distinction between the market and authoritative allocations. Certain allocations are more efficiently executed *via* authoritative decree than via market transactions. The profit-maximizing entrepreneur will determine exactly which ones these are. The efficiency of market exchanges is owed to the agglomeration of certain allocations within the productive unit, where they can be handled efficiently through the mechanism of entrepreneurial authority. Economic theory, dealing with exchange relations, can then treat the firm as a “black box” of authoritative allocations.

Coase’s argument provides a sophisticated validation of the market character of the labor exchange as embodied in formal mathematical treatments. Thus in the Debreu model we need only note that the profit-maximizer chooses a production point which includes not only the market exchanges he makes, but the allocations of inputs (raw material and labor) as well. The latter are clearly authoritative allocations. But the question of the nature of the labor exchange then arises in a different guise. Can the profit maximizer’s “choice” concerning the disposition of non-human factors of production be treated symmetrically with that concerning human labor? If so, the labor/labor-power distinction is clearly invalid.
Neoclassical economics has generally overlooked this critical question. But Coase attempts to repair the gap.[15]

He begins by stressing the difference between an employee and an independent supplier of a service (an 'agent'). Suppose an entrepreneur requires electrical repairs in the factory. He or she may either engage an independent electrician to perform a specific task (e.g., repair an outlet), or employ a worker skilled in electrical work. The entrepreneur will choose the most efficient solution. From employing, he or she secures the flexibility of obtaining a series of "electrical services" when needed, without having continually to recontract with an independent agent. The worker exchanges a wage for the disposition over work activities. Paraphrasing Batt (quoted in Coase, p. 350):

The employer must have the right to control the employee's work, either personally or by another employee or agent. It is this right of control or interference, of being entitled to tell the employee when to work (within the hours of service) and when not to work, and what work to do and how to do it (within the terms of such service) which is the dominant characteristic in this relation . . .

That is, the essence of the employer-employee relationship lies in the latter's relinquishing complete disposition over his or her activities, subject to agreed-upon limitations and restrictions. The worker is then a passive agent who can be treated, from the employer's perspective, no differently from other commodities.

This conception of the labor exchange has been vigorously formalized by Herbert A. Simon. [61, ch. 11] Simon postulates a set $A$ of activities the worker is capable of performing. He will supply each at a price $p(a)$ for $a \in A$. This describes his position as an independent agent. But he may contract a fixed wage $w$, in return for which the employer can choose any $a' \preceq A$, where the definition of $A'$ is part of the labor contract. Simple equations can be formulated to exhibit under which conditions one or the other exchanges will be acceptable to both parties. This model gives the neoclassical conclusion as to the efficiency of the profit-maximizing solution for the firm.

The major objection to this approach is both simple and yet absolutely fundamental. The theory assumes that once the contract between capitalist and worker is completed, the question of who has power over whom is solved. The capitalist simply tells the worker what to do and the worker either does it, or finds another job. Yet in the fact the power relations within the enterprise are not solved through these market exchanges at all.

We may note that taking power relations as exogeneous data in economic analysis is basic to the methodology of neo-classical theory. The theory of the firm is merely a case in point. Indeed, Abba Lerner has astutely noted that neo-classical economics is predicated on the prior solution of political problems:

An economic transaction is a solved political problem. Economics has gained the title of queen of the social sciences by choosing solved political problems as its domain.[43, p. 259]

The most conspicuous examples are the treatment of property rights and contractual obligations, on which market transactions are predicated as "solved political problems." And with some validity. The security of property in factors of production, goods, and capital is based on the legal rights of ownership, guaranteed ultimately by the coercive power of the state. Exchanges of property, like all legal contractual obligations, are simple extensions of property rights, and are similarly secured by the state. Exchange relations involve 'solved political problems' in that the coercive (i.e., political) instruments guaranteeing the binding character of the social relationship lie predominantly outside the jurisdiction of the exchanging parties. Thus it is often permissible to take these power configurations as exogenous for the purpose of economic analysis.

Clearly the neo-classical assumption can be extended to hiring the services of an independent agent. If hired, the agent contracts to supply a particular service for a price. Failure to provide the service entitles the user to withhold payment, and perhaps also sue for damages. The contract is guaranteed by an external political power (the juridical system) and the exchange can be treated symmetrically with other market transactions.4

The essence of these various market exchanges is a legally enforceable quid pro quo. Not so in the case of wage labor, where in return for a wage (quid), the worker normally offers only to submit to the political authority of the firm. When a specific
*quo* is in the form of labor services, the individual is an independent agent, not a wage laborer. What the worker must do in order that profits accrue goes far beyond the terms of legal contract. The legal contract will in general specify the hours of work, the meeting of certain health and safety conditions, limitations on what the worker can be asked to do, the wage rate, pensions, etc. While the state may in dire situations interfere in favor of the capitalist, he cannot in general be satisfied with the fulfillment of the *legally enforceable* conditions of the labor exchange. For instance, in the case of hiring an electrical worker, the exchange relations do not guarantee that *a particular range of services* will be offered (e.g., that $x$ number of outlets will be repaired per day, or $y$ number of panels installed, or $z$ number of switches replaced). The latter can be guaranteed only by *the particular way* the employer exerts control over the worker.

In terms of the Simon model, the fault is simply this: the worker receives a wage, and can perform any act in set $A$, but what determines that the capitalist can *choose* any $a \notin A$? The worker may *allow* the capitalist to do this, or the capitalist may somehow *induce* the worker to perform (a), but this is certainly not guaranteed by the contract. Power enters into the organization of the firm in a sense far beyond the “*authoritative allocation of value*” in the Coase-Simon sense. Power must be used to *evinces* worker behavior not guaranteed by the labor exchange (the contractual obligations). Indeed, a common form of worker insubordination is “working to rules,” whereby workers undermine the production process merely by doing exactly and precisely as they are required, not by contract, but by regulation.

This basic neoclassical fallacy is *precisely* the blurring of the distinction between labor and labor-power. The labor exchange involves the exchange of one commodity (labor-power) for another (the wage). But the concrete substance of labor which actually enters into the production process is conceptually distinct from labor-power and must be analyzed in fundamentally different terms. Actual labor is *not* exchanged for a wage according to market principles. Thus power relations between capitalist and worker are *resultants* of economic organization, and cannot be taken as given prior to economic analysis. On this point the neo-classical theory of the firm founders. This fact bears several implications which we proceed to investigate.

### Consciousness and Capitalist Production

The first implication of our analysis is that the profitability of production will depend intimately on the consciousness of workers. In this sense the labor exchange differs radically from a true market exchange, in which parties are concerned with only the attributes of the things exchanged, and not with the personal attributes of the other parties themselves. The labor/labor-power distinction, however, implies that capitalist production will be organized not only to produce a marketable commodity but also to reproduce, from period to period, forms of worker consciousness compatible with future profits.

This assertion can be demonstrated in the following manner. By the very nature of the labor exchange, a broad range of behaviors are available to the worker at any time, all of which are compatible with the legally enforceable aspects of the employment contract. Within this range we may view the worker as acting to pursue his or her own goals, subject only to the constraints the capitalist can place on the worker’s choices. Depending then on the consciousness of the worker, the imposition of these constraints will be more or less costly to the capitalist and the worker will be more or less “valuable,” quite independent of his or her skills or the legal contract between the two.

Suppose, for instance, the extreme case of the worker whose only goal is furthering the profits of the organization. Then the capitalist need only appraise this worker of the “needs of the organization” to elicit optimum behavior. Coercing or convincing each worker to contribute maximally to the enterprise is unnecessary. At another extreme, we have the worker whose only goal is to maximize job satisfaction. Here the only constraints open to the capitalist involve the direct tailoring of job contents to the needs of the worker — presumably a costly endeavor.

In general, how might capitalists place constraints on workers? As we have seen, turning to the coercive power of the state for compliance is altogether too crude. Nor do they have the power to whip the worker, mutilate the worker’s children or burn down the worker’s house. The historical development of political rights in capitalism has curbed these options. What powers do capitalists have? First, they may increase the worker’s *accountability* by imposing a suitable number of
supervisory and mechanical checks on performance. They may use the information gained to alter the conditions of the worker over which the capitalists possess legal control. These include pay, working conditions and position in the organization. They may also apply moral pressure.

This simple argument provides several immediate conclusions. First, the value of a worker to the capitalist depends integrally on the former's personal characteristics, in addition to his or her productive capacities. This is in direct contradiction with the Coase-Simon model. Second, the actual quid pro quo in the labor exchange depends on several organizational variables at least partially under the capitalist's control: (a) extent and character of accountability; (b) manipulation of worker consciousness; (c) pay scales and criteria of promotion and dismissal. These organizational factors replace the external political authority of the state in enforcing the labor exchange and constitute the power configuration of the capital-labor relation.

Important implications of these observations will be systematically developed in the course of our argument. First let us consider a firm where the cost of replacement of workers to the firm, and the cost of job transfer at the market wage to the employee, are both zero. The neo-classical theory of the firm here implies that the wage rate associated with each job will be the going market rate for labor possessing the appropriate skills. The model we have presented indicates, on the contrary, that the market wage represents a minimum which will normally be exceeded. For in this situation, at the market wage, a major instrument of the employer in evincing appropriate worker behavior — the threat of dismissal — is absent. Raising the wage above the market rate, however, restores the threat of dismissal, and hence is part of a profit-maximizing strategy. Thus the "market rate" which equates supply and demand will not actually be observed on the market! This implication of our model, seemingly paradoxical, actually corresponds to real social conditions: capitalists have always acted to create reserve armies of labor on all levels, and yet continue to pay wages in excess of those which would allow all markets to clear. Moreover, the individual capitalist is more likely to use this strategy when the cost to the firm of inadequate worker performance is high. Indeed, it has often been noted that an increase in the "responsibility" of an employee is normally accompanied by an increased wage, even when no additional skills are required and the desirability of the job is enhanced. [20, pp. 66-68]

In this same situation, neo-classical theory implies that job openings will be filled partially either by promoting existing workers or by bringing new employees into the firm. However abjuring "special privilege" for existing workers eliminates the second major instrument of the employer for extracting labor from labor power — the control over advancement in the organization. Our model, on the contrary, predicts a strong preference for promotion within the ranks, a formalized series of "job ladders," and an articulated internal labor market. This of course agrees with the facts.[38; 20, Part I]

In the general case, where worker replacement and job transfer costs are not zero, the analysis is somewhat more complicated, but can easily be supplied by the reader. We should note that there are clearly specifiable conditions under which the employer-employee relationship shades off into the "independent agent" relationship, where the Coase-Simon argument applies. These include (a) low costs of accountability of worker performance; (b) low worker replacement costs to the firm; (c) high job transfer costs to the worker; (d) low firm costs associated with inadequate job performance (e.g., little responsibility); and (e) standardized and measurable worker services. An example combining (a), (b), (d) and (e) might be the supply of female labor to a company typist pool, and more generally jobs with secondary labor market characteristics.[56]

From this example we may draw several general conclusions. First, wage scales will in general deviate from the supply and demand analysis of neo-classical theory, because the manipulation of wage scales is an instrument insuring the integrity of the labor exchange. For similar reasons a well-articulated "internal labor market" will develop alongside the traditional labor market, differing qualitatively from a market exchange. Thus wage differentials are in no way captured by technical capacities of workers: workers at different wage rates may be equally capable of executing the same tasks; and worker productivity at a given job will in general be a function of the wage rate and consciousness of the worker, which may depend on the overall organization of the firm and the overall wage structure. Thus a reorganization of wage differentials which lowers profits may increase efficiency.
Second, the phenomenon of job tenure appears even where the firm faces perfect labor markets. In the traditional theory of the firm the work force can be "turned over" in each production period, subject only to replacement costs (recruitment and specific training). Our analysis indicates an additional and quite basic source of endurance in the capitalist-worker relationship: threat of dismissal and possibilities of promotion are basic instruments insuring the integrity of the labor exchange.

Third, the labor exchange normally embodies another property not shared by pure market exchanges, which are "impersonal" in a sense accurately described by Arrow and Hahn [2, p. 23]:

The decision to supply a good in a perfectly competitive economy is not a decision to supply so-and-so much to such-and-such agents, but simply to exchange so-and-so much of the good for other goods.

For the profit-maximizer must take into account in his choice of work organization, job staffing, and wage differentials, the effect of his or her actions on the consciousness of the workers. Since the labor exchange depends on the preferences of workers in addition to their capacities, since the employer-employee relationship tends to endure over many production periods and since the experience of workers in the production process will affect their consciousness, the simple one-product firm faces a joint-product production function: the inputs are raw materials and workers with a certain consciousness and the outputs include both the good produced and "new" workers with transformed consciousness. Many of these "new" workers will be inputs at the next stage of production. This observation alone invalidates the neoclassical assertion as to the Pareto-efficiency of profit maximization. Moreover, in a general equilibrium system in which all of the usual conditions for efficiency hold, the economic configuration will not in general be Pareto-satisfactory. For there will be a substantive interdependence of the production-possibilities set and the preference functions of individuals. [2, Chapter 6, Section 2] In particular, forms of work organization which tend not to reproduce worker consciousness appropriate to further profits will not be introduced, however strongly desired by workers and however materially productive. In this sense the Pareto-inefficiency of capitalist production is rooted in class struggle.

The Hierarchical Division of Labor, Influence, and Fragmentation of the Working Class

The need to extract a surplus through proper enforcement of the labor exchange will have extensive impact on the capitalist's choice of a job structure, a wage structure and a policy toward staffing and promotion within the enterprise. Whence the origins of the hierarchical division of labor as an historical phenomenon. Such an organization faces the task of insuring the undistorted transmission of directives downward and of information upward. To this end the capitalist will bureaucratize the social relations of production within the firm. A job will be a position in the organization defined by rules which are merely modified and interpreted by the directives of a single superior. If all are obeyed, we have a paradigm of the rational Weberian bureaucracy: each worker chooses the rules for his or her subordinates by adhering to the rules set for this worker by his or her superiors. There is a perfect transmission of directives from above to below.

But there are two problems with this perspective. The first is that whether or not rules are obeyed depends not only on the substance of the rules but on the power, consciousness and solidarity of the workers as well — the latter factors in turn being in part a product of work organization. Thus the structure of bureaucratic authority must itself be analyzed through a problematic which includes the potential of systematic violation of rules. [4, p. 168] Indeed, a superior will normally choose rules taking into account the possibility that particularly onerous regulations will be subverted, thus systematically undermining authority in the organization. In this sense the structure of bureaucratic authority must itself be treated as the product of an historical dynamic which, in its broadest outlines can be explicated only in terms of the class struggle. Second, rules, no matter how finely articulated, are never sufficient to provide for the contingencies that arise in the production process. This observation is the basis of Herbert Simon's insightful analysis of organizational structure. As he notes in Administrative Behavior [62, p. 227]:

Authority, unless buttressed by other forms of influence, is relatively impotent to control decisions in any but a negative way... Unless the subordinate is himself able to control most of the premises of the decision, and to synthesize
them adequately, the task of supervision becomes hopelessly burdensome.

Thus Simon takes a step which distinguishes his analysis markedly from the "role analysis" of the Weberian theory of bureaucracy. Role analysis considers the behavior of the individual in the organization as determined by the norms, values, duties, and obligations of his or her office. As we have noted, this approach leaves a vast area of indetermination in organizational behavior — indeed, it once again becomes equivalent to the abolition of the labor/labor power distinction. Simon goes part of the way in repairing this fault by introducing the concept of decision premises [52, p. xxx]:

social influence is influence upon decision premises. A role is a specification of some, but not all, of the premises that enter into an individual's decision.

Of course the capitalist will buttress the bureaucracy with an "accountability structure" including mechanical and human monitors, personnel review boards, spot checks, time-motion men, security guards and the like. But these measures will be more or less costly and more or less effective depending on the consciousness of the work force. Moreover, whatever the structure of accountability, the worker will have a sphere of discretionary control over personal behavior and over information passed on to supervisors.

Thus the Weberian model must be rejected. The power vested in the capitalist to structure the rules of the enterprise and to manipulate wage differentials and criteria of promotion and dismissal are insufficient to explain the enforcement of the labor exchange. Consequently they are insufficient to explain the process of extracting surplus value. In addition to these formal aspects of the production process, the capitalist will, in the interests of profits, attempt to structure the consciousness and limit the power of workers. In this section we treat the former: the structuring of consciousness through the organization of work experience.

According to our model of the labor exchange, the worker will pursue self-defined goals, subject only to the constraints imposed by the wage, promotion and dismissal policies of the capitalist. But the self-construction of goals is not an individual enterprise; consciousness acquires a class element because workers will normally be influenced by the desires and goals of others in the organization. The types of influence to which the worker is subject and how heavily they affect his or her behavior is of critical importance to the capitalist.

Some of the most important "ideal types" of influence may be easily described. We say the worker is superior influenced when his or her behavior is significantly affected through internalizing the premises and goals of the worker's supervisor, subordinate influenced when behavior is affected by the desires and goals of the worker's subordinates, and horizontally-influenced when his or her actions are significantly affected by the worker's hierarchical equals and co-workers.

The structure of influence, some of whose "ideal types" are described in the preceding paragraph, will have a considerable impact on the profit potential of the firm. In general, structures emphasizing superior influence and minimizing horizontal and subordinate influence are more conducive to profits. For a major objective of profit-maximization is extracting labor from labor-power.

To this end, an authority structure which correctly amplifies and accurately transmits directives from the apex of the organization to its base is of prime importance. As the number of levels in the hierarchy increases, the opportunity for the distortion of directives increases rapidly. Most dangerous is the situation in which a superior defines rules and transmits premises according to criteria incompatible with profitability. Such may occur if his or her decisions are based on the values of co-workers, or are independently influenced by the values and goals of subordinates. These distortions are amplified as directives pass down the hierarchy of authority.

Superior influence, where workers are affected only by the premises and goals of their direct supervisors, is most conducive to enforcing the labor exchange. Workers are then only sensitive to the incentives of the capitalist and the disposition of their superiors. In this situation, superiors are not oblivious to the consciousness of their subordinates. Rather, they take this as a means toward furthering their own ends. Co-workers will also take into account each other's orientations, but only as instruments in furthering their personal objectives. All social relations are then objectified except for that of the worker toward his or her superior.

Among the "ideal type" structures of influence outlined above, horizontal influence without superior influence clearly is the most threatening to
What determines patterns of influence? Generally a group partitions itself into subgroups within which forms of consciousness tend toward internal coherence, and across which differentiation is the rule. [37; 49, Chapter X] Each may be called a normative reference group, which “sets and maintains standards for the individual.” [49, p. 337] The relative homogeneity and internal cohesion of a normative reference group are often based on (a) relatively frequent and intense personal contact among members; (b) a similarity of conditions of participation (status, power, task, pay, etc.); (c) communality of interests, in the sense that all members tend to be similarly affected by the actions of other parts of the larger group; (d) extensive cooperative activity among the members; and (e) low “social distance” among the members in terms of the social differentiations of the larger society (e.g., race, sex, ethnic or religious affiliation, social background). 7

The question as to when an individual will orient toward one or another of these groups is complex [49, pp. 338-361], but in many cases the cooperative work team will be treated directly as a normative reference group, and hence the individual will take the values of its members as a basis for personal action. Some common exceptions may be noted. First, an individual socially distant from other members (e.g., an individual of foreign extraction among natives, or an individual with college education among generally high-school educated workers) may withstand group pressure. 8 Second, a “deviant” individual who is upwardly mobile may take a group of superiors as a normative reference group, in anticipation of a desired future position. [49, pp. 319-325] Third, formal organizations, say trade union locals, can significantly widen the reference group of rank-and-file workers when their political structures are not too diffuse and the organization relates to the daily experience of workers in the productive process.

Our understanding of the structure of reference groups is sufficient to sustain a few general propositions concerning the contradictions between efficiency and control in capitalist production. First, insofar as a production process involves the class nature of the production process. Indeed, a high degree of horizontal solidarity, by pitting the capitalist or superior against the combined action of a stratum of workers, renders wages, promotion and dismissal incentives essentially inoperative. Thus the fragmentation of horizontal influence and the fostering of upward influence are basic capitalist objectives.

Nor is this strategy totally outside the control of the capitalist, who will staff positions and structure jobs to strengthen and reproduce desirable worker orientations.[25] Thus the capitalist will restrict the tasks available to the worker to a set over which he or she is indifferent (task fragmentation), and simplify tasks to increase accountability. 6 He will choose superiors whose attributes help legitimate their authority through their interpersonal skills, their credentials, their race, sex, age, manner of speech and self-presentation, and their commitment to the preservation of their hierarchical prerogatives. [69] He or she may also reinforce the prestige of the superiors by increasing their pay, discretionary privileges and the symbolic accoutrements of their office.[30] Finally, the capitalist may choose an individual who may be expected to show little solidarity and identification with co-workers and subordinates, [51] while organizing tasks to minimize the solidarity of co-workers and create conditions of work on different hierarchical levels which minimize the common experiences and hence the possibilities of identification of interest of workers.[11]

In short, major aspects of capitalist production which neoclassical economics treats in terms of neutral efficiency are in fact, through the need to structure patterns of influence, conditioned by the class nature of the production process. Indeed, I think it is reasonable to assert that the capitalist’s need to structure patterns of influence to reproduce the conditions under which surplus value can be extracted comes directly into conflict with the norms of social efficiency in production. Unfortunately a Marxist theory of the formation of consciousness through personal interaction is not sufficiently developed to handle this assertion. For our limited purposes, however, we may rely on the extensive research among American sociologists into the nature of reference groups within an organization.[49]
cise characteristics of which can be affected by the actions of the capitalist. Thus he may choose a job structure at some cost to efficiency, which limits the frequency of contact of workers, their similarity of condition, and their degree of cooperation, while attempting to staff positions with individuals of maximal mutual social distance. This may result in a "team-centered" structure of influence, where the work team is the unit beyond which further horizontal fragmentation is more costly than the prevention of horizontal solidarity. [17, p. 123]

Within a work team, moreover, members may have sufficient leverage to force the capitalist to staff positions with minimal social distance. Team centered solidarity can then be neutralized only through increased material incentives and greater costs of supervision and accountability. [66, Ch. 3]

Team centered influence can be reduced by inducing members of a work group to relate to their supervisor rather than to each other. This procedure is feasible when the possibility of promoting individuals to superior hierarchical levels is extensive. [25] Studies show, however, that when the objective probability of such advancement for any member of the group is low, most will abjure this "anticipatory socialization" and the team-centered reference group reference group will remain strong. [17, p. 123, 171-176] "Deviant" individuals will be ostracized, minimizing their influence on the work team, and their access to information communally guarded by the team will be severely limited.

Second, we have seen that subordinate influence is deleterious to profits. This form of influence is more easily dealt with, since it involves the behavior of a single individual (the supervisor) whose conditions of work and pay may be rendered superior to those of his or her subordinates, whose position of power sets him or her apart, and whose personal characteristics can frequently be chosen to maximize his or her social distance from those controlled. [12; 51] There are costs involved in this strategy, however, which may include the resources devoted to elevating the pay, prestige, and prerogatives of the supervisor, as well as efficiency losses resulting from not rotating supervisory tasks among team members more closely acquainted with the task at hand and possessing more intrinsic influence over their peers.

Third, horizontal and superior influence may be inter-related, either to the benefit or loss of the capitalist. For instance, as the chance of promotion increases the degree of team-centered solidarity will in general decrease, while the maximum degree of social distance between superior and subordinates declines, thus increasing subordinate influence. The two offset one another, a situation increasing the capitalist's flexibility as to choice of work organization. Contrariwise, some technical innovations may increase the solidarity of the work team, while rendering effective supervision from outside the group infeasible. [63] The capitalist will then refuse to introduce the new technology, or incur significantly increased labor costs.

Many of the considerations affecting the downward flow of directives apply as well to the upward flow of information. The importance of accurate transmission of information among participants in production is important whatever the class structure of the production process. But information relevant to enforcing the labor exchange is especially problematic in capitalist organization. Indeed, it must be seen as an object of class struggle. All of the major decisions of capitalists are based on information over which they have only indirect control. The information they receive reflects both the consciousness of workers and the structure of accountability they impose on the organization. The optimal situation of profits is a full and undistorted transmission of information from the base of the firm to its apex. The actual upward transmission of information will then reflect organizational characteristics and personal attributes in much the same way as the downward transmission of directives. The capitalists will then be fully appraised of the performance of all workers, the extent to which worker speed-ups are feasible and will possess all knowledge workers may have relevant to improving the efficiency of the production process and the efficacy of accountability structures. If all workers identify with the "goals of the organization" then no accountability structure will be necessary and voluntary disclosure will provide optimum information. In general, structures of superior influence will increase the supply of information to the capitalist, while horizontal solidarity and subordinate influence will render information unreliable. Co-workers then tend to cover up for one another, mask the limits of productivity of which they are capable and keep to themselves improvements in the production process. They employ such improvements to reduce their work load. [66, Chapter 7] Superiors will also be under severe pressure from their subordinates not to report rule violations and worker lapses, and to accept the
tacit withholding of information in which subordinate teams engage. [66, Chapter 6] In these situations, the importance of accountability is paramount. In addition, subordinate influence poses another threat which the accountability structure cannot handle. Namely, there are normally important pieces of information which supervisors possess that, if passed on to their subordinates, would severely curtail productivity and “morale.” These “secrets of the office” are part and parcel of nearly all concrete hierarchical positions and, with the assumption of office, the superior is pledged to systematic deception and dissimulation irrespective of his or her personal morality and good intentions. The effective supervisor is consciously aware of the theatrical or instrumental nature of the performance: he or she is an actor with a role, setting up a facade or front of realism.[30]

Under conditions of strong subordinate influence, where a supervisor takes subordinates as a normative reference group, this information will be passed downward to the detriment of “organizational harmony.” Thus subordinate influence must be avoided at all costs by the profit-maximizer: sufficient social distance between supervisor and subordinates becomes a sine qua non. To this end, existing social fragmentations of the working class will be drawn upon and reinforced in the interests of profits.

The ramifications of the need for accountability in the theory of the firm are significant. It cannot be assumed that accountability increases resources devoted to record-keeping, time-punch clocks, and additional supervisory personnel alone. In general, accountability will affect the total job structure of the organization. Production processes must be standardized to render performance easily measurable, decision-making must be fragmented and compartmentalized to create a clear sphere of responsibility for each person in authority, and production tasks must be fragmented to attach clear performance measures to each worker. The extent to which the considerable fragmentation of the working class visible in modern capitalism is due to the need for accountability, as opposed to the curtailment of horizontal solidarity and the increased efficiency of the “minute division of labor,” is of course a matter for empirical investigation. [45]

The general assertion that class fragmentation is a normal part of the extraction of surplus value through enforcing the labor exchange, however, rests secure.

Collusion, Legitimacy and “Divide and Conquer”

Extraction of surplus value is thwarted when worker solidarity is sufficiently high. But solidarity involves not only common interests and mutual influence, but joint action as well. Thus the capitalist must organize the production process to minimize the formation of worker coalitions.

The threat of worker collusion represents a major reason why the labor exchange cannot be conceived as an exchange of commodities and lends additional substance to the labor/labor power distinction. The labor exchange differs from pure market exchange in the way the capitalist may affect the extent of collusion among the individuals (workers) with whom he exchanges. In the case of market exchange as codified in neoclassical theory, collusion among the trades is handled by an external authority — the state. In the case of the labor exchange, however, recourse to the legal system covers only the most manifest and overt forms of worker collusion (e.g., wildcat strikes). In general mechanisms minimizing collusion must be built into the organizational structure itself.

Collusion between superiors and subordinates, and among co-workers, can swiftly render ineffective the structure of accountability, destroy the downward transmission of directives, and render inoperative the upward transmission of information. Sanctions that can effectively control the behavior of individual workers may be useless when a group of workers is acting in concert. The mechanisms the firm employs to avoid collusion will include the repertoire of devices analysed in preceding sections. The solidarity of a worker coalition depends on the degree of commonality of interests, the benefits accruing to an individual from withdrawing from the coalition, and the severity of the (usually informal) sanctions the coalition can impose on deviant members. The employer can then prevent coalition-formation by fragmenting work-groups, increasing the “social distance” between superiors and subordinates, and routing decision-making power through superior hierarchical levels to minimize the degree of control a group of workers may exercise over a co-worker.

But we must add another dimension to our analysis of capitalist production to capture the role of ideology and custom in the reproduction of the social relations through which labor is exploited. We must introduce the additional concept of legitimation, characterizing an aspect of the production
process as legitimate when it conforms to the norms and expectations of participants. Thus legitimacy is an aspect of social consciousness which changes and develops through the substantive experiences and social relations of workers.

The failure of legitimacy within a group increases the possibility of collusion. Commonly perceived injustice increases solidarity, and increased solidarity leads to increased effective power. Such collusion thwarting the objectives of the employer may call forth extraordinary measures in the form of increased accountability and punishment. These measures may in turn be viewed as illegitimate, thus increasing the solidarity of the coalition, and calling forth an additional set of extraordinary measures on the part of the employer. A downward spiral of legitimacy occurs. [26; 66] It follows that the capitalist will normally go to great lengths to avoid the appearance of illegitimate situations, and to provide regularized channels for their correction. [66, Ch. 9, 11] This objective is reflected in the organization of production as a whole.

We begin by offering certain generalities concerning the structure of legitimacy. First, the cultural norms of the larger society may supply an overarching pattern of legitimacy orientations which are held more or less firmly by all members of the enterprise. These may include principles guiding the interaction of superiors and subordinates, the equal treatment of equals, access to organizational positions on the basis of objective performance and merit, and the admissibility of types of authority relations between individuals of different status in the larger society. [52]

Second, general legitimacy orientations in the larger society may vary systematically across different segments of the work force. [6; 17, p. 170] Thus individuals of a particular race, sex, ethnic or religious origin, age, or class background may consider certain patterns of reward and authority perfectly acceptable which a member of a different group would find intolerable, demeaning, or offensive. [40; 65] Capitalists will generally staff positions keeping in mind the general legitimacy orientations of the larger society. [51] Also, unless it is quite costly to do so, they will choose an organizational form and an allocation of rewards and authority in compliance with these legitimacy-orientations. [58]

Third, specific legitimacy-orientations will tend to coalesce around the immediate context of the enterprise and its economic environment. Thus newly-hired workers may come to evaluate an aspect of the organization not covered by their general values, according to expectations derived from their newly-acquired experience in the organization. [9; 20] Thus the "rules of the game" may differ significantly from firm to firm, but may be self-legitimating simply through their correspondence with "standard practice". Often these can be understood in terms of the formation of comparison reference groups, which provide stable frames of reference facilitating the worker's judgements as to the equity of his/her position and that of others in the organization, and changes therein. [23; 37; 51] Comparison reference groups will normally conform closely to the groups naturally defined by the job structure, thus providing legitimacy to the pattern of inequality manifest in the organization. [66, Ch. 8; 53]

We apply these considerations to some concrete processes within the capitalist enterprise. These include (a) the legitimacy of the actions of superiors, co-workers and subordinates; (b) the legitimacy of the processes whereby workers are assigned to positions in the organization; (c) the legitimacy of the global distribution of prerogatives, benefits and duties among organizational positions; (d) the legitimacy of the concrete process whereby the worker's own position, those of his or her immediate superiors, co-workers or subordinates have been attained, as well as the particular criteria on which their prerogatives, duties and chances for advancement and dismissal are based. [12]

We begin by investigating the global processes whereby individuals are assigned to positions in the enterprise. Most advanced capitalist societies possess a political system based on and reinforcing values of formal equality and representative democracy. The hierarchically ordered capitalist enterprise, however, represents the antithesis of those values, as ultimate decision-making power is held by the few and compliance expected by the many. [54] Thus hierarchical organization in the enterprise requires special legitimating mechanisms. Among these are hierarchically organized educational institutions which inure youth to the social relations of capitalist production [12; 27] and the promulgation of a "technocratic ideology," whereby hierarchical organization and unequal reward are deemed necessary by the nature of advanced technology. [12] Given that the hierarchical struc-
future is legitimated, the legitimacy of the assignment of positions remains problematic. In a situation where a great deal of upward organizational mobility is feasible, this problem is minimal. Such a situation will obtain only when the ratio of the number of workers on successive hierarchical levels is large, a condition normally not obtaining. At this point, the strategy of divide and conquer applies in full force. The profit-maximizer will attempt to limit mobility by erecting barriers at fixed intervals in the vertical hierarchy, thus giving rise to stable comparative reference groups. Within these segmentations he will create meritocratic distinctions of pay and prerogatives while maximizing the lines of vertical mobility. Thus, “job ladders” appear for reasons of legitimacy.

Job ladders and segmented mobility patterns are also explained by the neo-classical theory of the firm in terms of on-the-job training. This theory predicts, however, that the pattern of internal mobility will follow cost-minimizing skill-acquisition opportunities. This need not be the case. Thus, in capitalist societies, entry into a particular segment [at so-called “points of entry” see 20, pp. 43-49] is based on the possession of educational credentials even when these credentials fail to increase worker productivity or when the concrete skills involved could be feasibly obtained on the job.

Much of the above analysis applies to the local situation of the legitimacy of the assignment of a worker and his or her superior to their respective positions. New elements also enter in, however, which bear some treatment. First, the supervisor’s effective authority depends on the legitimacy of his or her incumbency in the eyes of subordinates. Without this buttress, subordinates will frequently collude to render ineffective the supervisor’s power. Second, the ideologies of “technocracy” and “meritocracy” which guide the perception of global legitimacy have much less sway in the local and concrete experience of a worker interacting with a supervisor. Thus particularistic orientations are likely to be involved in the legitimation of the incumbency of a superior. For instance, norms derived from class segmentations in the larger society may be brought to bear on the legitimate forms of supervisor-subordinate incumbency. In American society the authority of women over men, blacks over whites, younger over older, less educated over more educated, and lower status over higher status (in terms of modes of dress, speech and demeanor) is generally unstable. Relationships of this type will therefore be discouraged in the capitalist’s staffing of jobs.

These mechanisms account for a portion of sexual, racial and social class discriminations. The neoclassical theory of the firm treats the staffing of positions in terms of purely “technical” attributes of individuals (e.g., skills and knowledge). When applied across the economy as a whole, this implies the gradual elimination of economic discrimination based on non-technical characteristics (race, sex, social class background, etc.) This prediction has not been born out. According to our model, however, the decisions of the firm may indeed tend to stabilize these differences over time, as the capitalist draws on the segmentations of the larger society in staffing positions in the enterprise.

In addition to global and local procedures for assigning individuals to positions, the benefits, prerogatives, and duties associated with these positions may be subjects of legitimacy-orientations. Let us consider the most straightforward of these considerations: the wage structure of the firm. The general orientations legitimating the overall degree of inequality in the enterprise will normally flow from the ideologies legitimating the hierarchical division of labor. These general orientations will, however, be far too crude to handle the minute details of wage scales within the enterprise, particularly the wage scales associated with jobs adjacent to the individual’s own position, and the wage scales of individuals with whom he has frequent organizational contact. In addition individuals may be affected both by the prevailing rates in the industry as a whole for the particular job they hold, as well as by the expectations generated and reproduced within the enterprise itself. Whatever the mechanism, a particular prevailing pattern of wage differentials may, in certain circumstances, be accepted as legitimate.

Hence the employer will be loathe to alter the structure of wage differentials, whatever the wage rates obtaining in the labor market. One obvious retaliatory mechanism on the part of workers to the change in wage-status of a particular group operates as follows. Members of an adjacent reference group each considers the change illegitimate, thus laying the basis for a coalition, resulting in the break-down of authority and accountability. This process forces the employer to alter the group’s wage position, and the mechanism is in turn repeated on another level. In short, when wage differentials are “legiti-
mate," no group of workers (ceteris paribus) has the power to increase its wages; the joint perception of illegitimacy, however, increases the solidarity, hence the power, and finally the wages of the group.

Conclusion

Throughout this essay — in the critique of neoclassical axioms, in the presentation of an alternative model, in the drawing out of its implications, and in exhibiting their concordance with empirical research — we have focussed on the treatment of the various anomalies presented in the introduction.

Our fundamental observation is that in a correct formulation of the theory of the firm, profit maximization entails divergences from Pareto-efficiency which can be understood only in terms of class analysis. Without looking at the inner workings of the firm, we may attribute this to the fact that the real wage and the intensity of labor are effectively endogenous in the capitalists’ decisions, the market being only one determinant. That is, the total wage bill is affected not only by the market, but the employer’s choice of work-organization. The employer can increase the piece of the pie accruing to capital and management by reducing the size of the pie to less than its maximum. Workers would gain by reorganizing production to increase output, work satisfaction and wages. Indeed, they could compensate the capitalist for his or her losses and still be better off — but of course once they had power there would be no reason for them to do so.

This endogeneity of the real wage has several roots. First, assuming the money wage as given, the intensity of labor is not determined by market conditions. This is the failure of the neoclassical model of the labor exchange. The intensity of labor is the outcome of the capitalists’ choice of work organization: alongside the problems of allocating given amounts of work is that of eliciting those amounts. Second, even the money wage is not determined by market conditions. Not only will the employer voluntarily raise wages selectively above their “market minimum,” but he or she may be forced to increase the wage bill should workers acquire sufficient power and solidarity. Since the work force cannot be turned over in each production period, and since wage structure decisions of one period have a strong influence on such decisions in the next, the endogeneity of the wage bill is a real and concrete contingency of profit-maximization.

In our model the enforcement of the labor exchange lies within the enterprise. Hence it is not surprising that the most manifest inefficiencies deal with the interaction between productive techniques and control techniques. In the neoclassical perspective the “minute division of labor” is in itself more productive and admits the more flexible introduction of new technologies. The hierarchical structure of control is then necessary to coordinate the atomistic and decentralized activity of a number of fragmented workers. While not denying the need for coordination and control in production, the Marxist model dramatizes the converse: given that profits depend on the integrity of the labor exchange, a strongly centralized structure of control not only serves the interests of the employer, but dictates a minute division of labor irrespective of considerations of productivity. For this reason, the evidence for the superior productivity of “worker control” represents the most dramatic of anomalies to the neo-classical theory of the firm: worker control increases the effective amount of work elicited from each worker and improves the coordination of work activities, while increasing the solidarity and delegitimizing the hierarchical structure of ultimate authority at its roots; hence it threatens to increase the power of workers in the struggle over the share of total value.

In addition, our model, based on the labor/labor power distinction, is capable of explaining racism, sexism, and the intergenerational transmission of status. While considerations of technical efficiency dictate the staffing of positions on the basis of technical attributes, legitimation dictates the reflection in the enterprise of culturally dominant sexual, racial, and social class ascriptions. There is no prima facie reason for the aggregated actions of individual employers to alter those over time. Nor is it to be expected that differences in mean economic position among various ascriptively identifiable groups will be based on productivity-related attributes. Indeed, our model of the firm places such attributes as one among a number of sets of profit-relevant personal characteristics, others of which include modes of self-presentation and interpersonal behavior, class identification, ascriptive traits, and credentials. Hence it is less than surprising to find the relatively small inde-
ependent value of IQ and cognitive test scores in predicting economic success, the inability of cognitive differences to explain the association of education with economic success, and the wide variety of criteria actually operative in hiring and promotion.

Finally, our model sheds light on the failure of "worker sovereignty" to describe the historical development of work. The symmetry of the labor exchange with commodity exchanges in neo-classical theory implies that the wage structure will reflect the job-preferences of workers, just as the price structure reflects the commodity preferences of consumers. Our model predicts, however, that no set of worker preferences will be reflected in production which threatens the secure capitalist control of the organization, however cheaply labor could be acquired. A group of workers may agree to work under satisfying conditions (e.g., where they control their activities) for diminished wages, but there is no guarantee these wages would prevail in future periods, where worker solidarity and control is deeply embedded in the organizational structure. 10

I conclude that a Marxist theory of production in which class relations in general, and the labor/labor-power distinction in particular, plays a fundamental role, provides an excellent basis for understanding the social relations of the production process. This paper, of course, provides only a few of the insights necessary to turn such a theory into a potent tool of socialist strategy. The general organizational issues we have discussed must in the future be supplemented by extensive historical and comparative studies. [14; 45; 57; 64]

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NOTES

1. By the term 'efficient' in this paper I shall mean Pareto-efficient; i.e., no reorganization of the work process or allocation of economic activity within that process can increase output without in the long run increasing objective or subjective costs of production. Thus the efficiency criterion is judged within the framework of existing technologies and worker preferences. While thereby limited and ahistorical in nature, the concept will be sufficient for our purposes.

2. This standard neoclassical theory of job structures may not be familiar to some readers, as it is not normally presented in standard microeconomic texts. For a full treatment, see [2, 18].

3. For an extensive bibliography, see [67].

4. Of course if either the supply curve facing the user, or the demand curve facing the supplier, is not perfectly elastic the exchange may involve elements going beyond the legally enforceable contract. For instance, in a "buyer's market" the supplier may offer increased service in the hope of gaining further contracts with the user, and conversely in a "seller's market." The reader can easily show that this represents a case of limited monopoly or oligopoly and "power relations" enter into the economic analysis even in neo-classical theory. For this reason (according to Lerner's reasoning) the assumption of extensive competition becomes integral to traditional economic analysis.

5. This is the case of the so-called Economic Theory of Teams — cf. [46].

6. The explanation of the high degree of task-fragmentation in modern corporate enterprise is normally given in terms of the dictates of "efficient technology" alone. Our analysis shows that task-fragmentation is a logical outcome of the need to minimize worker discretion and maximize accountability in a situation where workers have no intrinsic identification with the goals of the organization. That is, task-fragmentation is a means of ensuring the integrity of the labor exchange.

7. These characteristics and others are discussed at length in [35; 49].

8. For an analysis of this occurrence, see [66, Chapters 4 & 7].

9. This condition may hold for certain sectors of the enterprise, such as middle and upper management, and within a hierarchical level, such as apprentice II mechanic → apprentice I mechanic → master mechanic. Hence they present problems of legitimacy.

10. It may be asked why, if observed organizational forms are not efficient, they are not competed out of existence. Our argument shows clearly why capitalists do not seek alternatives in competition with one another. But why, for instance, do not workers hire capital and institute their own organization? I take this to be an open question. It may be that workers simply do not have the
collateral to borrow large amounts of capital, or that if several workers did decide to "go it on their own" they would hire labor as well as the other factors and in effect cease being workers. It must be stressed, however, that the answer is to be found in the nature of the capitalist economy, rather than an error in the model presented herein. For the same problem arises independent of the efficiency of the capitalist enterprise and its responsiveness to worker preferences. For suppose profit-maximization entails efficiency and workers act to maximize their incomes. Let us also accept that profits of efficiently-managed firms are significantly positive, after making all factor payments (including interest on capital borrowed). Then any group of workers has an incentive to opt out of a firm, hire capital, raw materials, and appoint a manager — thereby capturing the surplus generated in production, while maintaining exactly the same internal organization of the firm. Yet workers do not do this. If the conditions of "optimality" in the competitive model held, we would observe a large number of ownership patterns of firms. While there is a large number, scarcely any involve hiring capital. If there were no "barriers of entry" into firm control, we would see some firms in which capital hires managers and labor, some in which managers hire capital and workers, and some in which workers hire managers and capital. The market would bid up the price of "managerial talent" so that net profits would be eliminated. Yet this does not occur. Thus some of the competitive conditions must be violated. [1] Whatever restricts workers from hiring capital and managers simply to capture profits, also will operate to restrict them from improving their job characteristics.

**SOURCES**


Herbert Gintis, "Welfare Criteria with Endogenous Preferences: The Economics of Education," International...