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ALTERNATIVE APPROACHES  
TO THE THEORY OF INSTITUTIONS  
IN ECONOMIC DEVELOPMENT

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Abstract

In this paper we discuss three alternative approaches to an endogenous economic theory of institutions as represented by the Marxist, transaction-cost and imperfect-information schools. We show that they share some similarities both in their strengths and weaknesses. Some of the concerns expressed, though not often rigorously analyzed, in the Marxist approach need to be seriously addressed in the other theories, just as the Marxists can profitably draw upon the latter in building firmer micro-foundations for their theory of institutions.



# ALTERNATIVE APPROACHES TO THE THEORY OF INSTITUTIONS IN ECONOMIC DEVELOPMENT

Pranab Bardhan

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## I

Institutions are the social rules, conventions and other elements of the structural framework of social interaction. This framework is taken for granted in much of mainstream economics, and often pushed so much into the background that many of its central propositions are sometimes stated with a false air of institution-neutrality. We often apply the simple 'laws' of market supply and demand without being fully conscious of the complex of institutions on which contracts in actual markets crucially depend. Many anthropologists have also quite rightly, questioned the economist's parochial and often ahistorical assumption that the market form of economic organization is ubiquitous. The criticisms of Marxists and other institutional economists in this respect have been valuable in raising the general awareness of institutional presumptions in economics.

Much of the old institutionalist literature, however, is largely descriptive<sup>1</sup> (and sometimes intellectually lazy: whatever cannot be easily explained otherwise is ascribed to institutional factors), and when analytical, it is often confined to tracing the effects of a given institution on economic activities and incentives. A rigorous analysis of the economic rationale of the formation of the institution itself has been very rare. There is, of course, some methodological resistance on the part

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<sup>1</sup> For an account of the anti-theory inclinations of some institutionalists in the German Historical School, see Schumpeter (1954).

of many institutionalists to endogenize institutions in economic terms.<sup>2</sup> It is, however possible to point out, without subscribing to any cheap economic determinism, without denying that some exogenous irreducible rules and conventions must be presupposed in any economic analysis or without ignoring the two-way feedback processes between economic and other historical-cultural factors, that in the long-run historical-evolutionary process economic factors do play an important role in the shaping of institutions.

Marxists have a well-known endogenous theory of institutions. The authoritative text from which this theory flows is the 1859 preface to A Contribution to the Critique of Political Economy where Marx states:

In the social production of their life men enter into definite relations that are indispensable and independent of their will, relations of production that correspond to a definite stage of development of their material productive forces. The sum total of these relations constitute the economic structure of society, the real basis on which arises a legal and political superstructure. . . . At a certain stage of their development, the material productive forces of society enter into contradiction 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.

The economic structure of society (which in this theory provides the foundation of its legal and political institutions) consists of property relations and it corresponds to the level of development of the productive forces (which include all means of production and technology). The central driving force behind institutions is thus the forces of production<sup>3</sup> (Marx's son-in-law Paul Lafargue is reported to have exclaimed one day: "Dieu, ce sont les forces productives"). Changes in the forces of production, particularly technological change, produce over time some tension between the existing structure of property rights and the

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<sup>2</sup> For a forceful recent exposition of such a line see Field (1981). For a convincing rebuttal of Field's position that some non-economic rules or factors must always be taken as parametric in economic history, see Basu, Jones and Schlicht (1987).

<sup>3</sup> For the most cogent modern exposition of this theory see Cohen (1978). For a somewhat different interpretation, pointing to the ambiguities in Marx's writings as he grappled with the complexity of historical development, see Elster (1985, ch. 5).

productive potential of the economy, and it is through class struggle that this tension is resolved in history, with the emergence of new institutions.

The nature of this tension and the interaction between institutions and the utilization and development of the forces of production have been studied with much greater rigor and micro-analytical details in two strands of recent non-Walrasian economic literature. One strand originates -- paradoxically at the opposite end in the political spectrum to the Marxists -- from a famous paper by Coase (1960), which led to the flowering of a whole school of neoclassical writers on property rights and transaction costs, who developed a well-articulated endogenous theory of institutions and traced changes in economic history to changes in the institutional ground rules. Although several writers with quite distinct patterns of thought are involved here, for our present purpose we shall lump them together and call it the Coase-Demsetz-Alchian-Williamson-North (CDAWN) school. The other strand grew out of the theory of imperfect information (particularly of the Akerlof-Stiglitz vintage). Even though it has some family resemblance to the transaction cost theory, it provides a more rigorous and sharply defined framework for analyzing institutions as substitutes for missing markets in an environment of pervasive risks, incomplete markets, information asymmetry and moral hazard. Since this environment in some respects is particularly acute in developing countries, the recent literature in development economics has seen a number of attempts to model institutions, especially in agriculture, on these lines.<sup>4</sup> Most of the subsequent chapters in this volume consolidate and extend this particular line of building a theory of institutions. All these three approaches to the endogenous theory of institutions -- of the Marxist, CDAWN and imperfect-information schools -- have in my judgment some broad similarities, however uncomfortable that may be for the purists on all sides. In my fits of heretical eclecticism I also believe that Marxists can profitably draw upon some of the ideas of the other two schools in building firmer micro-foundations for their theory of historical materialism, just as at least one distinguished member of the CDAWN school, Douglass North (1981), seems to have integrated a significant part of Marxist ideas in his neoclassical property-rights theory of history. In this chapter, I shall point out that some of the weaknesses and problems of the other two theories are partly shared by the orthodox Marxist theory as well, but at the same time some of the concerns

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<sup>4</sup> For some overview of this literature see Bardhan (1984), Bell (1988) and Stiglitz (1986).

expressed, though not often rigorously analyzed, in the latter need to be seriously addressed in the other theories.

## II

According to the CDAWN school transaction costs, and institutions that evolve to minimize these costs, are the key to the performance of economies. These costs include those of information, negotiation, monitoring, coordination and enforcement of contracts. When transaction costs are absent, the initial assignment of property rights does not matter from the point of view of efficiency, because rights can be voluntarily adjusted and exchanged to promote increased production. But when transaction costs are substantial, as is usually the case, the allocation of property rights is critical. One of the main pillars of traditional neoclassical economics -- the separability of equity and efficiency -- breaks down under these circumstances: the terms and conditions of contracts in various transactions, which directly affect the efficiency of resource allocation, now crucially depend on ownership structures and property relations.

In the historical growth process there is a trade-off between economies of scale and specialization on the one hand and transaction costs on the other. In a small, closed, face-to-face peasant community, for example, transaction costs are low, but the production costs are high, because specialization and division of labor are severely limited by the extent of market defined by the personalized exchange process of the small community. In a large-scale complex economy as the network of interdependence widens, the impersonal exchange process gives considerable scope for all kinds of opportunistic behavior (cheating, shirking, moral hazard) and the costs of transacting can be high. In Western societies over time complex institutional structures have been devised (elaborately defined and effectively enforced property rights, formal contracts and guarantees, corporate hierarchy, vertical integration, limited liability, bankruptcy laws and so on) to constrain the participants, to reduce the uncertainty of social interaction, in general to prevent the transactions from being too costly and thus to allow the productivity gains of larger scale and improved technology to be realized. North and Thomas (1973) have explained economic growth of Western Europe between the 10th and the 18th century primarily in terms of innovations in the institutional rules that governed property rights. As in Marxist history, property relations which were socially useful

at one time become "fetters" on the further development of the forces of production, and an appropriate redefinition of property rights becomes necessary. New property rights emerge that allow an increase in gains from trade by economizing on transaction costs (including gains from new production or exchange which were unprofitable under earlier high transaction costs and the consequent "market failure").

North and many other neoclassical institutional economists believe that the basic source of institutional change is fundamental and persistent changes in relative prices which lead one or both parties in a transaction to perceive that they could be better off under alternative contractual and institutional arrangements. Historically population change is judged to have been the single most important source of relative price changes, though technological change (including that in military technology) and changes in the costs of information are also deemed as major sources. Demographic, as opposed to technological, change as a primary source of growth of productive forces is usually deemphasized by Marxists, but there is no important reason why it cannot be incorporated in a more general version of their "materialist" interpretation of institutional change.<sup>5</sup>

The imperfect information theory of institutions is closely related to that of transaction costs, since information costs constitute an important part of transaction costs. But the former theory is usually cast in a more rigorous framework clearly spelling out assumptions and equilibrium solution concepts, drawing out more fully the implications of strategic behavior under asymmetric information, sharply differentiating the impact of different types of information problems and being somewhat more concrete and specific, than the usual presentations of transaction cost theory, in its predictions about the design of contracts, with more attention to the details of terms and conditions of varying contractual arrangements under varying circumstances.<sup>6</sup> The models of

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<sup>5</sup> Marx asserts in Grundrisse that pre-capitalist communal societies broke down because of an increase in population, and Elster (1985) suggests that in doing so he comes very close to saying that population is a productive force the development of which breaks down existing production relations.

<sup>6</sup> For a brief comparison of the imperfect-information and transaction costs approaches, see Stiglitz (1986), although I slightly differ from him when he claims that the latter approach fails the test of falsifiability unlike the former. In any case neither approach has yet been subject to much of rigorous empirical hypothesis-testing.



sharecropping and other forms of land and livestock tenancy, bonded labor and other forms of labor tying, credit rationing, interlinkage between credit and land lease, labor hiring and output sales transactions, institutions of hedging against risks in production and marketing, cooperative institutions in production and credit, etc. that the reader will find in the subsequent chapters bear ample testimony to the remarkable fruitfulness of the imperfect information approach in analyzing institutions in the context of agrarian development. Since agriculture is a business with slow turnover of capital and with all kinds of high risks and since extreme poverty leaves little scope for 'internal financing' by peasants, credit and insurance needs are crucial; many of the key institutions modelled in the subsequent pages are those that emerge to substitute for missing credit, insurance and futures markets.

Marxists often cite some of these production relations as institutional obstacles to development in a poor agrarian economy, overlooking the micro-economic rationale of the formation of these institutions. Under a set of informational constraints and missing markets, a given agrarian institution (say, sharecropping) may be serving a real economic function; and its simple abolition, as is often demanded on a radical platform, without taking care of the factors that gave rise to this institution in the first place may not necessarily improve the conditions of the intended beneficiaries of the abolition program. Marxists have also a tendency to equate some of the pre-existing production relations mechanically with the 'feudal' or 'semi-feudal' mode of production, ignoring how in the real world the same institution (say, sharecropping) adapts itself to the development of the forces of production (with numerous cases of capitalist share-tenant farmers -- as, for example, in Punjab -- or more widespread cases of cost-sharing and other forms of landlord-tenant partnership in adoption of the new technology of high-yielding varieties in agriculture). The neoclassical institutional economists, on the other hand, have the tendency to apply their logic of voluntary contracts to many pre-capitalist forms of production relations (like slavery or *corvée* labor) ignoring that the sanctions underlying these relationships are often based on extra-economic coercion and the standard maximizing calculus on the part of the agents is somewhat out of place.

### III

The Marxist, CDAWN and imperfect-information theories are all equally murky on the mechanism through which new institutions and property rights emerge. All three sets of theory in explaining historical transition show how new institutions would serve the interests of economic progress and old institutions are a hindrance and 'ripe' for a change. But as if, ripeness is all: there is no need to specify a predictable model of the process of change. Historical teleology, a-historical functionalism and vulgar Darwinism abound in the literature on this point. An institution's mere function of serving the interests of potential beneficiaries is clearly inadequate in explaining it, just as it is an incompetent detective who tries to explain a murder mystery only by looking for the beneficiary and, on that basis alone, proceeds to arrest the heir of a rich man who has been murdered. The explanation by Demsetz (1967) that "the emergence of new property rights takes place in response to the desires of the interacting persons for adjustments to new benefit-cost possibilities" is no more helpful than the Marxist's routine reference to the laws of motion of history. Among CDAWN theorists North comes closest to recognizing the enormity of the collective action and free-rider problems that limit the ability of potential gainers to get their act together in bringing about institutional changes, just as among Marxists the Brenner debate<sup>7</sup> on the transition from feudalism has increased their awareness of the importance of specific historical processes of class capacity for resistance and struggle.

We have noted before the neoclassical economic historians' strong belief that relative price changes fuel the main motive force for institutional changes in history (primarily by inducing the development of property rights to the benefit of the owners of the more expensive factor of production). In particular demographic changes altering the relative price of labor to land lead to the incentive for redefinition of property rights on land and a rearrangement of labor relations: North (1981) and Hayami and Ruttan (1985) give several examples from European and recent Asian history respectively. But from Brenner's analysis (1976) of the contrasting experiences of different parts of Europe on the transition from feudalism (those between Western and Eastern Europe and those between the English and the French cases even within Western Europe) we know that changes in demography, market conditions and relative prices are not sufficient to explain the

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<sup>7</sup> See Ashton and Philpin (1985).

contrasts. Changes in relative prices may at most change the costs and benefits of collective action on the part of different classes (creating new opportunities for political entrepreneurs) but cannot predetermine the balance of class forces or the outcome of social conflicts. Hayami and Ruttan (1985) refer to the case of mid-19th century Thailand where the expansion of international trade triggered a rise in rice prices which led to a major transformation of property rights: traditional rights in human property (corvée and slavery) were replaced by more precise private property rights in land. But one should not forget that the expansion of grain trade in 17th century Poland had helped the relapse into serfdom.

A related question is that of the presumed optimality of persistent institutions. The CDAWN or the imperfect-information school, like the functionalist Marxist view, often unthinkingly implies the application of the market analogy of competitive equilibrium to the social choice of institutions or the biological analogy of natural selection in the survival of the fittest institution. As we all know from experience, dysfunctional institutions often persist for a very long period. Akerlof (1984) has built models to show how economically unprofitable or socially unpleasant customs may persist as a result of a mutually sustaining network of social sanctions when each (rational) individual conforms out of fear of loss of reputation from disobedience. In such a system potential members of a break-away coalition fear that it is doomed to failure and thus failure to challenge the system becomes a self-fulfilling prophecy. Kuran (1987) has a related model of collective conservatism which is reinforced by the influence on an individual's private preference formation of the justifications others give for their public preferences for the status quo. A similar self-reinforcing mechanism for the persistence of socially sub-optimal institutions may be in operation when path-dependent processes are important, as is now recognized in the literature of the history of technological innovations. (The QWERTY typewriter keyboard, the narrow gauge of British railroads, U.S. color television system, etc. have been given as examples of the persistence of ex ante inferior technologies.) As Arthur (1985) has emphasized, when there are increasing returns to adoption of a particular (technological or institutional) innovation -- i.e., the more it is adopted the more it is attractive or convenient for the others to join the bandwagon on account of infra-structural and network externalities -- a path chosen by some initial adopters to suit their interests may 'lock-in' the whole system for a long time to come, denying later, more appropriate, technologies or institutions a footing. The process is non-ergodic; there are multiple outcomes and

historical "small events" early on may well decide the larger course of structural change.<sup>8,9</sup>

The biological analogy of survival of the fittest is particularly inappropriate as path-dependence is assigned an important role in biological processes. To quote Gould (1980): "Organisms are not billiard balls propelled by simple and measurable external forces to predictable new positions on life's pool table. . . . Organisms have a history that constrains their future in myriad, subtle ways. . . . Their complexity of form entails a host of functions incidental to whatever pressures of natural selection superintended the initial construction." The arguments against the operation of natural selection in social institutions are obviously much stronger.

The recognition of path-dependence does not necessarily lead to a completely chaotic or 'Cleopatra's-nose' view of institutional history. There are certain regularities in the evolution of social institutions as social agents repeatedly face the same types of social problems and adapt their behavior. Schotter (1981) and Sugden (1986) have given game-theoretic accounts of the spontaneous evolution of institutions as self-enforcing stable solutions to iterated games of strategy. Sugden analyzes the evolution of three kinds of institutional rules or what he calls conventions: (1) conventions of coordination which evolve out of repeated play of games of pure coordination (examples from social life are: road rules, use of money, weights and measures, market-places and market days, languages) where the degree of conflict of interests is minor; (2) conventions of property which evolve out of repeated play of games where the players are in dispute over something that they all want but all cannot have (examples from social life: 'finders keepers' rule, queues, occupancy rights on land); and (3) conventions of reciprocity which evolve out of repeated plays of prisoner's-dilemma games (examples: practices of mutual restraint and mutual aid, and the highly suggestive success of tit-for-tat in

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<sup>8</sup> One remembers Leontief's (1963) plea for 'writing history backwards' when the dynamic system confronting the historian is unstable.

<sup>9</sup> To be fair to North, in a recent paper (1986) he shows some recognition of path-dependence in institutional evolution. He compares this to the way common law evolves: "It is precedent-based law; past decisions become embedded in the structure of rules, which marginally change as cases arise involving some new or, at least in the terms of past cases, unforeseen issue, which when decided becomes, in turn, a part of the legal framework. . . . It is essential to note that precedent not only define(s) and determine(s) many of the provisions but also dictate(s) the existing agenda, decision rules, and methods of resolution."

Axelrod's (1984) well-known computer tournament). Schotter, similarly has a model that depicts the process of institution creation as a Markovian diffusion process whose absorbing points correspond to stable social institutions; the institutional problem is phrased as a supergame. There is, of course, a certain amount of indeterminacy in such an analysis: we do not expect to isolate a unique institutional form as stable, rather we must content ourselves with a set of forms that, when taken together, are stable.

At this point it is also important to note, as many evolutionary economists remind us, the distinction that Carl Menger (1883) made between what he called 'organic' and 'pragmatic' institutions. The contractarian approach of the CDAWN and imperfect-information schools emphasizes the latter, those which are the direct outcome of conscious contractual design, as in the case of some corporate structure and practices. Organic institutions like the conventions of Sugden and Schotter are, on the other hand, comparatively undesigned and they evolve gradually as the unintended and unforeseeable result of the pursuit of individual interests.<sup>10</sup> (As Furet (1978) observed, "men make history but they do not know which one.") Menger's theory of the origin of money in which the self-interested actions of traders led to the evolution from a barter economy to one in which a single commodity became the universal medium of exchange is a prime example of the evolution of an organic institution. But unlike in the case of Menger's theory of money, it is possible to have cases where an institution is created organically but preserved pragmatically. One may cite here what Elster (1983) calls 'filter explanation', as opposed to functional explanation, where the actors eventually become aware of the function an institution serves for them and they then consciously maintain it even though it originally came to being unintended. Langlois (1986) gives an interesting (and ironical) example from Edelman's (1964) theory of government regulatory commissions: "Voters are plagued with vague fears about and a sense of powerlessness over certain phenomena they cannot control. The fear of monopoly is one of these. In order to gain votes, politicians make symbolic gestures to placate these fears -- in this case, the formation of regulatory

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<sup>10</sup> Buchanan (1975) in his explanation of the rise of property and law and Nozick (1975) in his discussion of the hypothetical emergence of the minimal state from a Lockean state of nature have used the idea of unintended outcomes of voluntary negotiations. On the other side of the political spectrum Elster (1985) has given an insightful interpretation of Marxian dialectics in terms of unintended consequences in history.

commissions. But, once in place, the commissions . . . are quickly captured in the familiar way by those they were supposed to regulate. Thus a quite different mechanism maintains them once created; they serve the function of cartelizing the industry and are kept in business by the political action of that industry."

#### IV

The neoclassical institutional economists focus their attention on allocative efficiency-improving institutions, whereas Marxists often emphasize how institutions change or do not change depending on considerations of surplus appropriation by a dominant class.<sup>11</sup> In particular progress towards a more productive institution may be blocked if it reduces the control of surplus by this class. (Even when historically valid such a statement, of course, needs better micro-foundations, showing how individuals within the class that could gain from the new institution are frustrated in their efforts by the aggregative necessity of retaining control for the whole class.) The emphasis on the effect of an institutional change on control of surplus by a particular class also suggests that the question of efficiency-improving institutional change cannot really be separated from that of redistributive institutional change, particularly when issues of collective action, class capacity, mobilization and struggle in the historical process are important. This means that the distinction Hayami and Ruttan (1985) make between the 'demand' for institutional innovations (on the basis of changes in technological or demographic factors) and their 'supply' (depending on political entrepreneurs undertaking the necessary collective action) may be somewhat artificial. In empirical analysis of actual institutional changes this may lead to a kind of 'identification problem'. In English agricultural history did the (second) enclosure movement in the 18th century come about because enclosed farming was more efficient than open-field farming, or because the (prospective) redistributive effect of enclosures in favor of landowners made collective action on their part easier? In the example of Hayami and Kikuchi (1982) from agriculture in the Phillipines in the mid-1970's where the increase in population pressure on land brought about a new employer-employee relationship (the gamma system replacing the traditional hunusan system) lowering the wage

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<sup>11</sup> Elster (1985) notes some ambivalence in Marx's writings on this question. On the one hand it is consistent with Marx's emphasis on the class struggle as the basic force in history; on the other hand, it does not support his view that the productive forces tend to progress throughout history.

rate, did it come about because the disequilibrium between labor productivity and wage 'demanded' such a change or because population pressure on land made collective action on the part of employers easier (or that on the part of laborers weaker) thus facilitating the 'supply' side?<sup>12</sup>

A shift in the focus of attention from the efficiency aspects of an institution to the distributive aspects inevitably confronts us with the question of somehow grappling with the elusive concept of 'power' and with political processes which much of neoclassical institutional economics would abhor. Marxists, of course, directly deal with these issues, but are often methodologically careless. The concept of 'power' is often used in a question-begging way: differences in institutional arrangements are supposed to be explained by blanket references to differences in the power of the dominant class without an independent quantification of the latter. The literature -- Marxist or non-Marxist -- on a rigorous analysis of power is rather scanty in economics, compared to that in sociological and political theory. Game theorists have used the idea of bargaining power<sup>13</sup> in dividing up the surplus in bargaining games or the idea of power exercised as the Stackelberg leader taking the weaker party's reaction function as given<sup>14</sup> or as the ability to credibly precommit in non-cooperative games -- these are indirectly reflected in some of the models of the imperfect-information theory of institutions. In recent Marxist theoretical models in economics two distinct forms of power relations have emerged: Roemer (1982) traces the primary locus of capitalist power in unequal distribution of property, whereas Bowles (1985, 1987)

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<sup>12</sup> Taking another example from Hayami and Kikuchi (1982), the rapid expansion of labor-tying arrangements like kedokan in many parts of Java in the late 1960's, which are attributed to population growth by Hayami and Kikuchi, are explained from the 'supply side' by Hart (1986a) with reference to the drastic changes in the collective strength of the poor peasantry that the bloody political changes of the mid-60's in Java brought about.

<sup>13</sup> Harsanyi (1976, Ch. 9) measures the strength of A's power over B by the opportunity costs to B of refusing to do what A wants him to do: these opportunity costs measure the strength of B's incentives for yielding to A's influence.

<sup>14</sup> Basu (1986) has shown some extra dimensions of power in triadic, as opposed to dyadic, Stackelberg relations. For example, a 'powerful' or 'influential' actor can extort from a weaker party more than his usual pound of flesh (say, profits in an all-or-nothing monopoly transaction) and push the latter below his reservation utility level of the bilateral case, if he can threaten the latter's relation with a third party.

traces it to the political structures of control and surveillance at the point of production, both referring to a competitive economy. Roemer reiterates the well-known Samuelsonian proposition that in a competitive model it does not matter whether capital hires labor or labor hires capital, with the important modification that in either case the wealthy 'exploit' (take advantage of) the poor. To Bowles, on the other hand, the locus of command in the production process is central to the functioning of the system. I find this distinction between domination in production and asset-based power somewhat overdrawn: who hires whom essentially depends on the capacity to be the residual claimant in production, and that in turn depends on the capacity to bear risks, the wealthy having obviously a larger risk-bearing capacity. But both these strands of Marxist theory serve as a reminder that in the CDAWN and imperfect-information theories demonstrating the constrained Pareto-efficiency rationale of some existing institutions in terms of transaction costs and moral hazard, it is underemphasized that a more democratic organization of the work process (following Bowles) or a more egalitarian distribution of assets (following Roemer) might have significantly reduced (not eliminated) the informational constraints and Hobbesian malfeasance problems which form the staple of much of the principal-agent literature.

Bowles (1987) draws our attention to another aspect of power which Walrasian models of neoclassicals as well as of Roemer overlook. When markets do not clear even in competitive equilibrium, those who are left out are the powerless -- the involuntarily unemployed in the labor market, the borrowers rationed out in the credit market, etc. Under conditions of imperfect information, costly monitoring, moral hazard and adverse selection, Bowles (1985, 1987), Stiglitz and Weiss (1981), Shapiro and Stiglitz (1984) and others have constructed non-Walrasian models of involuntary unemployment and credit rationing in equilibrium. As Bowles (1987) comments, "if agents are quantity-constrained as well as budget- and price-constrained the power of an economic agent is not fully expressed by his or her initial holdings and the reigning prices of all goods and factors of production: one may not have access to a good or service even if one is willing and able to pay the going price." Powerlessness here arises from being quantity-constrained, but one should note that claim enforcement costs or transaction costs may be sufficient, but not necessary, for a quantity-constrained economy (efficiency theory is not the only basis of involuntary unemployment; moral hazard and adverse selection are not the only basis of credit rationing). But selective exclusion of some workers and payment of a wage more than their opportunity cost to a co-opted group of workers



(who derive a strategic rent in the process), as the efficiency theory implies, may be an important institutional device to maintain a two-tiered labor market -- as Eswaran and Kotwal (1985) suggest -- and provide the micro-economic basis of what Marxists call social control of the labor process, as suggested in Bardhan (1984, Ch. 5) and Hart (1986b).

#### IV

Finally let us turn to two other key and at the same time complex and amorphous, aspects of the theory of institutions that neoclassical institutional economists generally ignore: ideology and the state. North (1981) significantly differs from other members of the latter group of economists, and is nearer the position of Marxists, in assigning a theory of ideology and of the state a central place in his theory of history and institutional change. The contractual environment of the CDAWN and imperfect-information theorists would have been much too anarchic and transaction costs prohibitively high, were it not for certain internally enforced codes of conduct which are shaped by ideology, with individuals constraining themselves by their socially imbibed notions of legitimacy of the system, fairness of contracts and the ethic of reciprocity. Our models of imperfect information are often full of super-strategists relentlessly pursuing their games of conspiratorial cleverness<sup>15</sup> without constraints of norms or moral obligations. Yet individuals sometimes decide to act contrary to their own interests, out of some sense of what Sen (1977) calls 'commitment'. Social ideology serves to reduce free-riding, shirking and venality, inducing the individual often to behave in a way contrary to the presumptions of principal-agent games; voluntary cooperative institutions and a complex system of traditional norms and practices in management of village common property often defy Olson's (1968) 'logic' of the collective action problem. Marxists offer many useful clues (and some functionalist red herrings) about the structural roots of different ideological systems. Ullman-Margalit (1977) and Sugden (1986) give us a game-theoretic account of the evolution of norms in society. But it is easy to see that we do not yet have a good theory of the formation, maintenance and institutionalization of ideology which can lend some regular predictive ability to a model of the role of ideology in institutional change.

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<sup>15</sup> One is reminded of Prince Metternich who reportedly said, when during a royal ball an aide whispered into his ear that the Russian Czar was dead, "I wonder what his motive could have been."

In propagation of ideology and the socialization process as in defining and enforcing property rights the state plays an authoritative role. The state is relatively passive and largely an arena of group conflicts in the view of both orthodox Marxists and the neoclassical institutionalists: for the former the state, even when it has 'relative autonomy,' acts may be not at the behest of, but only on behalf of, the dominant class; for the latter the state passively responds to rent-seeking behavior of various interest groups and lobbies. Both sides tend to ignore the large range of choices in goal formulation, agenda setting and policy execution that the state leadership, however constrained<sup>16</sup> by the articulated interests of organized classes and pressure groups, usually has. North gives the state a somewhat more active role compared to other members of the CDAWN school: a group with a 'comparative advantage in violence' captures the state and acts as a revenue-maximizing discriminating monopolist 'selling' protection and justice. (This is akin to the protection rackets of organized crime as Tully (1984) has noted.) North refers to the frequent fact (all his examples of sub-optimal institutions are attributed to it) that the state, for reasons of maintaining its support structures, may prolong socially inefficient property rights. He, of course, shares with other liberal economists a basic distrust of the state, whose unbridled power and rapacity result in institutional atrophy and economic stagnation. (Marx himself largely shared the anti-etatist views of the nineteenth-century liberals; he found in the Asiatic state, with its monopoly of economic initiative, an explanation for the backwardness of the East.) Despite some of the similarities between England and Spain at the beginning of the 16th century, North (1986) traces the differential subsequent evolution of economic institutions and consequently in economic growth in the two countries to the differential development of power of the ruler vis-à-vis the constituents (represented by the English Parliament and the Castilian Cortes respectively) in the history of the two countries. He also finds a reflection of this difference in the institutional evolution of the English North American colonies compared to the Spanish colonies in South America, with similar economic consequences.

I have at least three problems with this kind of anti-etatist explanation of institutional development or lack of it. First, the so-called Coase theorem (by the

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<sup>16</sup> This constraint may be somewhat less when the state itself is a dominant producer in the economy as in some developing countries; but then again as long as many of the state enterprises are losing concerns, the state's dependence on the surplus generated in the private economy is not greatly diminished.

way, Coase's 1960 paper does not have the statement of any theorem, only suggestions and examples), which is the starting point of the CDAWN theorists, is often interpreted to imply inferiority of government intervention to private property rights: even when the market outcome is inefficient (as in the case of externalities) people will supposedly get together and negotiate their way to efficiency under private property rights. This view I find simply incredible. Farrell (1987) has recently shown, with a mathematical example, the implausibility of the Coase theorem even in a second-best sense: he shows that under incomplete information voluntary negotiation under private property rights may be unable to perform as well as even an uninformed and bumbling bureaucrat.

Secondly, in many situations (in history and currently in many poor countries) of highly fragmented polity and economy, to blame the state for blocking institutional progress can sometimes be far-fetched and misleading. Where there is an oligopoly of violence (i.e., the state does not have a monopoly in it) and territorial segmentation of economic domination by local overlords, the state may be too weak (and too remote) to influence local relations of production even if it wants to.

Thirdly, it is sometimes important to distinguish between the top political leadership (let us call it the state elite) which takes general political decisions and the hierarchy of agents, the bureaucracy, which is supposed to implement those decisions. The process of implementation often generates various kinds of rental income which, to a significant extent, accrues to the bureaucracy (and sometimes to the lower functionaries of the ruling party) and the latter may form a pressure group to secure this income flow, with goals which are much narrower than those set by the state elite. The impulses that shape major policies and actions by the state elite, on the other hand, are fueled not merely by motives of self-aggrandizement but quite often also by what Miliband (1983) calls its 'conception of the national interest' in a way that the simple neoclassical theory of the rentier state or the simple Marxist class-driven state somehow fails to capture. In many cases of state-directed industrialization (the history of East Asia over the last hundred years or so provides some dramatic instances) this leadership genuinely considered itself as the trustee of the nation's deeply held collective aspirations and derived its political legitimacy from them. In a world of international military and economic competition one form these aspirations often take is to strive for rapid economic growth. The state elite tries to carry out a restructuring of social and

economic institutions towards that goal, not just out of pressure from the dominant class or as a revenue-maximizing strategy.

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