The Economics of Property Rights and Human Rights

By MICHAEL VESETH*

ABSTRACT. *Human rights* and *property rights* are rights of the *person,* with the former being numbered among the latter. The property rights school of *economics* analyzes the impact of maximizing behavior within alternative sets of *institutional structures* defined in terms of the definition and distribution of property rights. Property rights are tools or parameters, not goals of *economic policy* in themselves. It is useful to view human rights in the same way. The 'optimal' structure of human rights in an *exchange economy,* like property rights, depends on the nature of *market imperfections* such as *transactions costs.* The views of *Rawls, Arrow* and *Sen* can be interpreted in the light of this analysis. It makes a tentative case for some communal human rights (aimed at moderating the effects of an unequal *ditribution of resources*) within a system of private human rights vested in *individuals* rather than the *State.* This conclusion depends, however, on the distribution of *transactions costs* in human rights and the chosen role of human rights as tools of *public policy.*

I
Introduction

HUMAN RIGHTS ARE both a continuing intellectual concern of philosophers and an important issue in modern politics. Human rights are, however, incompletely understood. Moral philosophers, including John Stuart Mill, John Locke and Jeremy Bentham, have debated the origin of human rights. Are they 'natural' or are they man-made? Political scientists in modern times have concentrated on enumeration of rights that they consider necessary and, having named these 'human' rights, they then investigate the systems that lead to their violation.[1]

The discussion of human rights is confused by the lack of a clear understanding of the properties of these rights and the impact of different distri-

*[Michael Veseth, Ph.D., is associate professor of economics, University of Puget Sound, Tacoma, Wash. 98416.] The author thanks D. Wade Hands for his insights on the topic discussed here.

American Journal of Economics and Sociology, Vol. 41, No. 2 (April, 1982).
0002-9246/82/020169-13$00.75/0

butions of human rights on society. Ferdinand Mount voices this concern in a *Wall Street Journal* column:

> At the very least, we have to first agree among ourselves what human rights are. Are they primarily civil and political—including such things as freedoms from torture and arbitrary arrest and imprisonment, the right to a fair trial and the right to vote in free, fair and meaningful elections? Or should we espouse a broader definition, including economic and social benefits such as the right to education and even the right to holidays with pay and the right to "enjoy the arts"? Both sorts of rights are included in the UN and European Declarations of Human Rights.[2]

Mount's question is well posed. Are the right to vote and the right to holidays with pay both human rights? If they are, then what precisely is a human right? Are they goals to be striven for or tools used to achieve greater goals? What are the consequences of different systems of human rights?

While economists have no integrated theory of human rights, there has developed a rather extensive literature on the economic theory of property rights.[3] Human rights may be thought of as a subset of the set of property rights. As such, human rights have properties in common with the class of property rights with which economists concern themselves. This paper examines the economic model of property rights and then applies this model to an analysis of human rights. This application yields nontrivial insights into the nature of human rights.

In the following discussion the author is interested in the answers to the following questions about human rights. First, are human rights goals or are they tools or parameters? Second, does the definition and distribution of human rights (the way that human rights are distributed among individuals and between individuals and the State) make any difference? If there is a difference, what is it? Finally, what should be the distribution of human rights? Can the theory of property rights help us answer this strictly normative query?

II

The Property Rights Paradigm

THE PROPERTY RIGHTS SCHOOL of economics is a blend of the neoclassical and institutionalist schools of economic thought. Like the neoclassicals, property rights theorists consider individuals to be maximizing animals who allocate resources in order to achieve a maximal level of utility or satisfaction. Like the institutionalists, however, they consider the social and legal framework surrounding the maximizing behavior to be important. In short, the property rights advocates analyze the impact of maximizing behavior within alternative sets of institutional structures.[4] The basis for their analysis of institutional systems is, not surprisingly, the property right.

Property rights, defined according to this school, are the legal and social rules under which economic and social behavior takes place. For each physical or conceptual good or service there exists a bundle of rights to the various uses of the item. When we buy or sell something we are really buying or selling some or all of the rights that pertain to that item. A given set of property rights can be attenuated (weakened or assigned to more than one individual) in various ways by social or legal forces so that all of the bundle of rights that pertain to a given item are not available to the person who 'owns' it. Price controls, for example, alter the nature of property rights in a good or service by restricting conditions for voluntary exchange.

Property rights can be defined and distributed in many different ways. Property rights may be held in common by a group of people (in which case no member of the group may be excluded from exercising the common rights). An alternative distribution is a system of 'private' rights that allows exclusive use and enforcement of property rights. And, as noted above, property rights may be attenuated, with some rights being denied anyone (or, viewed alternatively, some rights held by the State and excluded from private use). The distribution and definition of property rights can change over time. Demsetz and Bjork, among others, cite instances of changing property rights accompanying changing economic conditions.[5] Systems of property rights have even been observed among animals.[6]

The definition and distribution of property rights is important because maximizing behavior leads to different results under different property rights structures. Property rights may, therefore, be altered in order to increase efficiency in production or to achieve different social or economic goals.

Suppose, for example, that we consider economic behavior toward the harvest of salmon runs. Salmon migrate up particular streams to spawn.

If the fishing rights to a stream are privately held (as they sometimes are in Canada and the United Kingdom), then the individual or organization that owns those rights has a vested interest in maximizing the utility that those rights provide over time. The salmon are likely to be harvested at an optimal rate and efforts made to restock the stream artificially in order to maximize the value of the private resource.

If the fishing rights are owned in common (as is generally the case in the United States) a different behavior is likely. Each individual fisherman maximizes the value of the common right by catching as many fish as possible. A fished-out stream is the likely result in the absence of collective action (government attenuating the property rights of the individuals in communal self-interest).[7]

A problem exists when property rights exercised by one person cause gain or loss to others. The discussion of this problem of externalities has been a major theme of the property rights school. Coase has asserted that, given a structure of non-attenuated property rights and zero transactions costs, the problem of externalities does not exist regardless of the distribution of property rights.[8]

Suppose, following an example of Coase, that a cattle ranch and a farm exist side-by-side and that cattle occasionally stray onto the farmland, destroying crops. The cattle are an external cost to the farmer. The traditional Pigouvian analysis suggests that, in the absence of government action, too little of the farmer's crop will be produced and too many cows will be added to the herd (compared with the efficient level of production that maximizes the value of the resources involved). Government action to alter the distribution of property rights (through a Pigouvian tax and subsidy scheme) is required.[9]

Not so, said Coase. Assuming zero transactions costs, the efficient level of production will prevail without government action and will be independent of the distribution of the (non-attenuated) property rights. To see this, suppose that the right to trespass is given to the rancher. It will then be in the farmer's interest to bribe the rancher to reduce the size of his herd, so long as the value of the marginal cow to the rancher is less than the value of the marginal crop loss to the farmer. An efficient level of crop and cow production will result, with a side-payment going to the rancher (note that this 'subsidy' goes in the "wrong" direction as compared with Pigou's analysis).

Now suppose, alternatively, that the farmer holds all property rights to his land (including the right to exclude trespassers). It will then be in the rancher's best interest to bribe the farmer to allow cows to stray occasionally so long as the value of the marginal cow thus allowed exceeds the value of the marginal crop loss. This additional cost will induce the rancher to reduce his herd to the efficient level while the side-payment causes the farmer to increase crop production to the efficient level as well. The value-maximizing level of production again occurs, with the difference in the distribution of property rights only altering the direction of the side-payment stream.

Coase's result is interesting in that it suggests that the distribution of property rights is irrelevant and that the role of government in the case of externalities is less active than is commonly assumed. Coase's conclusions, however, depend on his assumptions. In this case, four assumptions are very important. First, Coase assumes a situation where property rights are non-attenuated. Government actions that alter property rights will cause even this otherwise efficient 'bribe' system to give birth to an inefficient result. Suppose, for example, that an effective price floor or price ceiling exists in the market for the farmer's crop. This change in the right of the farmer to sell his crop alters the 'exchange rate' between crops and cows. Now, regardless of the distribution of property rights, the efficiency of the rights-exchange system breaks down.

Coase's example also depends on a 'private' system of property rights. That is, the farmer and the rancher are both assumed to have rights that are held individually. If some of the rights (say, the right to trespass into the farmer's land) are held communally, the result is the "tragedy of the commons" noted earlier in the discussion of salmon runs. Side-payments are ineffective in this case (especially in the presence of non-zero bargaining costs).[10]

Coase assumes, as well, that income effects and the distribution of income are not important to the exchange of rights. That is, he assumes that both parties actually have the economic resources to make any necessary side-payments and that the existence of these payments does not alter the problem by changing prices or preferences. If the existence of the externalities is always reflected in market price and changes in market prices are always reflected in changes in asset values and income, then Coase is right (indeed, he is right in his world). In imperfect markets, however, the existing distribution of resources and income may make some exchanges impossible with the result that bargaining breaks down and the distribution of property rights does matter.

Finally, Coase assumes that there are no transactions or exchange costs so that no cost wedge separates the parties to an exchange of rights. If non-zero transactions costs do exist, then the bargaining process will not result in efficient production.[11] If, for example, legal costs exceed the value of damaged crops, the farmer may choose to bear the external costs rather than the transactions costs and the efficiency problem of externalities is again upon us. Does this mean that government action is called for to regulate the market? Not necessarily, since government actions have a cost of their own (that must be paid for by increasing costs somewhere) and especially since government intervention designed to increase efficiency (given non-attenuated property rights) will necessarily modify those rights with the result that an efficiency improvement is not guaranteed.

Coase suggests that an efficiency gain can be achieved in the case of non-zero transactions costs through careful distribution of property rights. Property rights should be assigned to the party with highest transactions costs, leaving the lower-cost party to make side-payments to move production towards the efficient level. Thus, for example, if the farmer's transactions costs exceed those of the rancher, then the farmer should be given the right to exclude trespassers. Since his transactions costs are lower, the rancher may still find it in his self-interest to make some side-payments, exchanging cows for crops. If rights were distributed the other way around (with the right to trespass given to the rancher who has the lower transactions costs), the farmer, as noted before, may find any side-payment uneconomic and the use of resources is left unimproved.

To review this section, the property rights school holds that property rights are tools or parameters that affect economic behavior. The definition of property rights and the distribution of property rights is determined by society and can be changed. The exchange of non-attenuated property rights leads to productive efficiency in the absence of transactions costs. The existence of income or distributional effects, transactions costs or communal rights creates inefficiencies in exchange and production.

III

Property Rights and Human Rights

HUMAN RIGHTS MAY BE THOUGHT OF as the property rights that people hold in themselves and in society. Human rights may be defined as private rights (held by individuals able to exclude others from exercising them) or communally (able to be exercised by all without the principle of exclusion). The definition of human rights is established by social and legal convention and is subject to change.

If we choose to view human rights from a property rights perspective (as this article does) then it becomes clear that human rights, like property rights, are not goals that policy seeks to achieve. Human rights, in this context, are a subset of the rules and regulations under which human activity takes place. They are, therefore, tools or parameters of social interaction. If one takes the position that these rights are tools, not goals, then the particular definition and distribution of property and human rights is important only in so far as desirable or undesirable outcomes are generated. Viewed in this light, political scientists' current passion for cataloguing human rights violations is appropriate only if the social outcomes that they deem desirable can be achieved only given the existence of the particular human rights they advocate. The discussion of a particular set of human rights as necessary and sufficient conditions for a particular social outcome is an interesting and important issue, but one that will be left for another time.

In our discussion of property rights we saw that efficiency problems exist if rights are held communally (as opposed to privately). The same conclusion holds true of human rights. Communal human rights are those that all may claim and that none may be excluded from exercising. The UN Declaration on Human Rights lists several such rights including the right to fair and speedy trials, protection against unemployment, the right to education and an adequate standard of living.[12] These may indeed be 'rights' in the sense that we have discussed them, or they may (more likely) be 'goals'. In any case, these stated rights all have the property that they are claims against common resources.

If individuals have the right to, say, a certain amount of education, then society has a corresponding responsibility to satisfy that right (or else the individual has been excluded from exercising the right and the definition breaks down).[13] This, in effect, gives individuals command over common resources. If resources are scarce (have a positive opportunity cost), however, then exhaustion of the commons follows. Each individual exercises the communal right to his or her own benefit. The opportunity cost of the resources used is not borne by any individual and so is under-valued in individual maximizing behavior. Rights are 'over-fished' in the sense of the salmon run example of the last section.[14]

Society, given scarce resources, is rather like a fractional reserve bank. So long as only a few citizens seek to redeem their rights at any given time, the stock of resources on reserve can provide that those rights are honored. But if many seek their rights simultaneously (as, for example, if all traffic offenders sought jury trials) the result is the same as a run on the bank. No one's rights have any value. Causal empiricism suggests that some rights in the United States (the right to a speedy trial) have already been much devalued by such a bank panic. Similar communal human rights in less developed countries probably have little value (in a real sense) because of severe resource scarcity.

The distribution of human rights makes a difference to social behavior, given a system of private property rights. Consider conceptually similar human rights to mobility: the right to change jobs and the right to emigrate from one nation to the next. If an individual holds these rights privately, he or she exercises them so as to maximize their private value. Hence individuals change jobs or cross national borders whenever these actions bring an expected gain.

But suppose that these mobility rights are vested with others. Suppose that a particular employer (possibly the State) holds the right to individual job mobility (can stop the individual from changing jobs) and that the State holds the individual's right to emigrate (has the right to exclude individuals from emigration). In this case the employer or State seeks to maximize the value of these rights. The outcomes are likely to be different in the two situations.

Take, for example, the question of investment in human capital (education, training and the like). If workers have the right to freely change jobs, employers have little incentive to provide general education or training in widely applicable skills since this investment can be readily transferred to competitors if an employee changes jobs. General education must be sought by the worker and only very job-specific types of training may be expected from the employer. Likewise, if the State cannot restrict emigration, it may find it in its best interests to invest relatively less in human capital and relatively more in nonhuman capital (technology, machines etc) that can be excluded from export. Again, much human capital investment is left to the individual.

If, however, the employer has the right to limit job mobility or the State has the right to limit emigration, then a different pattern of investment in human capital can be expected. Now employer and State maximize the value of their rights by increasing investment in human capital. If the employer and the State have greater command over resources or better foresight than workers and citizens, a higher total level of investment in human capital results.

Does this mean that people who favor education and training must also favor slavery and 'iron curtains'? No. Assume, following Coase, that there are zero transactions costs and no income or distributional problems. Then it follows that the outcome (the efficient level of investment in human capital) is independent of the way that these human rights are distributed. That is, if mobility rights are vested with individuals, the employers and the State may offer side payments to individuals to induce them to transfer their rights. Indentured servitude and contract apprenticeship are institutions that evolved to fill such needs. The exchanges that result induce States and employers to increase the level of investment in human capital and, in theory and ignoring the relationship between the mobility rights and the distribution of other rights that may be related, efficiency should result, leaving all parties better off. If the relevant mobility rights are vested instead in States and employers, property rights theory suggests that similar side-payments may be made by individuals to bring about efficiency and Pareto optimality.

This analysis suggests, then, that a system of non-attenuated human rights is desirable and that, in the absence of transactions costs, the distribution of privately-held human rights among individuals and between individuals and the State is irrelevant. We observe, however, that transactions costs do apply and that the distribution of human rights between individuals and the State is important. We also observe that distributional questions are central to public policy. Can the property rights literature suggest explanations for these observations?

IV

Issues in Human Rights

THE EXCHANGE OF NON-ATTENUATED HUMAN RIGHTS is complicated by several factors that make the distribution of human rights an important issue. These problems include the existence of non-zero transactions costs, problems resulting from the initial distribution of income and resources and difficulties in social choice.

Following the property rights analysis, the existence of non-zero transactions costs drives a wedge between buyer and seller and reduces the potential for Pareto optimal exchanges of human rights. If it is costly, for example, for individuals to purchase human rights from the State (or vice versa) then some Pareto optimal exchanges will not take place. Coase's analysis would suggest, in this case, that an improvement occurs when human rights are assigned to the party with the higher transactions costs. To whom, then, should the right to emigrate be assigned, the State or the individual? If decentralization yields lower transactions costs, then this line of reasoning argues for rights assigned to the State (with individuals bargaining for exchanges). If, on the other hand, State bureaucracies display economies of scale that reduce transactions costs, then these human rights ought to be assigned to individuals.

This handy economic argument for the distribution of human rights necessarily ignores several important points. First, it assumes that, transactions costs aside, different individuals and the individual and the State are equally positioned to initiate human rights exchanges. This may not be the case, particularly if the State has police power to command resources and if the value of human rights does not translate into an ability to pay. In this case wealthy individuals (or powerful States) may be able to gain "market power" over human rights, with the textbook inefficiencies that would result. Suppose, for example, that employers are given the right to dictate job mobility of the employees. If the rights markets that result in these human rights are "uncompetitive," and if the initial distribution of income favors employers, then efficient exchanges between employees and employers may not take place because of the worker's inability to back preferences with cash. Slavery may result if the workers cannot afford their own purchase price.

An efficient system of non-attenuated human rights may be dependent, then, on the existence of an appropriate initial distribution of income and resources. Many of the communal human rights (such as the right to employment and an adequate standard of living) may be an attempt to deal with this difficulty.

John Rawls has proposed a theory of justice that has, as a fundamental tenet, the so-called "maximin" distribution of resources.[15] Rawls suggests that 'justice' be viewed as the set of rules (human and property rights in our analysis) that society would adopt under a 'veil of ignorance'—in the absence of self-interest based on knowledge of position and power in the real world. Rawls suggests that, given this perspective, individuals would agree to a system of justice that provides equal opportunity (one set of human rights) and provides a maximum of resources available to the least-well positioned groups in society (a second set of rights and the basis of the 'maximin' appelation).

We can view Rawls' maximin criterion for justice as the equivalent of a distribution of resources that leaves everyone able to make some human rights exchanges and leaves no one in a position where a particular exchange is forced--determined solely by the initial distribution of resources.

A problem exists here. Rawls' maximin criteria require the existence of certain common rights to resources. Desirable as these rights might be, they have value only, as previously noted, in the absence of scarcity. When scarcity exists, it follows from this analysis that these communal human rights lack value or power and, following Rawls, that justice fails as well.

Given the problem of scarcity, a second-best solution may be in order. If distributional problems make it ineffective to assign human rights to parties with the highest transactions costs, it may be efficient to assign them to parties with the least ability to intitiate exchange—those with the least ability to pay. This generally would require a system that vests human rights with individuals instead of the State, and that outlaws some exchanges because of the potential for abuse. Note, however, that the existence of transactions costs and distributional problems both reduces the number of Pareto optimal human rights exchanges that take place. If giving these rights to the State reduces transactions costs (encourages transactions that individuals cannot afford to make), and giving rights to individuals encourages transactions that are more costly to make, it is not clear which situation will be the best.

A different set of problems arises when, considering the distribution of human rights between individuals and the State, we assume that the State will undertake actions and make exchanges in its own self-interest. What is the State's self-interest? The interests of the citizens as a whole seems a reasonable assumption. How are these interests to be determined? This is a difficult question. Various voting schemes may be proposed. We may require (as does the United Nations' Declaration of Human Rights) that the preferences of all people 'count' in the social choice function. That is, all should be allowed to participate and their participation, at least in theory, should make a difference.

But these 'rights' to vote, be politically active, and so on do not necessarily guarantee that society's self-interest will truly be served. Kenneth Arrow's famous 'impossibility theorem' holds that any social choice function that satisfies certain reasonable criteria (that, for example, Pareto optimal choices not be denied) is necessarily either 'dictatorial' (reflecting the preferences of one individual or sub-population) or 'imposed' (determined by factors other than the preferences and interests of the voting society).[16] No social choice scheme, in short, can be guaranteed to generate choices that reflect the interests of society.

This uncomfortable situation is made worse when we also consider A .K. Sen's 'paradox' of liberty.[17] Sen has shown that, again assuming relatively innocuous criteria, the social choice function fails in the presence of liberty—if some human rights and property rights are privately held. One theoretical possibility is Sen's 'epidemic of paretial liberals' where the assignment of even one private property or human right leads to the possibility of dictatorship.

These problems may not concern practical people concerned with the existence of torture and slavery, but they do point to a basic problem with human rights, regardless of whether they are assigned to individuals or to the State. It may be difficult for the State to make consistent choices that really reflect the interests of society as a whole. It may be the case, for example, that choices that are strictly Pareto preferred are defeated. How, then, can we count on the State to undertake actions and make exchanges in the best interests of society?

In dealing with this problem we may conclude that the issue of social choice makes the State an untrustworthy party. Human rights may, then, be assigned to individuals rather than the State because they are more likely to act in their own self-interest. We may follow Nozick, if social choice functions are incapable of transmitting preferences, to call for a 'minimal' State that has only limited duties and controls relatively few rights.[18]

V
Conclusions

THIS DISCUSSION has looked at the properties of human rights from the perspective of the property rights school of economics. What has emerged from this discussion is a basic realization that the theoretical analysis of property rights has direct application in the case of human rights. It is possible to consider such problems as the proper role of human rights, the effects of changing distributions of human rights and the use of human rights as a tool of social policy.

The conclusions that result from the analysis strongly suggest that human rights should be vested with individuals, rather than the State, and that human rights should be defined in ways that reduce the consequences of matters relating to the initial distribution of resources. A decentralized distribution of human rights is not required because the 'freedom' that results is a goal. Rather, in a perfect world of theory these matters would not arise. Instead we draw these conclusions because of the existence of transactions costs in human rights, exchange problems caused by unequal resource distribution and the fact that, given the problem of aggregating individual preferences into a social choice function, the State is an unreliable partner in human rights transactions.

There is no guarantee, however, that a distribution of human rights that provides individual "freedom" is necessarily optimal in every case. If the State bears greater transactions costs and if distributional and social choice problems are minor, it may be that a centralized distribution of human rights yields better social outcomes. Since human rights can be used as a tool for social policy, it may sometimes be the case that a particular distribution of human rights will be levied (like a tax) in order to bring about public-good sort of outcomes that would not occur given decentralized choice.

Notes

1. The reader who is unfamiliar with aspects of the human rights discussion can quickly gain background by reviewing *The Human Rights Reader* edited by Walter Laqueur and Barry Rubin (New York: New American Library, 1979).

2. Ferdinand Mount, "What Is a Proper Human Rights Policy?" *Wall Street Journal,* March 24, 1981.

3. An excellent introduction to the property rights paradigm is found in "Property Rights and Economic Theory: A Survey of Recent Literature" by Eirik Furubotn and Svetozar Pejovich, *Journal of Economic Literature,* 10 (December 1972).

4. A good discussion of neoclassical, institutionalist and property rights economics is found in "Property Rights and Social Microeconomics," by Alan Randall, *Natural Resources Journal,* 15 (October 1975).

5. Harold Demsetz cites research concerning the organization of Indian tribes, for example. See "Toward a Theory of Property Rights," *American Economic Review,* 57 (May 1976). Gordon C. Bjork has discussed the development of property and human rights in feudal times in his book, *Private Enterprise and Public Interest* (Englewood Cliffs, N.J.: Prentice-Hall, 1969).

6. See an interesting article by M.C. Fredlund, "Wolves, Chimps and Demsetz," *Economic Inquiry,* 14 (June 1976).

7. H. Scott Gordon initiated the modern discussion of this issue in "The Economic Theory of a Common Property Resource," *Journal of Political Economy,* 62 (April, 1954). Garrett Hardin extended the discussion to issues of population and war in his controversial piece, "The Tragedy of the Commons," *Science,* 162 (December 13, 1968).

8. R.H. Coase, "The Problem of Social Cost," *Journal of Law and Economics,* 3 (October 1960).

9. A discussion of the rationale for this sort of externalities analysis can be found in the author's *Introductory Economics* (New York: Academic Press, 1981), chapters 29 and 30.

10. This example assumes that all rights to the land are held communally. This outcome need not prevail, and Hardin's 'tragedy of the commons' need not result, if communal *ownership* is combined with limited *tenure.* Land can be owned by all but its use may be strictly limited to a few who pay for this right. This solution to the problem of the commons is frequently used in the United States, as, for example, in national forests. The difference here between common 'ownership' of a resource and private 'tenure' of it illustrates the way that property rights may be redefined and distributed in order to alter private behavior.

11. Much of the literature in applied property rights analysis has examined the consequences of the existence of transactions costs. An example is Steven N.S. Cheung's "Transactions Costs, Risk Aversion, and the Choice of Contractual Arrangements," *Journal of Law and Economics,* 12 (April 1969).

12. *United Nations Universal Declaration of Human Rights* (1948), reprinted in Laqueur and Rubin, *The Human Rights Reader.* This volume also includes an article that would surprise many economists: "Some Economic Foundations of Human Rights" by José Figueres, former President of Costa Rica.

13. Virginia Held has written an excellent piece describing rights, responsibilities and interests, "Property Rights and Interests," *Social Research,* (Autumn 1979). Friedrich von Hayek also addresses this point in his "Justice and Individual Rights" (appendix to chapter nine) in *The Mirage of Social Justice* (Chicago: Univ. of Chicago Press, 1976).

14. Note that in this section it is the property rights that are held in common; the distinction between ownership and tenure does not apply because, by assumption, there is both common ownership and common tenure.

15. John Rawls, *A Theory of Justice* (Cambridge, Mass.: Harvard Univ. Press, 1971).

16. Kenneth Arrow, *Social Choice and Individual Values* (New York: John Wiley and Sons, revised ed., 1963).

17. A.K. Sen, "The Impossibility of a Paretian Liberal," *Journal of Political Economy,* 78 (Jan.-Feb. 1970). Reprinted in Frank Hahn and Martin Hollis (eds.), *Philosophy and Economic Theory* (New York: Oxford Univ. Press, 1979).

18. See R. Nozick, *Anarchy, State and Utopia* (New York: Basic Books, 1974). Nozick builds a case for a State that exercises only the most meager of rights.