ARE PROPERTY AND CONTRACT EFFICIENT?

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CONTENTS

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INTRODUCTION

This is an article about economic justifications for the legal institutions of private property and enforceable contract. There is, of course, an enormous literature addressed to such questions.[1] At

1. The early literature of political economy contained much discussion of legal institutions. *See, e.g.*, J. S. MILL, PRINCIPLES OF POLITICAL ECONOMY Book V (1st ed. 1848). A second wave is typified by J. COMMONS, LEGAL FOUNDATIONS OF CAPITALISM (1957) (first published in 1924) and R. ELY, PROPERTY AND CONTRACT IN THEIR RELATIONS TO THE DISTRIBUTION OF WEALTH (1957) (first published in 1914). For a sampling of current approaches, see ECONOMIC FOUNDATIONS OF PROPERTY LAW (B. Ackerman ed. 1975) [hereinafter cited as ECONOMIC FOUNDATIONS]; THE ECONOMICS OF CONTRACT LAW (A. Kronman & R. Posner eds. 1979)

present, most discussions focus on the advisability of proposals about specific legal rules. For example, the issue might be the choice between zoning, covenants, and nuisance law as systems of land use control,[2] or the choice of a remedy for the tender of non-conforming goods.[3] There has also long existed a jurisprudential or theoretical literature proposing general defenses of the economic virtues of property and contract. For example, Blackstone asserted that:

> As human life also grew more and more refined, abundance of conveniences were devised to render it more easy, commodious, and agreeable; as, habitations for shelter and safety, and raiment for warmth and decency. But no man would be at the trouble to provide either, so long as he had only an usufructuary property in them, which was to cease the instant that he quitted possession.[4]

The literature of the contemporary law and economics movement[5] deals with both the general question and problems of specific application. It is distinguished from its forbears both by its self-conscious choice of a norm of economic virtue ("efficiency") and by its elaboration of techniques for economic analysis of legal material.

This Article, by contrast with all the literature just described, neither argues for (or against) any legal rules or institutions nor proposes a proper role or technique for economic analysis. It is concerned, in the first place, with what may appear to be a task of mere intellectual housekeeping: that of cataloguing and refuting in detail a number of *false* arguments and suppositions about the economic virtues of private property and free contract. The arguments that concern us are those purporting to justify the legal institutions in question by reference only (a) to a very weak, highly plausible value judgment that we should do things that make or could make everyone affected more satisfied than they would otherwise be, and (b) to a very weak, highly plausible factual judgment that people tend most of the time to act as though they had goals and were try-

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[hereinafter cited as ECONOMICS OF CONTRACT LAW]; THE INTERACTION OF ECONOMICS AND LAW (B. Siegan ed. 1977).

2. *E.g.*, Ellickson, *Alternatives to Zoning*, in ECONOMIC FOUNDATIONS, *supra* note 1, at 265.

3. *E.g.*, Priest, *Breach and Remedy for the Tender of Non-conforming Goods*, in ECONOMICS OF CONTRACT LAW, *supra* note 1, at 167.

4. 2 W. BLACKSTONE, COMMENTARIES *4.

5. *See generally* G. CALABRESI, THE COSTS OF ACCIDENTS (1970); R. POSNER, ECONOMIC ANALYSIS OF LAW (2d ed. 1977).

ing to achieve them—*i.e.*, that people are rational maximizers of satisfactions.

The first part of the Article sets forth and successively refutes five arguments of this type for private property. The second part does the same for free contract, noting the close parallelism between false property and false contract arguments. The result of this exercise, we believe, is to show convincingly, if nonrigorously, that any argument for the economic virtue ("efficiency") of any legal rule must depend on specific assumptions about the actual wants and factual circumstances of the persons affected by the choice among possible rules—that is, that the efficiency of private property and free contract cannot be deduced from the sole factual supposition of rational maximizing behavior.

This is not, we readily acknowledge, an original result, or one that will surprise economically sophisticated readers. Still, not all consumers of economics-oriented law-related literature are economically sophisticated, and the mistakes we catalogue are occasionally committed—or at any rate not always guarded against—by writers who are. It may therefore be useful to provide this guide to traps for the unwary.

If it is true that no one who thinks competently about the question believes that the efficiency of legal rules can ever be finally determined without concrete knowledge of people's actual wants, circumstances, and proclivities, it is also true that much legal and related policy-analytic literature reflects and reinforces the view that certain legal institutions (*e.g.*, private property, free contract) are in some sense *generally* or *presumptively* efficient, while others (*e.g.*, central regulatory command, commonses) are generally or presumptively inefficient, for a population of rational maximizers.[6] In Part III of the Article, building on the catalogue of errors in Parts I and II, we undertake to show that any notion of the presumptive efficiency of private property and free contract must be untenable. We there argue that any *actually* efficient regime, though it may well contain rules fairly characterizable as private property and free contract, must contain them in combination with rules drawn from realms perceived as *opposite* to private property/free contract (*viz.*, unowned commonses and collective controls) so that there is no more reason for awarding the palm of "presumptive efficiency" to private property/free contract than to its opposites.

6. A classic example is Hardin, *The Tragedy of the Commons*, in ECONOMIC FOUNDATIONS, *supra* note 1, at 2.

I. Five False Arguments for Private Property

In this Part, we take up a series of arguments for private property, and show that each depends on empirical assumptions additional to that of rational maximizing behavior. Throughout, we will be contrasting the property regime, or PP, with two other regimes, since economic arguments for PP always make some implicit comparison with alternative possibilities. The two other regimes are the state of nature (SON) and the regime of forced sharing for needs (FSN).

A property regime (PP) is one in which things of value are assigned to owners, who have the following rights with respect to them: (a) they can consume them, or use them to produce other things of value, which they will also own; (b) they can get the state's help in preventing any nonowner from consuming them or using them for production without the owner's consent; and (c) owners have exclusive power to transfer ownership to others, with the state recognizing and then enforcing the transfer. This is admittedly a very rough, and in a number of respects a weasel-worded definition, but it is adequate for our present purposes. In Part III, where we take up the problems of the boundaries and internal structure of the property concept, we will offer a much more technically precise definition.

In the state of nature (SON) there is no ownership of anything, and no institution of legally enforced contract either. People may simply do as they wish, using whatever means are available to them—subject to everyone else doing likewise. Conceptually, the distinction between PP and SON is that in PP ownership rights are assumed to be automatically and universally respected—or, equivalently, perfectly and costlessly protected by an absolutely reliable and irresistible force ("the state"); whereas in SON, while there is always the contingent possibility of some people, perhaps by prearrangement, coming forcefully to the aid of others seeking protection or vindication for ownership-like positions, actual protection or vindication will always depend on the hazards of specific, concrete tests of strength (will, wit, etc.).

Forced sharing for needs (FSN) resembles private property, except that ownership is qualified in the following way: Anyone who "needs" a thing and doesn't own it (or its equivalent in cash or credit) may take or requisition it from anyone else who owns it and doesn't "need" it, and the state will intervene, if necessary, on the side of the needy taker. We can imagine rules defining need objectively, either in very general terms (*e.g.*, having in one's ownership

at this moment less than two-thirds of the per capita average share of privately held national wealth) or in terms of a series of particular situations, equally objectively described (*e.g.*, being diabetic and lacking insulin for an overdue shot). Alternatively, we can imagine an official body administering a much vaguer and more subjective standard (*e.g.*, being needy is having so little that a person of good conscience would feel guilty about your state of deprivation, supposing the deprivation was not your fault).

We have cast our five arguments in terms of comparisons between PP and SON or FSN. In each case we compare the valued experiences generated, or sometimes the hours worked, under the various regimes.[7] But we have set aside all arguments that refer to the good (or ill) that may be wrought by, or ascribed to, the *mere existence* of property rights. It might be that because people believe that property is right or fair, they will stop working under SON or FSN, whether out of depression or a desire to bring a property regime into existence. Moreover, it is of course true that if people want property for its own sake, irrespective of its impact

7. We have construed the several arguments for property as all designed to show that property is relatively efficient by the test variously known as "Kaldor-Hicks," or "hypothetical compensation," or "potential Pareto superiority"—*i.e.*, that property will generate a higher-valued periodic total output of goods, services, and leisure for the members of society taken altogether than will any alternative regime. Some economists may object that such is not the sense in which they ordinarily speak of "efficiency;" that in calling a regime "efficient" a careful economist would mean only that it was a "Pareto *optimum*," an arrangement that could not be altered without worsening the lot of at least one person; that, indeed, comparison of regimes in terms of *total* values *across* society is meaningless without an objective, or at least intelligible, metric for comparing one person's gain with another's loss; that the only such metric known is that of (actual or constructed) offer or asking prices, which is unsatisfactory because it suppresses the important but unfathomable effects of changes in distribution on the total of individual welfare levels.

Our response is, first, that the strict criterion of actual Pareto superiority—better for each person, or at least as good—cannot be the one intended by claims that property is relatively efficient, because it is plain without argument that the strict criterion cannot select among PP, SON, and FSN; second, that a great deal of policy analysis, as distinguished from work in economic theory, in fact aims, if only mediately, at maximization of social welfare by way of "educated guesses" about cross-personal welfare comparisons; third, that if we succeed with our project of showing that PP is not demonstrably more efficient than SON or FSN in the less demanding "potential" sense, we shall also have shown, a fortiori (supposing any such showing were needed), that PP is not efficient vis-a-vis the alternatives in the strict Paretian sense; and, finally, that the nature of our attacks on the economic arguments for property is such that specification of output metrics is not crucial for us: in some instances, the arguments we are attacking will imply their own metrics (*e.g.*, total labor time in the case of the First Argument); in others, our position holds no matter what metric you choose to consider—offer/asking prices ("wealth"), labor time, product output by weight, utiles, whatever.

on how many valued experiences of other kinds they have, then people will be worse off under an alternative regime. Finally, it may be that property is a good or right arrangement on grounds having nothing to do with the volume or distribution of valued experiences. Because we are specifically interested here in exploring the economic, instrumental virtues of property, we suppose throughout that none of these is the case: people, we assume, want or don't want a property regime because of its impact, *as a means*, on their supply of goods, services, and leisure; and property is good or right (bad or wrong) just insofar as it is (is not) truly such a means.

A. *First Argument for PP: Security Increases Production*

In both SON and FSN no one can expect with certainty to be able to retain the fruits of her labor. It follows, according to the First Argument, that people will not work as much as under conditions of legally guaranteed security.[8] Economists will be quick to point out that showing—if one could—that people will work more under property than under SON or FSN would not by itself establish that property is the Pareto-superior regime. Variables other than products of labor (*e.g.*, leisure, security) enter into individual welfare levels. Moreover, products of labor are themselves a practically infinite set of possibilities all having different values. Thus the highest valued goods might, for all the First Argument has to say, be in better supply under SON or FSN than under property. An adequately formed argument for property's effficiency, the economists might continue, would be designed to show that property is the regime most likely to generate the highest valued *mix* of outputs in which various products of labor are but possible components. All of that is, of course, correct. We deal below with the more adequately formed arguments for property. Here our objective is the narrower one of showing that the First Argument is not only incomplete but false in itself—that, from the postulate of rational maximizing behavior, it does not follow that the volume of productive labor will in even the rawest sense be higher under property than under SON or FSN.

There are two mistakes in the First Argument. The first, particularly relevant to SON, is that it confuses the legal "permission" of violence and chaos with the actual social practice of violence and

8. R. POSNER, *supra* note 5, § 3.1, at 27-28; *see* W. BLACKSTONE, *supra* note 4, at *4.

chaos. Even if no one has any legal right to protection, and everyone is legally entitled to do anything they want and can get away with, it does not follow that among rational maximizers there must arise either random depredations or actual freedom to refrain from production. There might, in SON, evolve a balance of physical and social force such that both the "weak" and the "strong" have very distinct ideas about what will probably happen to them if they do or don't produce. And the particular, highly discernible pattern of force might be one that induces the population as a whole to produce more rather than less than they would under PP.

In a two person SON, for example, the stronger won't necessarily kill the weaker. The stronger may be more interested in the consumption of products of labor than in perfect safety or in aggression for its own sake. Even according to the usual, very pessimistic models of human nature[9] used in this kind of analysis, the stronger in that case will rather force the weaker to work, and extract from him as much surplus as is compatible with stability. It might very well be that he would impose something analogous to a tax on everything except what the weaker needed to survive at a level that permitted the kind of production the stronger desired. There is no reason to expect this arrangement to generate great "uncertainty." The weaker would know pretty well what to expect and so would the stronger.

To be sure, the weaker may receive less return for his labor than under a two-person property regime, while the stronger receives a large income without working at all. But the weaker's incentive to work will not necessarily be lessened by the low return to labor. The stronger may force him, by threatening him with even less palatable alternatives, to work more hours for less return than he would in a property regime. As for the stronger, he is provided by the weaker with a steady flow of products, but there are two reasons why he may also work more than under property. First, he must supervise and direct the weaker, and the return to supervision may be very high. Second, he may choose to spend his time producing, of his own free will, "luxuries" that he prefers to leisure, given that his "necessities" have been otherwise supplied.

Of course, this picture of an industrious state of nature is no more logically necessary than that which is usually implicit in economic discussions of property. It might also work out that the stronger adopted a policy of putting in only enough supervision

9. *E.g.*, T. HOBBES, LEVIATHAN ch. 11 (1651).

time to make the weaker work, say, two hours a day, but systematically confiscated all surplus over subsistence the weaker produced "in his free time." The weaker might respond by working two hours for the stronger, two hours for his subsistence, and not at all in the "free time." In this possible scenario, SON might well generate less labor than PP.

We have thus far assumed both that all property regimes generate the same incentives to produce, and that a given property regime yields the same incentives in all circumstances. But it is obvious that how much people produce varies both as among particular property regimes and according to the actual distribution of rights within a given regime. If one rich person has property in all the means of production and the rest of the people have property only in their labor, then it is very possible—though not certain—that the total hours worked will be greater than in our "industrious" state of nature. The picture grows cloudy if we suppose a different distribution of land and capital, or some set of legal rules (*e.g.*, maximum hours laws) that destroys the bargaining power of the rich man even when he is formally the "owner" of all capital goods and land.

The second objection to the First Argument, relevant to both SON and FSN, is that even if holdings and harvests are more secure under PP than SON and FSN, people may respond to the hazards of the latter regimes by working more rather than less. Under the chancy, non-property regimes people are doubtful whether they will enjoy the fruits of their productive undertakings, so the reward for each unit of work or investment is less, ex ante, than it would be under property. Because the reward is less, according to the First Argument, they will work less. The objection is that reducing the probable share of product retained by the producer may induce people to work more rather than less, in order to maintain the same level of welfare-from-consumption. For example, a farmer may respond to the threat of theft by planting more crops, in the hope that he can thereby offset depredations and keep his income up—with the result of increasing the consumption of society as a whole, the thieves included. In technical terms, it all depends on the relation between the income and the substitution effects of the reduced rewards from work.[10]

The argument that property has desirable effects on produc-

10. *See* J. HENDERSON & R. QUANDT, MICROECONOMIC THEORY § 2-6 (2d ed. 1971).

tive effort thus amounts to no more than an empirical assertion. It remains such when we take into account that people who live off the work of others in the state of nature or in a regime of forced sharing might have to work for their livings under a property regime (though they might, too, live on voluntary charity). The question whether adding their product, if any, would overcome whatever *reduction* in product might be caused by giving people greater security can be resolved only by looking at the circumstances of particular cases.

B. *Second Argument for PP: Theft is Inefficient*

Suppose a thief takes something, in the SON, that the thief would willingly have paid only five dollars for in PP, while the possessor would have offered ten dollars to the thief at the moment of theft, if it had been possible thereby to bind the thief not to steal the object. It is a common intuition that it is somehow not economically sound to let the theft happen under these circumstances. It is, one might think, inefficient because the law is sanctioning a change that makes one person worse off (the possessor, by ten dollars) while making another better off by considerably less (the thief, by five dollars).[11]

The argument that theft is inefficient plainly depends on an assumption of substantial transaction costs, which in turn imports motivational assumptions regarding individual wants and proclivities, not at all implicit in the bare postulate of rational maximizing behavior. If there are no transaction costs, there will be no theft, even without the coercive legal institution of property, unless the property is worth more to the thief than to the victim. Otherwise, the possessor will offer the thief some sum to go away, they will negotiate, and strike a bargain in which the thief receives something between five and ten dollars in exchange for desisting. The end result is that the prior possession is respected but the possessor ends up, say, out $9.95, rather than the $10 value of the object, while the thief ends up pocketing $9.95 rather than what would have been (for him) $5.00 worth of stolen goods. The only

11. *See* R. POSNER, *supra* note 5, § 3.5, at 40-41 & n.1; *id.* § 6.1, at 121. In this discussion we abstract from "offer/asking problems" that arise in situations of this kind. *See, e.g.*, Baker, *The Ideology of the Economic Analysis of Law*, 5 PHILOSOPHY & PUB. AFF. 3, 12-22 (1975); Bebchuk, *The Pursuit of a Bigger Pie: Can Everyone Expect a Bigger Slice?*, 8 HOFSTRA L. REV. 671, 679-81 (1980); Kennedy, *Cost/Benefit Analysis of Entitlement Problems—A Critique*, 33 STAN. L. REV. (Jan. 1981) (forthcoming).

difference between this outcome and the one that would have occurred under a property regime is "distributional." The object is finally allocated to the same use (unless the possessor's impoverishment causes him to change that use). Some are better off and some worse off than they would have been under PP, but we cannot rank either outcome as Pareto superior to the other.

Let us, however, grant arguendo that substantial transaction costs are an inevitable accompaniment of essential human nature. The theft, then, may well occur in SON but not in PP, apparently leaving society $5 poorer in SON. On the other hand, transaction costs also disrupt the functioning of a PP regime.[12] For example, transaction costs in PP may prevent the transfer of an object from a possessor who values it at $5 to another who values it at $10; whereas in SON, the other might simply take the object.[13] For ought the rationality postulate can tell us, the disruption in PP may on the whole be more damaging to wealth or welfare than that in SON. We cannot say a priori which way the balance of systemic advantage lies.

The problem is further complicated by obscurity in the relationship between dollar evaluations and real satisfaction levels. Suppose, again, that in SON but not in PP a theft will occur that costs the victim $10 while the thief gains only $5. Obviously, one cannot say that either the SON or the PP result is Pareto superior in the strictest sense of better for both parties. Nor can one say with assurance that the PP result is "socially" preferred. The dollar figures are supposed to represent sums of money the parties respectively would be willing to exchange for the object in question, not the absolute (interpersonally comparable) amounts of satisfaction possession would bring them. So if the initial possessor is very rich and the thief is very poor, an observor might feel that the theft probably results in a net gain in total satisfaction—since, given the standard assumption of diminishing marginal utility of wealth, a dollar means relatively less to the possessor than to the thief.[14]

The concept of efficiency does tell us that as between the theft and a deal in which the possessor pays the thief to desist, we

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12. *See* pp. 726-29 *infra*.

13. This is the economic rationale for the SON-like practice of uncompensated governmental impairments of private holdings by regulation and "injurious affection." *See generally* Michelman, *Property, Utility, and Fairness: Comments on the Ethical Foundations of "Just Compensation" Law*, 80 HARV. L. REV. 1165 (1967).

14. Such a *probabilistic* judgment need entail no direct interpersonal utility comparisons. *See* A. LERNER, ECONOMICS OF CONTROL 23-40 (1944).

should prefer the latter. If the possessor and the thief can agree on a bribe, both will be better off (according to their own evaluations of the matter) than if the theft actually occurs. From this we can infer that if there were no property, it would be inefficient to criminalize the exaction of a payment to prevent the theft. But as between the theft and respect for the property *without* a bribe, we cannot say that either alternative makes both parties' prospects, or the total of their prospects, better than the other does. In other words, efficiency provides no basis for choosing between them.

C. *Third Argument for PP: PP Reduces Uncertainty*

The third argument for PP is that SON and FSN involve an unpleasant psychological state of anxiety about whether or not one will be able to keep what one has and to enjoy the fruits of one's labor. Since this anxiety is a psychic "bad," we can make everyone better off by eliminating it through a property regime.[15] This argument looks like the argument that people will not work in SON because of uncertainty about receiving the fruits of their labor,[16] but it is in fact quite different. The previous argument focused on production incentives; the only significance of uncertainty there was that it modified the return to productive activity. Here the notion is that if everyone dislikes uncertainty, then we can make everyone better off by moving from SON or FSN to a property regime specified in such a way that everyone would expect to receive exactly the same quantum of goods and leisure, and to do exactly as much work, as in the SON or FSN alternative. The difference would be that under PP people would receive their rewards through transactions based on preexisting sets of entitlements; and everyone, supposedly, would enjoy her receipts more, knowing they were accruing as a matter of secure legal right.

The basic response to the argument that property maximizes the psychic good of certainty is that, under all three regimes, to enhance certainty for one person is to impair certainty for another. Under a property regime people are all certain that they and no one else will receive the fruits of their labor, but all uncertain of access to the fruits of others' labor. In moving from one regime to another, some will have gained security at the expense of others, and everyone will have traded certainty and uncertainty of one kind for certainty and uncertainty of another.

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15. J. BENTHAM, THE THEORY OF LEGISLATION 111-14 (Ogden ed. 1931).
16. *See* pp. 717-20 *supra*.

1. The Certainty of a Property Regime Vis-a-Vis the State of Nature—In the state of nature, the strong are certain that no automatic, irresistible force will stop them from exploiting the weak. Thus secure in the knowledge of their strength, they are certain of receiving benefits they cannot be as certain of receiving under property. This is true even if the property regime is based on particular rules and an initial distribution of rights that are designed ex ante to yield for the strong the same shares they would expect in a state of nature. The move to property may impair their security even so, because the whole point of a property regime is to restrain the strong from resorting to their strength if it should turn out ex post, through the play of socially uncontrollable chance—like freakish weather—that their shares are less than probabilistically anticipated.

The shift in the types and distribution of uncertainty will be complicated for all parties. Under PP, the strong need no longer rely on their continuing strength, because the state will protect their shares even if they become weak. The weak are no longer vulnerable to unrestrained depredations, and they now have the chance of becoming rich without becoming strong, but they have lost all prospects of gaining power through force themselves, by using the strength of their numbers, for example. If the weak become the poor, as Rousseau would have it,[17] and the strong the rich, then the weak will have disarmed themselves, unless, of course, universal suffrage comes along with property, in which case it would appear that the strong/rich have made a big mistake; unless, of course, there is a constitution and judicial review; and so forth.

The more one speculates about the multiple changes in expectations generated by the shift from the state of nature to a regime of property, the less clear it is what might be meant by the argument about the psychic good of certainty. The only thing that is certain to be certain under property is effective protection of the weak against violent dispossession by the strong, and vice versa. Yet in the state of nature there is an exactly equivalent certainty that no absolutely dominant force will intervene to frustrate the dispossessing strong. Depending on their initial positions, their preferences, and their ideas about likely courses of events, some people may prefer one kind of certainty, others the other kind.

17. J. ROUSSEAU, *What is the Origin of Inequality Among Men, and is it Authorized by Natural Law?*, in THE SOCIAL CONTRACT AND DISCOURSES 249-52 (1950 ed.).

This point does not depend on defining the state of nature as in itself a "regime of entitlements," though some people find it easier to understand when put that way.[18] When there is an established legal rule that one person can inflict injury on another without paying compensation, we often speak of the injuror having a legal "right" to act as he does. And such rights are "property" within the broad definition usually used, for example, in constitutional adjudication. Thus one company can deliberately injure another, say by price cutting, in the exercise of normal legal liberties. Moreover, the victim is free to resist, say by retaliatory price cutting, and that is also a matter of legal "right." (Of course, there are many restrictions on both the right to injure and the right to retaliate. It is illegal for one company to put another out of business by burning its premises.)

One way to understand the state of nature is as a regime in which all the rights to be "secure" have been abolished, leaving only freedom of action, both to injure and to resist injury.[19] Like a regime of property, this is a situation of formal equality within which the substantive outcome—the set of welfare positions everyone will reach as a result of activity within the framework—is highly uncertain. There is no reason to believe, a priori or on the basis of the postulate of rational maximizing, that one regime is Pareto superior to the other, even "potentially."

2. *The Certainty of Property Vis-a-Vis Forced Sharing*—If what we have been saying about the certainty argument in the context of the state of nature is true, then it should be plain that certainty arguments won't work any better against forced sharing. If what we are interested in is the certainty provided by *law*, then forced sharing is a legal regime, by any definition, just like property. It should provide no more and no less certainty than any other set of rules and standards about the application of public force.

If, on the other hand, we are concerned with people's sense of confidence that their expectations about substantive outcomes will be fulfilled, then life under forced sharing will be *differently* certain and uncertain than life under property. Forced sharing ties the fortunes of the individual to the group. It therefore eliminates some fundamental uncertainties of a property regime. Under FSN, one need not fear that one's own unproductiveness will expose one

18. *See* pp. 759-62 *infra*.
19. *See* pp. 754-55 *infra*.

to isolated deprivation as long as others are producing.[20] But forced sharing introduces its own forms of insecurity, since the fortunes of the group depend on a complex process of interaction, with no guarantees against a disastrous slide into uncooperative behavior.

As we did in the comparison with the state of nature, we might illustrate possible impacts of forced sharing on different sorts of people. But at this point perhaps an analogy is enough: those who are "good at production" under private property, or who have large holdings of property, would obviously have more to fear from forced sharing than those who are weak producers and have no property. They are analogous to "the strong" in the state of nature, who have a lot to lose from a property regime. But the gainers from property are like the strong in that they are also vulnerable, in a property regime, to mischance that leaves them in need, whereas under forced sharing they would not be.

Again, we need to separate the uncertainty argument from that about substantive gains and losses. Suppose a property regime in which for a time the balance of skill at production and the distribution of inherited wealth leads to a situation of exactly equal incomes. A move to forced sharing would then present everyone with a choice between the two forms of certainty and uncertainty we have already mentioned. Some would jump at the chance to reduce the precariousness of their position under property, where mischance may leave them in need. Others would not want to sacrifice the chance of bettering their positions in the next round of bargaining under property. The only thing that's clear is that nothing is clear about the impact of the change on total welfare. The notion of uncertainty is not, by itself, enough to allow us to make even a guess about the outcome.

As with the First Argument, we can anticipate a complaint by economists that our discussion misses the true point of suggestions that a property regime might minimize uncertainty. Of course, it will be said, no regime can be externally known to contain "less," or less obnoxious, uncertainty than any other, partly because the value of uncertainty is impenetrably, individualistically subjective. Just because that is so, the objection continues, the only way to

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20. *See* R. Musgrave, *The Role of Social Insurance in an Overall Program for Social Welfare*, in THE AMERICAN SYSTEM OF SOCIAL-INSURANCE 23 (W. Brown ed. 1968).

optimize on uncertainty is to facilitate consensual reallocation of risk through voluntary transactions—insurance, futures and requirements contracts, liquidated damages clauses, and so on; and the virtue claimed for property is just that it does facilitate such voluntary exchange of risk, quite as it facilitates voluntary exchange of other goods and bads. Our answer is the same as before: the more adequately formed arguments for property's economic virtue are considered below.[21] Here we have been dealing with the less sophisticated claim that property *directly* reduces—as distinguished from facilitating private transactions that reduce—the amount of disvalued uncertainty, relative to SON and FSN.

D. *Fourth Argument for PP: Coordinational Failure*

The Fourth Argument for PP is that life under SON or FSN will be an organizational nightmare, whereas coordination under property will be easily managed.[22] The objection to this argument is that it simply misunderstands the organizational problem: in fact, both SON and FSN *could* pose insuperable strategic and transaction cost obstacles, but are no more likely to do so than is PP, if all we have as a basis for prediction is the postulate of rational maximizing. Furthermore, while PP might keep us out of coordinational quagmires, it might also turn out to be one itself. In other words, rather than the postulate of rational maximizing allowing us to predict that PP will make everyone better off than they would be under either SON or FSN, the postulate indicates that each of the three regimes might or might not be organizationally disastrous, depending on the particular proclivities and factual circumstances of the people involved.

1. The Coordination Problem in FSN—In the state of forced sharing, each person's level of welfare is directly dependent on each other person's. The question is whether the people involved will respond to this situation by working a lot or by working only very little, in each case by comparison to the property regime. (As with the First Argument, we here grant arguendo that less work means less total satisfaction.) They might work only a little, if each person expected others to work a lot, and hoped to be able to en-

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21. *See* pp. 729-39 *infra*. For a refutation of the analogous justification of enforceable contract, see pp. 744-45 *infra*.

22. *E.g.*, Hardin, *supra* note 6. For a good discussion of the general subject of coordination problems, see Heymann, *The Problem of Coordination: Bargaining and Rules*, 86 HARV. L. REV. 797 (1973).

joy a share without working himself. The law does not prevent this outcome, and it intervenes positively to prevent the others from punishing the freeloader by denying him his "needed" share of the labor of others.

There is a way, however, for the group to sanction the freeloader: if everyone cuts back work, then the freeloader will find himself at a low level of welfare. If everyone decides to live off the labor of others, everyone will starve. When everyone is starving, either there will be a group reaction to reverse the slide, or there will not be. In other words, the state of forced sharing can easily be conceptualized as a strategic game, in which the structure of incentives is ambiguous.

As is generally the case with games of this kind, our best guess about the outcome depends on the precise assumptions we make about the situation.[23] In a small group, with easy communication and much mutual knowledge and trust, it is more likely that a cooperative solution will occur and will persist; if everyone has the same capacity for work, the agreement process will be easier; and so on. The only general point of importance for us is that the bare postulate of rational maximizing behavior tells us little about the outcome. It is possible to flesh out the situation so that people work a great deal, more than under many imaginable property regimes; and it is possible to construct it so that they end by working less.

2. *The Coordination Problem in SON*—Just as in FSN, in SON each person's welfare is dependent on each other person's, but here the interdependence is brought about by the absence of self-enforcing rules, rather than by irresistible enforcement of sharing. Again the question is how things will go when people realize that they can steal what they are strong, shrewd, and swift enough to get away with. It is easy to imagine a situation in which some give up work, and subsist on meager gains by stealing from those who continue working, while the workers have to invest so much time and energy in precautions that they are not much better off than the freeloaders. It is even possible to imagine that people will become so preoccupied with defense of the products of their labor that they will take to launching preemptive strikes against one another, and that the world will be ceaselessly embroiled in lethal conflict. Or we might foresee the gradual deple-

23. *See generally* A. RAPOPORT & A. CHAMMAH, PRISONER'S DILEMMA (1965).

tion through overuse of the world's scarce, but unowned resources until the race simply dies out.

But, as we saw in considering the First Argument for private property, there is nothing inevitable about such a slide into mutual self-destruction. It is quite imaginable that a single Amazon might emerge who was strong enough to force everyone to work all the time, so that, far from discoordination, we had a situation of continuous, centrally directed labor. Or the people involved might achieve through nonbinding agreements and informal arrangements many of the benefits of property, while avoiding many of the drawbacks of rights relentlessly enforced.

As with FSN, a lot depends on particular aspects of the SON we are imagining—things like the number of people, the ease of communication, the existence of powerful family, tribal, or local groups with internally effective norms of cooperation and some set of practices for dealing with "others." If all we know is that people are rational maximizers, we cannot say that they will or that they will not manage to prevent the slide into chaos.

3. The Coordination Problem in PP—In a complex economic system, with extensive division of labor and little production for autoconsumption, the economic process as a whole requires an extraordinary amount of social cooperation. If everyone has property in his labor, and if property in the means of production is widely dispersed, this cooperation requires great numbers of complex chains of bargains among individual right holders, and these bargains will be costly to organize and vulnerable to strategic failure. The situation under property may be a "prisoners' dilemma" such that each owner rationally pursuing his view of his own interest will behave antisocially. For example, every owner may withdraw his property from production because of fear of economic collapse, and thereby fulfill as fact what began as only prophecy. If there were no transaction costs, each property owner would see that the sum of all the individual exercises of rights was a social disaster, and the group could strike a bargain to keep production going. But the atomization of control might make such a solution impossible. By contrast, a single "strong man" who controlled the whole economy might avert the disaster by forcing everyone to behave in the socially appropriate fashion. Likewise, communal ownership might result in "planning" that prevented crisis.

The point, then, is not that some or any property regime can never be superior on efficiency grounds to the state of nature. Rather, if there are no transaction costs preventing bargaining,

each regime is necessarily efficient, in the sense of Pareto optimal (on the production-possibility frontier), whereas in the presence of transaction costs the question of efficiency is an empirical one. Given transaction costs, it may be that people in SON would be blocked from moving to a property regime that would unleash such a flood of commodities that the gainers could compensate the strong for their losses. But it might also work the other way around: the dispersal of control among property holders might prevent the strong from reorganizing production along lines that would produce enormous surpluses, which would in turn permit the strong to buy off the weak.

E. *Fifth Argument for PP: Distribution of the Tradeoff Between Work and Leisure*

We have now arrived at the argument for private property that seems most plausible to people who have some technical knowledge of economics. It is that a property regime maximizes welfare because it provides individuals with both the information and motivation they require to make the choices among different kinds of work and investment, and between work and leisure, that will allow the group to get the maximum of satisfaction from the resources available to them. One form of the argument is to assert that departures from private property always cause a "distortion" of incentives.[24] The distortion argument is complex, and in order to address it we will have to elaborate our model of a property regime considerably beyond what has been necessary up to this point.

1. The Crusoe Economy—The idea that underlies the "distortion" argument is that of the single producer on a desert island who "owns" both his own labor and a defined set of natural resources, simply because there is no one else around to make conflicting claims. This solitary producer will spend some time at work and some time not working. The postulate of rational maximizing behavior is helpful in figuring out what particular division he will make between the two uses of time. He will work until the psychic rewards of another unit of work fall below those of a unit of leisure. In equilibrium he will arrange things so that the marginal yield of utility from work and leisure is equal.

He will follow the same procedure in deciding what to work on. In equilibrium, the marginal yield of a further minute spent on

24. *See* Lange, *On the Economic Theory of Socialism*, in ECONOMIC FOUNDATIONS, *supra* note 1, at 69-75.

shelter will exactly equal that of a minute spent on food gathering. These marginal equalities guarantee that Crusoe is getting the most possible satisfaction out of both his time and his resources. There is a quite real sense in which the actual quantities of work of different kinds, and of leisure, that Crusoe chooses are "natural." They reflect the natural surround of physical resources, and Crusoe's "nature," in the sense in which nature means simply a set of preferences.

2. *The Multiple-Crusoe Economy*—The next step in the development of the distortion argument is to imagine a multiplicity of islands, each different from the others, each with a different Crusoe on it. At first, the Crusoes are ignorant of each others' existence. Each behaves as though he were the only person in the world, producing in such a way as to generate marginal equality of satisfactions from different kinds of work, and from the mix of work and leisure. Then they become aware of one anothers' existence.

Let's suppose they respond to this knowledge by agreeing that each Crusoe will "own" his island, and by creating a state to enforce their property regime. Each will continue to produce as before, except now there is the possibility of trade and the division of labor. Imagine a first phase of trade in resources only. Two Crusoes discover that each would prefer the other's island to his own. That is, given the first Crusoe's preferences and his capacities for labor and leisure, he would prefer to own the second's island rather than his own; and vice versa for the second Crusoe. A round of trading of islands ensues, until there is no trade left that anyone wants to make. On each island, the Crusoe owner produces until the marginal equalities are achieved.

If we suppose that the trading of finished products is precluded for some reason that does not interfere with the trading of islands, this new situation is efficient in the sense of representing a Pareto optimum. It is not possible to make any Crusoe better off without injuring some other Crusoe. We could make any Crusoe better off, say, by allowing him to enslave another, or by giving him two islands instead of one. But this would presumably harm the Crusoe who was enslaved or dispossessed. As things stand, each Crusoe is making the most of his resources; nothing is being "wasted;" each Crusoe is as well off as it is possible for him to be, given the initial distribution of islands, of physical characteristics, and of preferences.

It would be misleading to describe as "natural" the various quantities of different kinds of work and of leisure that the Crusoes

are now doing. These amounts depend on what island each Crusoe has, and this in turn depends on the initial distribution. This is an important point, which we can illustrate as follows. Suppose three Crusoes and three islands, with the Crusoes' rankings as follows:

A prefers 1 to 2 and 2 to 3
B prefers 1 to 2 and 2 to 3
C prefers 1 to 3 and 3 to 2

Initial distribution I:
A gets 1
B gets 2
C gets 3
Result: no trades

Initial distribution II:
A gets 1
B gets 3
C gets 2
Result: A keeps 1; B gets 2; C gets 3 (same as I)

Initial distribution III:
A gets 2
B gets 1
C gets 3
Result: no trades (different from I)

Initial distribution IV:
A gets 3
B gets 1
C gets 2
Result: B keeps 1, A gets 2, C gets 3 (same as III, different from I and II)

It seems unnecessary to continue through all the permutations, since the result is clear: who ends with which island depends on who has which island to start with, and on the preferences as among islands of different Crusoes. After the islands have been finally distributed, each Crusoe will equalize the marginal returns of work and leisure. But the result of this equalization process, the *actual* division of time, depends on who has which island rather than on anything in "nature." There is no particular work/leisure tradeoff that is natural, any more than there is a natural distribu-

tion of islands. Another way to put the same point is to say that there are multiple possible efficient outcomes given a set of Crusoes and a set of islands. Once the trading process is completed, and each Crusoe has equalized the marginal returns of different kinds of work and leisure, the situation will be Pareto optimal. But there are as many actual contents for the optimal solution as there are post-trading distributions of islands.

3. *The Optimal Work/Leisure Tradeoff*—The problem is not just that the (optimal) work/leisure choices of the Crusoes depend on the distribution of islands. There are also a multiplicity of possible optimal tradeoffs, even after we have stipulated that each Crusoe will "own" an island *and* have defined the initial distribution of particular islands to particular Crusoes. This set of possibilities will vary according to how we define particular rules *within* our regime of individual ownership of islands.

a. *The Duress Problem*[25]—Suppose that a storm wipes out all the crops a particular Crusoe has planted on his island. Under a "strict" private-property regime, no other Crusoe is obliged to save the unfortunate from starvation. The victim of disaster will have to sell his island or his labor in exchange for food to carry him through the crisis. Let us suppose that in exchange for help he agrees to work 4 hours a day for a year for a neighboring Crusoe. Supposing this transaction is permissible under the existing property regime, it will radically change the work/leisure marginal equalities for both the master and the servant. The servant now has only 20 instead of 24 hours to allocate between different sources of satisfaction. The master has to decide how work and leisure look to him given that he has available four hours worth of labor "for free," so to speak, each day.

Given a series of exchanges of this type, the multiple-Crusoe economy will soon be producing a mix of leisure and various kinds of work completely different from that which occurred in its initial state. Still, the defender of private property will note with satisfaction that *all* the possible outcomes are bound to be efficient, in the Paretian sense. In each, each Crusoe maximizes the satisfactions he derives from the resources he has a "right" to, given the initial distribution of islands. No matter how things fall out, it will have been impossible to make one person better off without hurting someone else.

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25. The following discussion was inspired by Hale, *Bargaining, Duress, and Economic Liberty*, 43 COLUM. L. REV. 603 (1943).

b. *Changing the Duress Rule*—Now let us suppose that the regime of rights to which all the Crusoes have agreed is more like FSN than PP or SON. It contains the following rule: "If, through no fault of his own, a Crusoe does not have enough food on hand to last until the next harvest, he may demand of the Crusoe on the nearest island, as a matter of right, enough food to tide him over, or one half of the stock of the neighboring Crusoe, whichever is less. At the next harvest, any Crusoe who has exercised this right must repay the borrowed food, without interest. Nothing in the above shall be construed to prohibit any Crusoe from making any bargain he pleases with regard to any part of his property."

Under this rule, each Crusoe will still attempt to produce to the point at which the marginal returns from different kinds of work and from leisure are equal. But that point will turn out to be different from what it was under the old duress rule. Work may seem less attractive, in so much as its product may be taken, at least temporarily, by a needy neighbor. It may also be less attractive in so much as it is no longer necessary to accumulate a hoard adequate to survive a catastrophe without having to submit to the mercies of a rapacious neighbor. On the other hand, types of work which once seemed a frivolous waste, given the necessity of providing against disaster, may now be much more attractive. Or work might seem not more attractive, but necessary in order to have stocks large enough to be comfortable even if called on by a neighbor in need. Depending on the interplay of these conflicting elements, a new set of equalities of marginal return will eventually emerge.

Can one say that the work/leisure tradeoff under property with the first duress rule is more or less natural than that under the second? Certainly not. In each case, people maximize their satisfactions given their initial rights. In each case, no matter how things fall out, it will have been impossible to make one person better off without hurting another, given the initial rights. In neither case does the law prohibit an owner from doing as he chooses with his holdings, or prevent a willing buyer and a willing seller of property from getting together on any terms they please.

It is true that the choices between work and leisure and among different kinds of work will be different as between these regimes. And it is true that, over time, some people would be better off under one regime while other people would be better off under the alternative regime. It is even true that the total quantity of "goods and services," as measured by total hours of work or

some more particularized indexing scheme, might be much greater under one regime than another. But since both regimes are efficient, and since there is no "natural" set of tradeoffs between work and leisure, there is no way to choose between the regimes without first deciding how to compare the values of different people's satisfactions.

c. *Crusoes in the State of Nature*—Now suppose that the Crusoes fail to institute a property regime on becoming aware of one anothers' existence. The ordering that emerges from their interactions is strictly alegal, and the only constraints on individual behavior are those arising from the balance of force and the structure of preferences. Each Crusoe will have to decide how much and what kind of work to do. Some will base the decision on an expectation of being able to take the fruits of the labor of others; others will expect to be victims. The original distribution of islands and parts of islands will undergo all kinds of vicissitudes as coalitions or kingdoms form and reform.

It is obvious that the incentives associated with work of different kinds and with leisure will be radically different in the state of nature than under either of our two property regimes. Under property, each Crusoe knew he could keep what he produced on his island, but had no claim on what anyone else produced, except that under the second property regime there was a limited right to assistance in an emergency. In the state of nature, one knows what one can keep only to the extent one can accurately predict the balance of force. But there are nonetheless a number of crucial ways in which the two situations are similar.

First, each Crusoe will still try to equate his expected marginal returns from different kinds of work and from leisure. Each will, according to the postulate of rational maximizing, make himself as well off as possible given his expected access to resources and products. Some will do much better under SON, some much worse. But all will make the same marginal equations they made under the property regime. The results will be different, but the form of private rationality will not.

Second, it is no more true of the results in the state of nature than of the results under one or another property regime that they are "natural." Once the Crusoes find themselves as a matter of fact in a state of society, *all* of the possible structures of incentives available to them are social, rather than natural, so there is no sense in which the particular choices among kinds of work and between work and leisure are "distorted" in one situation or another.

Distortion implies an undistorted norm. If there are no "natural" incentive structures, then the word "distortion" seems appropriate only if we *define* one or another regime as correct, and compare all other regimes to it. But we have found no basis in economic reasoning for choosing a norm.[26]

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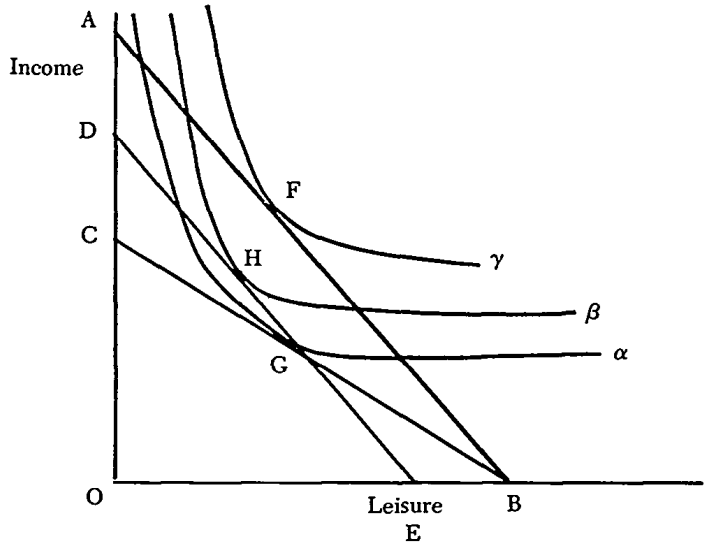
26. People who are familiar with the literature on taxation may want to object at this point that it is well known that there are "efficiency costs of progressive taxation" because of distortion of the work/leisure tradeoff. *See, e.g.*, J. DUE & A. FRIEDLANDER, GOVERNMENT FINANCE: ECONOMICS OF THE PUBLIC SECTOR 200-04 (6th ed. 1977). If taxation distorts the tradeoff then it would seem to follow a fortiori that unrestrained theft must do so far more. The simple answer is that the lawyers' understanding of the economists' distortion argument is incorrect.

To begin with, economists assert that *all* except what they call "lump-sum" taxation is distorting and has "efficiency costs." A lump-sum tax is a fixed taking of goods or money imposed on a particular person regardless of that person's income or activity level. Second, the distortion is *not* of the work/leisure trade-off that would occur with no taxation at all. Rather, the claim is that as between lump-sum and any form of proportional or progressive taxation of income, lump sum is preferable. The reason for this is that the lump-sum method allows the taxpayer to make the choice between work and leisure in any way that will maximize his satisfaction, given that he has to pay the lump sum. By contrast, a proportional tax on income that raises exactly the same amount of money has an effect on work incentives beyond the "wealth effect" of the lump-sum tax. There is a familiar graphic illustration of this point:



α, β, γ = preference isoquants.
AB = No tax.
CB = Proportional tax.
DE = Lump-sum tax raising revenue from this person equal to that raised by the proportional tax.
F = welfare level with no tax.
G = welfare level with proportional tax.
H = welfare level with lump-sum tax.

d. *Labor "Wasted" on Protection Against Theft*—Our last proposition may seem easy to refute simply by pointing out that in the state of nature people will have an incentive to produce goods that the stronger cannot so easily take from them, rather than the goods they want most, and also have an incentive to spend time on devices designed to make theft more difficult. Since they would prefer to have the products of an equal amount of time spent under a property regime, it would appear that property *must* generate a net increase in welfare.[27]

An easy answer is that PP involves its own kinds of "unproductive" actvities, like lawyering, prosecuting, judging, and housing the legal system. Whether, under any particular set of circumstances, these will cost more or less than fences (etc.) is an empirical question.

Furthermore, we cannot treat the argument about precautions

The crucial point here is that the distortion argument has to do with the comparison between two methods of taxation. It has nothing to do with the comparison between a tax and no tax at all. Indeed, there is no reason to believe that the work/leisure tradeoff in a lump-sum-tax situation will be the same as that in the pretax situation. That depends on the shape of the taxpayer's indifference curves at different levels of real income. No reputable economist would argue that the change in the work/leisure tradeoff involved in moving from no tax to a lump-sum tax is a distortion, or that such a move is inefficient. The pretax tradeoff is no more and no less "natural" than that generated by efficient taxation.

When we compare the pretax tradeoff to that which occurs under *in*efficient (non-lump-sum) taxation, there is still no basis for a judgment in terms of distortion or inefficiency. Again, neither the pretax nor the inefficient tax tradeoff is natural. But, much more important, the inefficiency of the proportional or progressive tax is inefficiency *only* vis-a-vis a lump-sum tax. As between the two taxes, we can say that it would have been possible to make the taxpayer better off, without hurting anyone else, by moving from proportionality to lump sum. That is the point of the diagram. But as between a tax and no tax, we can restore the no-tax-tradeoff only by eliminating taxation altogether, and that will obviously hurt the recipients of public funds. In order to decide whether the relief to taxpayers is of greater weight than the harm to the overlapping group of beneficiaries of taxation, we need a social welfare function that states our basis for making interpersonal comparisons of utility. *See generally* R. MUSGRAVE & P. MUSGRAVE, PUBLIC FINANCE IN THEORY AND PRACTICE 461-77 (2d ed. 1976).

The point of all this is that the economists' taxation analysis supports rather than contradicts our discussion of the efficiency of private property in general. When we compare the property regime with the state of nature, we are concerned with something like the pretax and posttax situations, *not* with an analogy to lump-sum versus proportional taxation. The change in the work/leisure tradeoff when we move to the state of nature is like that from the imposition of a tax (*any* tax). It is a "change," not a "distortion," vis-a-vis the earlier situation, because neither is "natural." The new situation is not inefficient, at least not a priori, because there is no way of saying that the losses to the weak outweigh the gains to the strong.

27. *See* R. POSNER, *supra* note 5, § 6.1, at 121-22.

as conclusive, even assuming costless enforcement of legal property rights. The argument assumes that the diversion of production into theft-proof goods and into precautions is a pure loss, from the point of view of social welfare, so that eliminating the diversion is a pure gain. But it is obvious that the production is diverted because some people are trying to live off the products of others. Eliminating the diversion by introducing private property means preventing the freeloaders from freeloading, as well as reducing the wages available to those whose strongest talents are for serving as guards. It seems, on the face of it, that this should decrease the welfare of the latter groups. When the diversion argument ignores the impact of property rules on their welfare, it is patently inconclusive. The gain to the industrious from being able to produce what they most want, and from dismantling their defensive measures, may or may not be greater than the loss to former thieves and Pinkertons. In order to decide, we need a social welfare function that allows us to compare these gains and losses.

4. Sole Ownership and Efficient Allocation—Now, it may be felt that in focusing on the notion of distortion we have failed to answer completely the most plausible argument that private property generates efficient incentives. The argument may seem to have a point that goes beyond the distortion question, perhaps something like this: Take (i) any initial stock of resources (including human labor) expected to be available to the members of a society, (ii) any well-defined regime of rights over the resources and products (on the order of PP, SON, and FSN, but not necessarily restricted to those), and (iii) if the regime is one for which the notion of an initial distribution is significant (as it isn't, *e.g.*, for SON), any well-defined initial distribution of rights. Out of that particular combination of resource base, regime of rights, and initial distribution may eventually come an equilibrium characterized by a schedule of individual welfare positions; or, if no stable equilibrium is anticipated, a schedule of ex ante expected values of welfare positions over time can be inferred, at least in principle.

Suppose that the form of the initially chosen regime is obviously not that of private property (is, for example, SON). Then the claim we have to meet is that there will always be a possible private-property regime such that it, in combination with an appropriately chosen initial distribution, can reasonably be expected to generate an equilibrium—or ex ante—outcome in which each entry in the schedule of individual welfare positions is higher than its counterpart entry under whatever non-PP regime we are using for

comparison, as applied to whatever initial distribution we apply it to.

Is there any reason, beyond those we have canvassed in preceding sections, for thinking that such a claim might be true? The most plausible line seems to us to be this: Private property is that form of allocation among persons of rights over things according to which, for each identifiable object of desire or utility, there is at all times just one person (an "owner") who has total, unqualified, and exclusive rights ("sole and despotic dominion," Blackstone called it[28]) over the use, consumption, and disposition of that object. Thus understood as denoting a *form* of regime in which no valued objects are either collectively owned or unowned, the notion of private property leaves open countless particular questions as to the bounding or packaging of the several things that have to be exhaustively, solely, and indivisibly owned—for example, whether a tube of toothpaste is one object or many, whether a subsurface estate in land is severable from the surface estate, and so forth. It might seem entirely coherent, however, to claim that *the form itself* is what is generally efficient for a population of rational maximizers.

Such a claim would mean that, given whatever knowledge we in fact have about people's actual and expected wants and proclivities, there will always be some way of carving up the universe of valued objects into a configuration of sole and exclusive holdings —some particular realization of the private-property form—which, when applied to an appropriately selected initial distribution, will generate ex ante or equilibrium outcomes that are Pareto superior to those obtainable from any non-property regime as applied to any initial distribution of the same resources.

Of course, the specific configuration of legally cognizable holdings required to render private property efficient would always depend on what we take those wants and proclivities to be; and so the argument we are now considering may seem to violate our condition for justifications of private property in terms of presumptive efficiency, *viz.*, that they should appeal to no factual judgment save that people behave as rational maximizers. It doesn't, however, violate that condition properly understood. The argument in no way depends on any specific, contentful assumptions about wants and proclivities.

It asserts, rather, that (i) whatever we think we know about

28. 2 W. BLACKSTONE, *supra* note 4, at *2.

those matters, that knowledge will point toward *some* way of defining or restricting the ways in which rights over things are carved up among individuals in the private-property form of sole and exclusive rights over indivisible objects of utility and desire, which will make the amount of "waste"—the sum of transaction costs and deadweight losses (missed gains from trade)—as low as it can be within the private-property form; that (ii) waste under this efficient private-property regime will systematically tend to be less than under any distributionally equivalent non-property regime; and that (iii) private property *as form* thus tends generally toward maximization of social welfare.

Such a contention is one that our undertaking requires us to answer, but also is one for which the answer exists in what we have already written. For, so construed, the incentives-based argument for private property reduces to a claim about coordinational failure: it is, simply, that beneficial coordination will be harder to arrange in non-property regimes than in PP; and that, as we have seen, is not a conclusion that can be derived from the premise of rational maximizing alone.

II. Five False Arguments for Free Contract

In this Part, we discuss five arguments for free contract, each one closely parallel to one of the arguments for private property. As in Part I, all the arguments have in common that they appeal only to the norm of efficiency, and to the factual postulate of rational maximizing behavior. By free contract, we mean a regime in which all transfers of property and all promises intended to be legally binding are without question performed or enforced, or substitute penalties exacted. We assume that private property of some kind exists in the background of the free contract regime. We will contrast free contract with a situation in which neither transfers of property nor promises are enforceable, but all the other aspects of a property regime are in force.

A. *First Contract Argument: Gains from Trade Depend on Enforcement*

The notion that it is obviously efficient to have free contract is probably related to the fact that one of the most common definitions of efficiency refers to a situation in which there are no further transactions perceived as mutually profitable by the actors in a system. A position on the welfare-possibility curve is one where all

the "gains from trade" have been exhausted.[29] From this, it seems a short step to two false conclusions: (a) without free contract it would be impossible (once we rule out omniscient command) to get to the welfare possibility curve, and (b) enforcement of contracts always moves us toward the curve, *i.e.*, necessarily makes both parties better off than they would otherwise have been.[30]

The problem with both propositions is that they disregard the crucial difference between permitting and enforcing contracts. If the state *prohibits* a contract that both parties wish to go through with, both will be worse off than they would have been had the state permitted the deal, given the usual neoclassical tautological definition of "better offness." If I want to sell you my land and you want to buy it, for any price within some range, and the state says that we simply cannot make the exchange at any price, then we will both be worse off, according at least to our own estimate of better-offness, than we would be if the state let us proceed.

But letting us proceed is not at all the same thing as enforcing a past conveyance or a past promise to convey. Prohibition means making the contractual behavior a crime or otherwise subjecting those who contract to sanctions designed to stop them from making deals. The decision to lift such sanctions will let us convey, or agree to convey, as we see fit. It will therefore permit us to realize the gains from trade, as long as, in the executory contract case, the trade still looks mutually desirable at the time for performance.

The question is: why do we need, in order to reap the full gains from trade, to go beyond decriminalizing and in every other way permitting contractual behavior? Is there a connection between *enforcement* and efficiency? It is not enough to respond, with our proposition (b) above, that once we have a contract freely entered it would be inefficient not to enforce it because both parties were made better off by entering into it. (We supposedly know they were made better off because if they hadn't been they would not have bound themselves in the first place.) The trouble with this argument is that it does not follow, from the fact that at the time they made the contract both parties thought it *would* make them better off when it was finally executed, that it will actually make them both better off when the time for actual performance arrives.

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29. For a helpful summary of the concepts used here, see ECONOMIC FOUNDATIONS, *supra* note 1, at xi-xiii.

30. *See* Tullock, *The Logic of the Law*, in ECONOMICS OF CONTRACT LAW, *supra* note 1, at 22.

Indeed, as of the time of the lawsuit, the enforcement of a contract *cannot* be said to make both parties better off. If performance was in the interest of both parties it would normally occur without enforcement. There is, to be sure, always the possibility that parties engaged in strategic maneuvers over division of the surplus might bluff each other into a jointly mistaken "no deal." This possibility cannot be avoided by enforcing contracts, and is therefore irrelevant to our argument here. The fact that one party demands *enforcement* shows beyond doubt that the other party believes that performance is not now in his best interests.

In other words, the meaning of enforcement of contracts is the application of ineluctable force to make people do things they don't then want to do. The fact that at some earlier point in time they agreed to do what they are now being forced to do does not in any way indicate that they are made better off by being forced to do it later. The economic argument in favor of contracts therefore has to be more complex than a simple assertion that the state is changing things in everyone's interests by intervening.

While it's easy enough to see why this argument doesn't work for the enforcement of contracts that are fully executory on both sides, it is less obvious that it doesn't work for enforcement of conveyances. In the case of the conveyance, the transfer is instantaneous. When the parties execute the conveyance, say land for money, it does follow that both are better off in the second after the transaction than they were in the second before it. But it does not follow that the state should *enforce* the conveyance when one party goes back on the deal, say offering back the money and demanding back the land. If the state takes the position that the land now belongs to the buyer, so that the buyer can refuse to hand it back, it is not making everyone better off than she would have been had the state adopted one of the alternative possible positions.

There are at least two alternatives to enforcing the conveyance: (1) The state might treat all attempts to alienate property rights as null and void, so that any original holder can always get state intervention to reassert all his original rights whenever he wants to, in spite of his purported agreement to the contrary.[31] (2)

31. The state in fact does this in numerous particular situations in order to achieve specific objectives. These range from nonenforcement designed to encourage formal precision or deliberation (consideration doctrine) through nonenforcement designed to deter immoral conduct (illegality doctrine). *See generally* Kennedy, *Form and Substance in Private Law Adjudication*, 89 HARV. L. REV. 1685, 1690-94 (1976).

The state might treat the conveyance as nullifying the seller's right vis-a-vis the buyer, without giving the buyer a right vis-a-vis the seller, so that neither has a right, and enjoyment depends on the balance of lawful force. (This would be compatible with continuing to enforce a right in either or both of them against third parties.[32])

The choice between enforcing the conveyance and adopting one of these alternatives will affect the welfare of buyer and seller in different ways. Looking at the moment when the state has to choose which way to go, it is obviously wrong to say that enforcing the conveyance always or generally makes both parties better off than they would be under the alternatives. The seller might prefer nonenforcement of both parties' contract rights, and prefer even more that the state enforce their preexisting rights against one another. He is worse off if the state enforces the conveyance.

The parallel between this first set of arguments for contract and the first set of arguments for property is as follows. In each case, we tend to confuse the legal "permission" of the SON with some kind of state policy guaranteeing that the permission will be acted on. In the property case, because random depredations are not illegal, and because no one is legally obliged to work, we assume that random depredation will be common and that people will respond to it by not working. We disregard the possibility that, in spite of the absence of any legal regulation of the situation, there will emerge a reasonably certain balance of force under which people are compelled (nonlegally) to work and strictly prevented from random depredations. Likewise, in the contract case there is an initial tendency to see the elimination of binding contract as meaning that people certainly will not make and keep agreements and that all gains from trade must therefore go unrealized.

B. *Second Contract Argument: Breaches that Don't "Increase Welfare" are Inefficient*

Suppose you and I have a contract. If I perform, I will end up with $5; you will end up with $10. After we make this deal, I dis-

32. The state sometimes does this in fact, as in the case of "illegal" conveyances. For example, when residential premises have been leased in violation of a housing code, the state may simultaneously (i) refuse to enforce the lessor's claim for rent, (ii) refuse to recognize the lessee's claim to possession for the balance of the lease term, and (iii) refuse to assist in the lessor's effort to evict the lessee. *See* Robinson v. Diamond Hous. Corp., 433 F.2d 497, 499 (D.C. Cir. 1970) (per curiam); Brown v. Southall Realty Co., 237 A.2d 834, 836-37 (D.C. 1968).

cover another opportunity that I could take if I broke my contract with you. If I took that opportunity and did not have to pay you damages, I would end up with $6 and you would end up with nothing. My breach would gain me a dollar and cost you ten. It is a common intuition that it would be inefficient for the law to "permit breach" under these circumstances,[33] so that the institution of enforceable contract is, to that extent at least, economically desirable. This argument parallels the one justifying property on the ground that theft is inefficient because it may hurt the victim more than it benefits the thief.

A first problem with this argument is that if there are no transaction costs there will be no breach even without legal enforcement. I will offer you a chance to save *something* from the debacle: we will go through with the deal, and you will make me a side payment of, say, $9.95. The contract will be performed, but at the end of the operation I will be at $14.95 rather than at $5, and you will be at $0.05 instead of at $10. The only difference between this outcome, and the one that would have occurred if you had been able to get a decree of specific performance without a side payment, is "distributional." That is, the allocation of resources is exactly the same, but the distribution of the benefits from that allocation is quite different.

Now suppose there are transaction costs, so that it is clear no side payments will be made. The choice is now between enforcement, which leaves me at $5 and you at $10, and nonenforcement, which leaves me at $6 and you at zero. We cannot say that one of these solutions is Pareto superior to the other. Which one we prefer depends on how we value a $1 increase in my income as against a $10 fall in yours (not to speak of the problem of adding in the gains, if I breach, to the person whom I do contract with).

The concept of efficiency does tell us that as between breach and performance with a side payment, the second is better than the first. In comparison, performance with a side payment leaves both of us better off than we would be in the event of breach (me at $14.95 vs. $6 and you at $0.05 vs. zero)—again leaving out the third party I deal with if I breach my contract with you. And from

33. Some such intuition must underlie the "theory of efficient breach," no part of which addresses the efficiency vel non of blanket nonenforcement. *See* Barton, *The Economic Basis of Damages for Breach of Contract*, in ECONOMICS OF CONTRACT LAW, *supra* note 1, at 154; Goetz & Scott, *Liquidated Damages*, in ECONOMICS OF CONTRACT LAW, *supra* note 1, at 194.

this we can infer that it would be inefficient for the court to penalize the making of the side payment, supposing that the only alternative was breach. But as between breach and performance *without* a side payment, we cannot say that either makes both of us better off, so that efficiency provides no basis for choosing between them.

C. *Third Contract Argument: Enforcement Reduces Uncertainty*

By far the most familiar economic argument for the enforcement of contracts is that the state thereby reduces the uncertainty of economic activity, and makes everyone better off in the process.[34] This argument is closely analogous to the uncertainty argument about private property. Like that argument, it suffers from one-sidedness. It focuses on the experience of the promisee, who is assured by the institution of legal enforcement that he will receive either performance or its equivalent (if the promisor is solvent). But it leaves out altogether the impact of enforcement on the experience of promisors. For promisors, the legal enforcement of contracts means a substantial *increase* in the uncertainty attending engaging in economic activity. If contracts are enforced, it means that the promisor who becomes unable or unwilling to perform for reasons not amounting to an excuse will have to pay damages, whereas in a world without enforcement there is no need to worry about such things.

As in the case of the uncertainties associated with private property, it is perfectly possible that promisees' pains of uncertainty about breach by promisors are generally greater than promisors' pains of uncertainty about the future conditions under which they will be forced to pay up by promisees. If so, there is a net gain from moving to the enforcement of contracts. But whether or not the balance of uncertainty costs lies in this direction is an empirical question, since to settle it we need to discover how different people actually feel about it, and also an ethical question, since once having made our empirical determination we need a social welfare function that tells us how to make interpersonal comparisons of the utility gains and losses of the different people involved.[35]

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34. *E.g.*, M. WEBER, LAW IN ECONOMY AND SOCIETY 33-40 (M. Rheinstein ed. 1954).

35. Our position may at first seem, but is not in fact, inconsistent with the intuition that enforcing contracts is good insomuch as it enables people to realize the "ex ante" gains available from trading in risks. The pure case is the insurance contract or

D. *Fourth Contract Argument: Coordinational Failure*

The coordinational failure argument for free contract is that without state enforcement people will be discouraged from "relying" on promises of others, for fear that promisors will back out in midstream. This argument is analogous to the argument that both in the state of nature and in that of forced sharing people will be discouraged from producing, on the one hand by the fear of losing their products to others, and on the other by the hope of successful freeloading.[36]

Here, the idea is that activity in reliance on promises is a crucial component of production under an intricate system of the division of labor based on investment. If people are assured of performance by contractual partners, they will engage in all kinds of arrangements for the future, and the totality of these arrangements over time will be clearly preferred by them to the net returns over time if there were no state guarantee of performance. (Otherwise, knowing about enforcement practices, they wouldn't enter into them.)

If there is no enforcement, there is fear that contractual partners will take advantage of the vulnerability created by reliance in order to renegotiate the terms in midstream, to the detriment of

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its mirror image, the bet: *A* and *B* both assess the odds against Lucky Charm's winning the fifth at Pimlico at 6:1; but *A* is risk-neutral (a bet against Lucky Charm has positive value for him at any odds lower than 6:1) while *B* is risk-preferring (a bet on Lucky Charm has positive value for him at any odds higher than 4:1), and so they can both reap an immediate gain in satisfaction if, but only if, they can make an *enforceable* bet on the race (at any odds between 4:1 and 6:1).

It does not, however, follow that a practice of enforcing bets is on the whole good for, or preferred by, either *A* or *B*. For either or both of them, it may be the case that, though a gain in satisfaction accrues at the instant the bet is made, the loss in satisfaction in case the bet is lost, discounted by the improbability of losing, is more significant. Those two propositions are not, as some might imagine, mutually contradictory. Quite aside from the engrossing metaphysical problem of whether the *A* or *B* who makes the bet is the same experiencing entity as the *A* or *B* who loses it, there is the more simple-minded possibility that either or both of *A* and *B* may occasionally, or even regularly, underestimate how much it will hurt to lose. Such a possibility is inconsistent neither with rationality (since it is a matter of missing or mistaken information), nor with a relish for risk ex ante. No more irrational would be an ex ante preference for a legal regime (*i.e.*, nonenforcement of contracts) which tends to protect against certain adverse consequences of mistakenly low appraisals of the pains of future bad fortune. A classic image of rationality is Odysseus bound to the mast as he sails by the Sirens' rock. *See* Strotz, *Myopia and Inconsistency in Dynamic Utility Maximization*, 23 REV. ECON. STUD. 165 (1955).

36. *See* Birmingham, *Game Theory & Contract Law*, in ECONOMICS OF CONTRACT LAW, *supra* note 1, at 16-31; Fuller & Perdue, *The Reliance Interest in Contract Damages: I*, 46 YALE L.J. 52, 60-63 (1936).

the relying promisee. This inability to trust one's partners discourages one from entering into any contracts at all. The result is that all are worse off than they would have been if they had known from the beginning that both their promises and those of other people would be enforced.

It is important to distinguish this argument from the pure uncertainty argument discussed a moment ago. According to that argument, all are made better off by enforcement of contracts simply because they now know that promisors will perform. That argument left out of account that all may also be promisors, and may therefore be made worse off by uncertainty about what will happen to them if circumstances turn out to incline them toward breach. The coordinational failure argument is concerned not with the distribution of the ill effects of the factual uncertainty that is inevitable in life, but with arrangements to control the phenomenon of *distrust*. The existence of distrust may not be inevitable, nor is it necessarily impossible to eliminate it when it exists.

The legal system *makes* others trustworthy, according to this argument, replacing the unshakeable suspicion that they will do the wrong thing with the certainty that they will do the right thing or its economic equivalent. Whereas the enforcement of contracts simply *redistributes* the burden of uncertainty about the future course of the natural or social world, legal enforcement actually *eliminates* distrust. This is a true net gain for everyone. It will, or could, make everyone better off.

As in the case of private property, there are two kinds of objections to the coordinational failure argument. The first is that the postulate of rational maximizing itself is not enough to justify a prediction that the structure of life in a world without enforceable contracts is a strategic dilemma. The second is that it is quite possible that a world of contract enforcement will be a strategic dilemma. Given that nonenforcement is not necessarily suboptimal, and that the contract world may be suboptimal, there is no basis for a conclusion that everyone will be or could be better off if we move from no enforcement to free contract.

It seems unnecessary to rehearse in detail the argument that nonenforcement may not be a strategic dilemma. The parties may trust each other without legal sanctions. They may have long term relationships or repeat dealings which make it possible for them to calculate their partners' long-term interests, so that they can rely on performance without anything so moralistic as trust. Or one party may dominate the other to such an extent that trust is irrele-

vant, given the far greater certainty about performance generated by the imbalance of force.

The argument about the possible suboptimality of a contract regime is less obvious. It is analogous to the argument that a property regime may lead to catastrophe in a situation where everyone's insistence on his privilege of withdrawing his property from the network of the division of labor causes a breakdown of economic activity. Imagine that an unexpected event causes a business to fail and default on its contractual obligations to another business. The essence of the contract regime is that, short of excuse by impossibility, there is the possibility of each link in the contractual chain insisting on its full right to performance or damages from all its partners. It may happen that because each person in the chain believes that every other person in the chain will insist on his full rights, each person believes that he must also do so, or face a total loss. He will then insist on his rights even though if all moderated their contract claims in exchange for moderation of their contract obligations, everyone would be better off.

There is even an analogue to the freeloader in this situation. Suppose that by informal agreement all parties forego strict enforcement of their contract claims, through a series of unilateral forgivenesses or delays of payment. A freeloader might believe that he could insist on full payment without bringing the whole tacit agreement down, just because he amounted to such a small part of the total of contract indebtedness. But if everyone sees himself as in the position of the freeloader, or if everyone thinks all the others will see themselves that way, then no tacit agreement to moderate claims will occur.

Of course, it may be possible to eliminate the dilemma by having the state step in to enforce a moratorium on the payment of all contract indebtedness for a period of time sufficient for the restoration of confidence. But there is no guarantee that adding such an apparently inconsistent rule to the institution of free contract can get us out of the dilemma. There just isn't any basis in the weak assumptions of rational maximizing and Pareto optimality for concluding that any legal or alegal regime can preclude or will necessarily produce the dilemma.

E. Fifth Contract Argument: Distortion of the Tradeoff Between Present and Future Goods

This argument is closely analogous to that which asserts that property is efficient because it assures an undistorted tradeoff be-

tween work and leisure, and among possible products. The notion is that contract allows us to treat a future satisfaction as no less certain than a present satisfaction. If there is no contract enforcement, future satisfactions are less certain, and we are therefore going to be biased in favor of the present. Where the bias is removed, we choose between "consumption" and "investment" as we "really" or "naturally" value them.[37]

There is an obviously wrong interpretation of this argument that is like the idea that people will work more with property in the fruits of their labor than they will if they have to worry about theft. Here, it is not true that making future satisfactions less certain will necessarily reduce investment designed to produce such satisfactions. It all depends on the relationship between income and substitution effects. We are concerned with the more sophisticated version which speaks in terms of distortion rather than in terms of a reduction in absolute quantities of one thing or another.

The response to this argument is to acknowledge that the allocation of resources between consumption and investment will be different with enforceable contract than it would be without (almost certainly different, though there's nothing that logically precludes the two situations turning out the same). But the existence of difference does not establish bias or distortion, and it is not at all clear why the result *with* contract should be taken as the natural benchmark reflecting people's real preferences. The analysis goes exactly as it did with the Crusoes in the property discussion: (1) It does make sense to say that a sole producer's choices between present and future consumptions are "natural" and reflect his "real" preferences. (2) If we introduce some more Crusoes and start up trade *without* enforceable contract, we will get a pattern of choices for each actor that still represents his maximum given his preferences. (3) When we add enforceable contract, we change all these choices once again, but everyone is still maximizing given his preferences. (4) The move from unenforceable to enforceable does not necessarily make everyone better off,[38] so it is hard to see what's so natural about the choices or preferences expressed, after it occurs, by each actor.

III. General Considerations on the Efficiency of Entitlements

In this Part we present a more abstract version of our critique

37. Economics of Contract Law, *supra* note 1, at 3.
38. *See* pp. 733-34 *supra*.

of efficiency arguments about basic private-law institutions. In considering the specific cases of private property and enforceable contract, we were mainly concerned with arguments based on the notion that those institutions were more "certain" than the alternatives, and with arguments that those institutions would serve to prevent breakdowns of social cooperation in the face of transaction costs (including information gaps and associated strategic behavior). We want to argue here that the refutations we have already offered of certainty and coordination arguments can be extended to cover any private law institution constituted by general rules.

Our contention about uncertainty is that all private law rules simultaneously eliminate and create uncertainty, for the same and also for different people, so that it is never possible to say that the total amount of uncertainty has been reduced by a change in legal relations without knowing both how the affected individuals react to the situation and how to compare their reactions and resulting experiences according to some common scale. Our contention about coordination is a good deal more complex. We start from a much more precise definition of a property and contract regime (PPFC) than seemed necessary in Parts I and II above. We then assert that it is intuitively obvious that this regime would be in danger of breaking down or causing severe coordination problems if it were operated without modification under real-world conditions. We then show that modifications in the regime designed to make it more effective in dealing with transaction costs turn it into a formless mixture of state of nature, communalism, and PPFC, with the parts held together only by ad hoc judgments as to which form of arrangement will work better in response to the specific pattern of transaction costs we presuppose. We conclude that arguments for the efficiency of private law entitlement systems must be based on these specific constellations of transaction costs rather than on the mere postulate of rational maximizing behavior.

A. *The Notion of a Nondirective (Formal) Order*

A formal or nondirective order is a collection of rules about access to resources and products, where the rules are both (i) so general as not themselves to specify any particular resource allocation or product distribution, and yet (ii) so complete as to compose an informative, regular framework for purposive private actions that will, in combination with the rules, fully determine a prevailing allocation and distribution from time to time. The notion corresponds generally to that of "private ordering" familiar in contempo-

rary jurisprudence.[39] It stands opposed to the notion of governmental "intervention." In a pure nondirective order, the government's only functions will be those of elaborating, confirming, and enforcing the general rules. Of course, every real constitution will allow for sectors both of intervention and of nondirective ordering. In even the most laissez-faire state, the government will engage in some economically active or directive roles; and in even the most thoroughly regulated, there will be pockets of economically significant, nondirected private action.

Our concern in this Article is with the nondirected sector of a society's economic life, however extensive or restricted that may be. The issue before us is that of the kinds of factual judgments needed for comparing the efficiency of a nondirective order based on private property and free contract with that of alternative forms of logically available nondirective orders. Specifically, the question is whether it is enough for that purpose to know that individuals usually act with a view to maximizing their respective "ends in life."[40]

To aid the analysis in this Part, we define two nondirective alternatives to a private property/free contract order (PPFC), each occupying one extreme on a spectrum of logical possibilities. At one pole there is the state of nature (SON), in which the only "rule" is that every person is free to do or take whatever she can with whatever strength and cunning she has. At the other pole is the whole world—all resources, labor, and products—owned in common by everyone (WOC), so that no one can do or use anything (or for that matter refrain from doing or using anything) without the consent of everyone else. It may seem paradoxical or even perverse to characterize the totally unregulated SON as an "order," and the totally impacted WOC as "nondirective." There is, however, nothing illogical about these characterizations. Both SON and WOC are instances of initial situations defined by general rules, from which the only permitted developments are those arising from self-motivated individual action taken subject to the rules, with no intervention allowed. They are both, therefore, nondirec-

39. *See, e.g.*, H. HART & A. SACKS, THE LEGAL PROCESS: BASIC PROBLEMS IN THE MAKING AND APPLICATION OF LAW (tent. ed. 1958); Kennedy, *Legal Formality*, 2 J. LEGAL STUD. 351 (1973). Compare Hayek's concept of "spontaneous" and "abstract" orders, opposed to which is the concept of "interference." *See, e.g.*, F. HAYEK, THE MIRAGE OF SOCIAL JUSTICE 128-29 (1976); F. HAYEK, RULES AND ORDER 38-39 (1973).

40. R. POSNER, *supra* note 5, § 1.1, at 3.

tive orders according to our definition. Looking at matters this way may initially be awkward for some, but by coming to appreciate the implications of this view one comes to understand the reasons why it would be miraculous if anyone could show that PPFC, or any other nondirective order, is generally efficient for a population of rational maximizers.

B. Hohfeldian Analysis and its Lessons

The style of thought we are urging, and the skeptical conclusion to which it leads, were commonplace for a preceding generation of legal scholars who famously addressed themselves to the bearing of law on economic policy. They did so over a period that can be said to begin with the work of Wesley N. Hohfeld, whose analytical paradigm of "jural relations"[41] has become a staple of academic legal culture. The period culminated in the work of Robert L. Hale,[42] a highly distinguished precursor of the contemporary school of economics-inspired legal-policy analysts; and spanned the chief productions of such Realist luminaries (and, incidentally, admiring disciples of Hohfeld) as Arthur L. Corbin[43] and Walter W. Cook.[44] Despite the reverence with which its author is still sometimes recalled, Hale's work receives astonishingly little attention today,[45] while the Hohfeldian staple survives, like a sack of dried beans, unesteemed by those who have lost the recipe for its use. Of Hale's *oeuvre* we shall here say no more than that it virtually anticipates our thesis; had it not sunk into oblivion, there would have been no occasion for this paper. Corbin and Cook have served us as interpreters for their esteemed colleague Hohfeld, whose own obscurity is deservedly legendary. It is Hohfeld's work —blandly familiar, imperfectly understood—which is most fundamentally related to our thesis and which we therefore undertake to expound anew.

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41. Hohfeld, *Fundamental Legal Conceptions as Applied in Judicial Reasoning*, 26 YALE L.J. 710, 712 (1917); Hohfeld, *Some Fundamental Legal Conceptions as Applied in Judicial Reasoning*, 23 YALE L.J. 16, 28 (1913).

42. R. HALE, FREEDOM THROUGH LAW (1952); Hale, *Property and Distribution in a Supposedly Non-Coercive State*, 38 POL. SCI. Q. 470 (1923).

43. Corbin, *Jural Relations and Their Classification*, 30 YALE L.J. 226 (1921); Corbin, *Legal Analysis and Terminology*, 29 YALE L.J. 163 (1919).

44. Cook, *Introduction* to W. HOHFELD, FUNDAMENTAL LEGAL CONCEPTIONS AS APPLIED IN JUDICIAL REASONING (W. Cook ed. 1934); Cook, *Privileges of Labor Unions in the Struggle for Life*, 27 YALE L.J. 779 (1918).

45. A notable exception is the revival effort of Warren Samuels. Samuels, *The Economy as a System of Power and its Legal Bases: The Legal Economics of Robert Lee Hale*, 27 U. MIAMI L. REV. 261 (1973).

By today's law students (not to speak of their teachers), Hohfeld is often envisaged as a chap with a scholastic passion for terminological nicety—at worst a carping bore, at best an authentic, if pedantic exemplar of the academic virtue of precision. His contribution is understood to consist of a lexicon for distinguishing among several discrete types of legal advantages (entitlements, as we now commonly say) often and detrimentally confused in legal discourse—the famous jural quartet of rights, privileges, powers, and immunities. It will be recalled that a "right" or "claim right," in Hohfeld's stipulation, is a claim one has to require or prevent, with the state's assistance if needed, a certain act or class of acts by another,[46] while one's "privilege," by contrast, just refers to certain acts or classes of acts which one can do (or not do) without anyone else's being able to summon state force in opposition.[47] Likewise, a "power" is one's state-recognized authority to negate or transfer certain entitlements held by oneself or others, while one's "immunity" is, by contrast, the absence of power in another to alter one's own entitlements.[48]

Hohfeld also supplied a term for the negation, or "opposite," of each of the four positive relations, giving a total of eight names for jural relations, out of which to construct the famous tables of "jural opposites" and "jural correlatives":[49]

JURAL OPPOSITES

right	privilege	power	immunity
no-right	duty	disability	liability

JURAL CORRELATIVES

right	privilege	power	immunity
duty	no-right	liability	disability

This elaborate exercise was not undertaken merely for the sake of clarifying discourse by supplying a precise vocabulary that people could use to avoid getting distinct notions mixed up. It was intended to convey some substantive lessons, one of which has a bearing on our own discussion to follow.

The lesson is that there is no logically necessary bond between a right over some act or class of acts and a privilege over that same

46. Hohfeld, *Some Fundamental Legal Conceptions as Applied in Judicial Reasoning*, 23 YALE L.J. 16, 30-32, 34 (1913).

47. *Id.* at 32-44.

48. *Id.* at 44-55.

49. *Id.* at 36.

act or class, no logical reason why having the right must go with having the privilege, or vice-versa. Take the act consisting of your reading (or not reading) this Article. You are privileged to do either, although one or the other decision on your part might inflict harm on us so severe that we would gladly pay you a great deal of money to do the opposite. If we want to avoid the harm of your reading or not reading, there are various countermeasures we can take, but these do not include, given your privilege, our summoning state force to make you do what we want or punish you for not doing it. In this sense, the state "authorizes" you to choose between reading and not reading without regard to our welfare.

Hohfeld and his followers were eager to point out, however, that this privilege on your part to read or not read as you choose does not logically entail a right on your part that we refrain from using *our own* force to make you stop or start reading.[50] Your privilege over this choice of uses of your optical and mental apparatus does not entail a right against our interference with your preferred use. If we, wishing you not to read, physically restrain you, we may have violated some right you have to bodily security, if you have such a right; but we shall in no way have violated your privilege of reading because it is logically impossible for one person to violate another's privilege, in the Hohfeldian sense of the term (unless, perhaps, by suborning corrupt officials to use state force to restrain or punish the privileged act). To have a privilege means only that one is the beneficiary of a state practice or rule of nonintervention. It most definitely does not mean that one is guaranteed enough concrete social or physical power to do what one is legally privileged to do against opposition from others privileged to resist or interfere. And just as privileges entail no rights, so rights entail no privileges. My having a right, for example, that others not interfere with my bodily freedom just means that the state will come to my aid in opposition to those who would restrain or compel me; it does not at all mean that I can do as I please without incurring state opposition or requital.

C. *Hohfeldian Definitions of Various Nondirective Orders*

Let the world be arbitrarily carved up into any number of conventionally identifiable discrete "things." For now, it doesn't matter just how we carve up the world—for example, whether a hu-

50. *E.g.*, Cook, *Privileges of Labor Unions in the Struggle for Life*, 27 YALE L.J. 779 (1918).

man body is regarded as a single, unified thing or as a collection of things like blood, arms, teeth, etc. (or, conversely, a "platoon" is regarded as a unified thing of which bodies of individuals are deemed integral parts). In similar fashion, let the totality of acts that may be done to or with various things, including leaving them idle, be conventionally differentiated into any number of discretely identifiable "uses." Then for each of some finite number of things, there is at any moment the possibility of one or more out of some finite number of uses. If we let "X" stand for some (any) specific thing, and "U" stand for some (any) specific use, then we can let U_x stand for that use of that thing. A formal order, then, is a collection of general, legal rules about private entitlements over all the U_x's that are considered to be in the nondirective sector at any given moment.

1. SON and WOC—Given this vocabulary, it is easy to construct Hohfeldian definitions for SON and WOC. SON is the order in which each person at all times holds a privilege in rem[51] over all the U_x's and WOC is the order in which each person at all times holds a right in rem over all the U_x's. In both of the orders, everyone has at all times an immunity in rem against divestment of their privileges or rights.

The Hohfeldian SON consists of the Table of Jural Correlatives modified as follows:

~~Right~~	Privilege	~~Power~~	Immunity
~~Duty~~	No-Right	~~Liability~~	Disability

The state treats *all* actions that impinge on other persons' interests as privileged, or in other words, treats everyone as having no-rights with respect to all actions that affect them. And since there are no rights, there can be no powers, because to have a power is just to be able to modify, create, or extinguish a right. If the state does not recognize rights, there is nothing to do with a power, because there is nothing that one can turn a privilege into except a duty (to do or not do the act one was formerly privileged to not do or do as one saw fit), and there can't be any duties in a state that refuses to recognize rights. Everyone being thus immune against translation of their universal privilege into duty, everyone by the

51. A "privilege in rem," by analogy with the more familiar "right in rem," is a collection of privilege/no-right relations covering the same U_x—one for every person in the world other than the holder—in each of which the holder occupies the privileged end of the relation.

same token is disabled from turning their own or other people's no-rights into rights.

What all this means in practice is that the state in SON plays no active part whatever in the maintenance or administration of its nondirective sector. It is easy to see that such an arrangement is "nondirective," but perhaps not altogether clear why one would want to call it an "order." However, because we presuppose that the state *exists*, there is an order in the sense that there is an organization constituted under recognized public law rules and possessed of enough force to create and vindicate rights if those in charge wanted it to. Since the regime of universal privilege/no-right, covered by universal immunity/disability, is thus *chosen*, and since it frames an actual course of behavior, there is no reason not to call it an order. The state, by its choice of rule system, has contributed to whatever outcomes emerge, and the state's thus conditioning outcomes by its choice of rules about private interaction is what we mean by a nondirective order.[52]

The Hohfeldian WOC consists of the Table of Jural Correlatives modified as follows:

Right	~~Privilege~~	~~Powers~~	Immunities
Duty	~~No-Right~~	~~Liabilities~~	Disabilities

Whenever someone else's action or inaction affects my welfare (my preferences), the state will back me in dictating to that other person what to do or not do: and the same goes for everyone else. The state's position is now the opposite of that in SON: it has declared its readiness to concern itself with every instance, no matter how slight, of impingement by one person's conduct on another's concerns, as contrasted with its refusal in SON to intervene to prevent or requite an impingement no matter how grievous. In WOC, there is literally no such thing as *damnum absque injuria*; there are no legally unprotected interests, there are no nonproximate chains of but-for cause; there are no excuses; everyone is strictly liable for all the consequences of every act and also for the non-act that is the contradictory of every act. Everyone will be constantly under an unrelieved duty to do everything and also to do nothing. The state, offering at every moment to enjoin anyone to do and not do everything and anything, is in a position to paralyze social life totally.

Powers cannot provide the way out of this stalemate because

52. *See also* pp. 750-51 *supra*.

powers can no more exist in WOC than in SON. The defining feature of WOC is that everyone always has rights respecting anything that anyone else might do or not do. There are never any privileged acts; and since there are never any privileges, there can be no powers, because to have a power is to be able to modify, create, or extinguish a privilege. If the state does not recognize privileges, there is nothing to do with a power, because initially every possible act is covered by a duty, and there is nothing one can turn a duty into except its correlative privilege, and there aren't any privileges in WOC.

Stalemate is not, however, the only possible outcome. People who have rights may always refrain from asserting them. Forbearance from asserting a right doesn't entail the existence of a power, and neither does a nonbinding conspiracy to forbear from exercising rights. Even a universal agreement—a constitutional "contract" —according to which everyone will refrain from exercising certain rights when such is the decision of, say, a majority, entails no powers as long as the constitution isn't itself legally binding on anyone. So it is possible that, in WOC, people will find a way to conspire nonbindingly about what rights over what U_x's will be exercised, by and against whom, under what circumstances, and life can go on. (The first nonbinding conspiracy might be to suspend all assertions of all rights—*i.e.*, act as though they were in SON—for the time it takes to work things out more fully.)

Now, SON, at least at first glance, looked nondirective, if not so obviously like an order. WOC, when we first encounter it, may seem to be neither nondirective nor an order, but it is both. It is an order just as SON is an order. The state's existence and potency are presupposed, so the state could have created and vindicated some privileges had its governors wanted it to. Since the regime of total perpetual joint control has thus been chosen, and since that regime frames an actual course of behavior (*i.e.*, looking toward the fashioning of the nonbinding conspiracies), there is no reason not to call it an order. Whatever outcomes emerge will have been conditioned by the state's choice of rule system, and state authorship of outcomes by its choice of a rule system for private affairs is, again, what we mean by a nondirective order.

But in what sense are affairs in WOC ever private? Granting that WOC is an order, how is it nondirective? Affairs are private in the sense that outcomes emerge exclusively through the privately motivated interactions of persons wielding individual entitlements (in this case, broad rights in rem over all U_x) assigned to them by a

rule as general as any rule could be. Whatever happens will be what the rights-bearing individuals make happen through their own, several, deliberate acts. No state, or outsider, will at any time "intervene"—do anything beyond enforcing the general rule.

2. *The Hohfeldian Definition of PPFC*—In combination, the Hohfeldian categories and the U_x notation seem to provide a perfectly exhaustive, perfectly incisive analytical vocabulary for describing and defining formal orders. No one since Hohfeld has ever been able to suggest a legal entitlement or relation that is not either itself one of the Hohfeldian entities or else analyzable into such entities, and no one today doubts that his list of entities is both an exhaustive and an elementary vocabulary for *modes* of entitlement. By stipulation, U_x can stand for any sort of use of any sort of thing, no matter how broadly or narrowly conceived; and so U_x is an undoubtedly exhaustive and elementary vocabulary for *objects* of entitlement. It seems to follow that any nondirective order should be precisely and unambiguously describable in the language composed of these two vocabularies.

As we have seen, that is obviously the case for SON and WOC. It is, we think, a matter of some moment for our thesis that it is *not* obviously the case for "private property," or for "enforceable contract," or for their conjunction in PPFC. We are about to offer an analytic definition of PPFC which we think compatible with the formal order many people have in mind when they think or say that PPFC has some peculiar efficiency virtue. We do not, however, anticipate that all readers will accept our definition as the proper one; and certainly there is nothing logically compelling about it.

Here is our definition of PPFC:

> 1. At all times, every U_x is the object of both a right in rem and a privilege in rem, both of which are held by the same individual. (The individual who holds the coupled, congruent, right-and-privilege over a U_x will be said to "own" the U_x.)
>
> 2. An owner of a U_x has at all times an unqualified power to transfer sole ownership of the U_x to any other individual, or to bind himself to make such a transfer in the future, as he sees fit; and an owner is at all times unqualifiedly immune against having his ownership of a U_x transferred to anyone else against his will.
>
> 3. Whoever owns all the U_x's that are used to pro-

> duce any other thing (a "*P*") owns all the *U*'s of that *P*; and in the case of *P* produced using U_x's owned by more than one person, ownership of the U_p's is determined either by the unanimous agreement of all the owners of the U_x's or, in default of such agreement, by rules designed to minimize losses sustained over time by non-consenting owners.

What is most important about this definition is right/privilege symmetry—the idea that for every U_x there is an owner who can *U* the *X* without legal interference, and at the same time can invoke the law if some other private party tries to interfere with his *U*ing of the *X*. We have chosen this as the core of our definition of a property/contract regime in part because we think it corresponds to a common intuition of what it means to say that a "thing" is "my property." But the notion of right/privilege symmetry as the essence of the private legal order has a long history.[53] As we have intimated already, it was one of Hohfeld's main purposes to refute the idea that such symmetry was inevitable, a deductive implication of the concept of a legal order. We readily admit that there is a certain artificiality—indeed implausibility—to the notion that a property regime "is" such an order. There is even some question in our minds as to whether it would be logically possible to institute such a regime in the real world. But we think the definition useful nonetheless. The arguments we will make using the extreme construct of Hohfeldian PPFC would be valid for any other general definition we can imagine. And this highly abstract formulation will permit us to state the difficulties in the notion that property and contract are efficient (or presumptively efficient) much more briefly and precisely than would be possible using one of the more familiar definitions.

D. Uncertainty and Coordination Reconsidered

A review of our canvass in Parts I and II of the arguments for the general efficiency of PPFC will show that they all depend on either (1) technical mistakes, or (2) a belief that PPFC minimizes

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53. *See* J. AUSTIN, THE PROVINCE OF JURISPRUDENCE DETERMINED 289-90 (1832); J. BENTHAM, OF LAWS IN GENERAL 99 (Hart ed. 1970); Donahue, *The Future of the Concept of Property Predicted From its Past* in PROPERTY (J. Pennock & J. Chapman eds. 1980). For a full account of the history of the right/privilege bond from Hobbes through Hohfeld, see J. Singer, Legal Rights: A History of the Justification of Legal Violence, Anglo-American Analytical Jurisprudence from 1830 to 1930 (1980) (unpublished manuscript in the Harvard Law School Library).

the amount of bad uncertainty that people have to bear, or (3) a belief that PPFC facilitates coordination, or (4) some combination of the above. We have already given intuitive arguments against the plausibility of beliefs (2) and (3). Here we make use of Hohfeldian renderings of various nondirective orders to show more perspicuously that those beliefs either are absurd or else depend on complex empirical suppositions that no one, so far as we know, has ever made explicit much less supported with substantial data.

1. Uncertainty—The certainty claim for both private property and enforceable contract is that the holder of a property or contract right is certain that he or she will be able to retain particular benefits, whereas in SON (say) there is no such assurance. The proponent of the certainty argument then reasons either that uncertainty in SON will discourage some desirable activity, or that it is just a "bad" in itself.

We think that one of the purposes of Hohfeld's schema was to make it easy to see that such an argument is necessarily incomplete, because it fails to recognize what we call the Law of Conservation of Exposures. Hohfeld's analysis makes clear that exposures (risks, uncertainties) can never be eliminated, but only shifted among persons or classes. This becomes evident on inspection of the two tables. As Corbin put the matter,

> No pair of opposites can exist together. That is, when a person has a right, he cannot have a no-right with respect to the same subject matter and the same person. When he has a privilege, he cannot have a duty.
>
> Each Pair of correlatives must always exist together; when some person (A) has one of the pair, another person (B) necessarily has the other. One of the terms expresses the relation of A to B; the other term expresses the relation of B to A.[54]

That is, from *A*'s having a certain right or power—any we may care to describe—it can be inferred not only that *A lacks* the contradictory no-right or disability, but also that there is some *B* who *has* a certain ("correlative") duty or liability; and likewise, from *B*'s having some described privilege or immunity we can infer that there is some *A* who has the correlative no-right or disability. In sum, every assertion of a Hohfeldian positive entails the assertion of a Hohfeldian negative, and vice-versa.

Now suppose—as seems clear upon reflection and as Hohfeld

54. Corbin, *Legal Analysis and Terminology*, 29 YALE L.J. 163, 166 (1919). We have reversed the order of Corbin's paragraphs.

certainly intended—that there is no entitlement which is not either a right, or a privilege, or a power, or an immunity; and allow further that no-rights and disabilities count (as duties and liabilities obviously do) as forms of legal exposure. Hohfeld's "correlatives" table is, then, a precise statement of what can be called the Law of Reciprocity of Entitlements and Exposures: For every legal entitlement there is an equal and opposite legal exposure. And by an easy step we arrive also at the Law of Conservation of Exposures: The sum of the legally determined exposures is a constant. For the two tables in conjunction tell us that just insofar as some *B* is spared a duty, some *A* must suffer a no-right (and vice-versa); and just insofar as some *A* is spared a disability, some *B* must suffer a liability (and vice-versa).

Since there seem to be no legal exposures that are neither no-rights, nor duties, nor disabilities, nor liabilities, the law of conservation is established. Exposures can be shifted but not changed in number. To cancel *A*'s no-right just means to replace it with its "opposite" right—transmuting *B*'s erstwhile privilege into its "opposite" duty—and so on. The books are double-entry and they have to balance. Once the notion of legal entitlement has entered consciousness—or, as the legal realist would have it, once it occurs to us to form expectations or offer predictions about organized societal responses to appeals for relief by those objecting to various classes of acts against those performing them—that notion is immediately pervasive and exhaustive. Entitlement abhors a vacuum. Covering any act that anyone can be imagined to do or suffer, there is *always* either a privilege or a right, therefore *always* either a duty or a no-right. The agent either is legally sanctionable for the act or omission (*i.e.*, has a duty) or she is not (*i.e.*, has a privilege); a victim either can secure relief (*i.e.*, has a right) or he cannot (*i.e.*, has a no-right). There is no undistributed middle. There is always an exposure.

To be sure, this conclusion depends on the idea that no-rights and disabilities count no less than duties and liabilities as forms of legal exposure. That they must so count, Hohfeld was at pains to insist:

> It is difficult to see . . . why . . . the "privilege + no-right" situation is not just as real a jural relation as the precisely opposite "duty + right" relation . . . . A rule of law that *permits* is just as real as a rule of law that *forbids*; and, similarly, saying that the law *permits* a given act to X as between himself and Y predicates just as genuine a legal relation as saying that the law

> *forbids* a certain act to X as between himself and Y. That this is so seems in some measure, to be confirmed by the fact that the first sort of act would ordinarily be pronounced "lawful" and the second "unlawful."[55]

Corbin offered a more lucid rendition of the same point:

> [O]ne who thinks that there can be no rule of law and no jural relation between men without societal constraint seems to insist that law does nothing but *command*. There is no doubt that the command element is of the utmost importance; and according to Hohfeld's classification this element is the factor that defines rights and duties. But it seems to some of us that society not only commands but also *permits* . . . . The rules that determine these permissions . . . are rules that law schools have to teach, that lawyers have to use in advising clients, and that courts have to create and apply in rendering judgments. And this is true whether there is any societal command or constraint then existing or not.[56]

In PPFC, the source of certainty is legal entitlement, while the source of uncertainty, often overlooked, is legal exposure. In the case of PP, what the proponent overlooks is the exposure of the non-owner. The non-owner is under a duty correlative to the owner's right to invoke state force against interference; the non-owner also has a no-right to state intervention to protect him from adverse consequences of the owner's privilege to use the *X* as he sees fit. These exposures entail uncertainty about access to and control over the *X*, leaving the non-owner dependent on the will of the owner to satisfy the non-owner's wants.

In the contract case, the certainty comes from the promisee's right to performance. The uncertainty overlooked derives from the promisor's exposure—his duty to perform or pay damages even if the expectations that led him to enter the contract have changed drastically. Certainty arguments always celebrate entitlements—either a right/privilege combination (as in PP), a right alone (as in contract), or a privilege alone, as in the rule of *Hadley v. Baxendale*,[57] for example. That rule is often explained by reference to the good of assuring the promisor that he will not be subjected

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55. Hohfeld, *Some Fundamental Legal Conceptions as Applied in Judicial Reasoning*, 23 YALE L.J. 16, 42 n.59 (1913) (emphasis in original) (citation omitted).

56. Corbin, *Jural Relations and Their Classification*, 30 YALE L.J. 226, 237 (1921) (emphasis in original).

57. 9 Exch. Ch. 341, 156 Eng. Rep. 145 (1854). The rule sets limits on a contract-breaker's liability in damages for the harmful consequences of breach.

to disastrous liabilities he couldn't have predicted and therefore didn't expect.[58] But the rule is one of privilege—the privilege of the promisor to inflict injury by breach so long as the injury was neither contracted about in advance nor a "natural" consequence of breach. The privilege has its correlative exposure in the no-right of the promisee to recover damages for injuries of the kind specified. And this no-right creates an uncertainty for the promisee, who can never know for sure that he won't suffer uncompensated losses by breach of contract.

Of course, as we said in the discussions of property and contract, it may as a matter of fact be true that a given entitlement generates more benefits from certainty than its correlative exposure generates "bads" from uncertainty. But that is a strictly empirical question. The Law of Conservation tells us that there will be a person experiencing the potential bad every time we confer the potential good on an entitlement holder. It follows that there can be no merely logical demonstration that any particular entitlement reduces uncertainty. As we move, for example, from SON toward PPFC, we convert privileges into rights. And by the Law of Conservation, we necessarily also convert the exposure implicit in no-rights into that implicit in duties. Whether the total of the good of certainty and the bad of uncertainty increases or decreases depends on how the various people in the system feel about their situation before and after the change.

2. *Coordination*—Readers may have noticed that our proposed Hohfeldian specification for a PPFC regime leaves something to be desired from the standpoint of trying to avoid prisoners' dilemmas, or to minimize transaction costs, information costs, and other strategic obstacles to consummation of gainful trades. The basic idea of that definition is to stipulate that for each of various acts respecting various objects (U_x) having utility for production or consumption, there is just one legally assured entitlement to determine the use and enjoy the resulting benefits (or suffer the resulting losses). The owner may direct the use to consumption or production, as he pleases, without anyone's being able to summon state force against him; may have the state's assistance to prevent anyone else from interfering with his control of the use; and may, if he prefers, give or sell full control over it to anyone else he chooses, on whatever terms he likes.

58. *Cf.* Kennedy, *supra* note 31, at 1743-45 (permitting breach of altruistic duty will encourage transactions in general).

All that may sound just right to those who, ignoring transaction costs, are prone to think that PPFC is efficient for a population of rational maximizers because of its effect of correlating information, control, and motivation so as to generate efficient incentives. For those sensitive to coordination problems, though, there are three distinct respects in which our proposed Hohfeldian specification for PPFC must seem too purist or extreme to promise even tolerable efficiency: First, under our specification PPFC is given a boundless range, defined as covering every U_x and thus all of its possible domain—including, to take just one example of inept coverage, the navigable airspace that on any sane conception of economic rationality ought to be, under current technological conditions, a reserved zone of universal privilege qualified, if at all, only by collective rights of traffic control. This we call the question of *boundaries*.

Second, under our specification the PPFC order is potentially composed of broadly scattered entitlements over minuscule, atomic U_x's—carved up along spatial, temporal, and functional lines into fragments that can be arbitrarily tiny as long as they remain coherent, intelligible objects each with a modicum of independent utility—and this without regard to the horrendous coordination problems that may have to be faced when numerous such atomic holdings have to be coordinated for efficient production. The definition, for example, does not rule out the possibility that a five-acre area of woodland might be parceled out as follows: Birding on Mondays to A, on Tuesdays to B, etc.; logging in the mornings to H, in the evenings to I, etc.; beet agriculture for life to O, remainder to P, etc. This we call the question of *composition*.

Third, under our specification there is no room for legally sanctioned versions either of competition or of the practice of mutual toleration of injuries. Competition is impossible because it presupposes two actors each of whom is privileged to inflict on the other the injury of loss of trade or of some other advantage. Neither competitor has a right symmetrical to this privilege, since neither can sue the other for the loss of the customer (or other advantage) that he is perfectly free to take if he can. The issue of mutual toleration of injuries is that of the excuses we allow for infliction of injuries *within* the universe of U_x's subject to PPFC. In a world where there were matching rights and privileges for every U_x, it could not be the case that I was privileged to destroy your possessions accidentally, but that you were at the same time privileged to fend off the injury. Yet such situations are pervasive. We call this

question of what to do about conflict within PPFC the issue of *structure*.

Reflecting separately on the questions of boundaries, composition, and structure, one is led to like conclusions each time. First, the actual legal orders familiar to us do not correspond to PPFC. Our legal system, in particular, constricts PPFC within boundaries outside which there is SON or WOC. It restricts freedom of contract by imposing all kinds of limitations on decomposition of U_x's. It resolves the problem of internal structure by creating lacunae within which, in spite of the fact that we are dealing with legally protected interests, the parties are privileged to inflict injury without enjoying corresponding rights not to be injured.

Second, it seems overwhelmingly likely that at least some of these deviations from PPFC are motivated by an accurate assessment of the disastrous efficiency consequences of taking PPFC seriously as a design for an entire legal order. A PPFC order is likely to be efficient only insofar as it has been deliberately worked over—restricted, qualified, and specified—with a view to making it efficient, only insofar as the right matters have been excluded from its range, the right limits imposed on decomposition of holdings, the right mix specified of liability and nonliability for consequences. Working in the requisite exclusions, limits, and mixes means introducing elements of SON and WOC into the order. From one standpoint, the result can be described as "PPFC with pockets of SON and WOC"; but equally valid characterizations would be "SON with pockets of PPFC and WOC," and "WOC with pockets of SON and PPFC." Thus in whatever sense PPFC can be said to be efficient, the same can be said of both SON and WOC.

We now take a closer look at each of the three questions.

a. Boundaries—It is obvious that real legal systems never attempt a global, domain-covering version of PPFC. Here are some salient ways in which they fall short: (a) They establish commonses, SON-like zones of universal in rem privilege over real resources like the air and the seas, and also over zones defined less concretely, such as emotional states, many intra-family matters, and contracts deemed unenforceable because based on want of consideration or on inappropriate subject matter, like illegal but noncriminal undertakings and mere "social" obligations. (b) They establish WOC-like areas of collective compulsion, such as compulsory service by utilities and compuslory improvements or maintenance of property, and of collective prohibition (marked by

the fact that no private consent can confer a privilege) concerning such varied matters as sexual behavior (prostitution, adultery, etc.), fraud, and pollution, and encompassing thousands of police power regulations ranging from zoning to bans on shotgunning birds on one's own land.

These cases pose a problem for the thesis that PPFC is efficient for rational maximizers because they are cases in which it would be *possible* to apply a regime of property and contract but in which judges and legislators refuse to do so. That leaves us with two possible ways to defend the efficiency thesis. The first is to insist that the exclusions from PPFC are, indeed, *all* inefficient but justifiable even so by reason of their service to some nonefficiency aim or value. The second is to admit that at least some of the exclusions make sense from the standpoint of efficiency. We doubt that anyone will seriously take the first line, and don't propose to say any more about it. But the second line is tantamount to admitting that not PPFC, but some tasteful confection of PPFC, SON, and WOC is what is efficient—unless there is some significant sense in which the whole confection is identifiably PPFC, a possibility we find ourselves unable to fathom.

It seems, in short, that we have here a case illustrating Wittgenstein's reputed dictum that no rule can determine its own application.[59] The property regime is a set of rules concerning what to do about property; it is not a set of rules concerning what should and should not be property. If the efficiency of property depends on the rules being applied to the right things, then without a new set of rules about *which* things, we can't say anything significant about property's efficiency in general.

b. Composition—Just as all real legal systems exclude some parts of PPFC's possible range from its actual domain, so do they all impose restrictions on the decomposition of possible objects of ownership into parts that can be separately owned. Our own legal system struggles over whether parts of a live human body can be owned by anyone but the owner of the whole body.[60] It has frowned upon the creation of nonpartitionable tenancies in common;[61] the splitting off of alienable easements in gross from the

59. *See* F. KESSLER & G. GILMORE, CONTRACTS 653 (2d ed. 1970); L. WITTGENSTEIN, PHILOSOPHICAL INVESTIGATIONS §§ 84-87, at 39e-41e (3d ed. G. Anscome trans. 1958); L. WITTGENSTEIN, THE BLUE AND BROWN BOOKS 90-91, 97 (1958).

60. *See* Note, *The Sale of Human Body Parts*, 72 MICH. L. REV. 1182 (1974).

61. Clark v. Clark, 99 Md. 356, 58 A. 24 (1904). Tenants in common are each en-

balance of the possessory entitlement to land;[62] the encumbrance of present possessory entitlements with entitlements to future possession that are subject to contingencies that might remain in abeyance for longer than lives-in-being-plus-twenty-one-years.[63] At the same time, as these very examples help to show, our system does permit decomposition very liberally, *including decomposition of the right/privilege coupling that our Hohfeldian specification for property treated as atomic.* Not only may rights/privileges over concrete objects like land surface be legally chopped up into arbitrarily small spatio-temporal bits, but also privileges may be split off from their symmetrical rights, as with nonexclusive affirmative easements (such as rights-of-way); rights may be split off from their symmetrical privileges, as with restrictive covenants and equitable servitudes; powers and immunities may be split off from their symmetrical right/privilege pairs, as with the doctrine of bona fide purchaser under a recording act;[64] and even the seemingly essential PP condition of sole entitlement may be violated, *i.e.*, "undivided" shares of U_X's may be held by tenants in common, and even—if held by a married couple as tenants by the entireties—made nonconvertible into holdings in severalty except by the collective action of both the tenants (or the death of one of them).[65]

As with boundary exclusions, the zones of tolerance for subatomic decomposition all represent the order's acceptance of elements of SON and WOC. If several of us hold nonexclusive privileges (profits-a-prendre) to fish in "your" lake, we are as to that matter in a SON-like state; neighbors in a subdivision covered by a network of reciprocal equitable servitudes (specifically enforceable

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titled to the use and enjoyment of the common property. Partition is a legal remedy for avoiding the potential economic awkwardness obviously implicit in such an arrangement—a judicial division or judicially supervised liquidation and division of the proceeds, resulting in individual ownership of the moieties.

62. *E.g.*, Stockdale v. Yerden, 220 Mich. 444, 190 N.W. 225 (1922); Boatman v. Lasley, 23 Ohio St. 614 (1873). An "easement in gross" is a special, personal privilege to make a particular use of another's land.

63. *See generally* J. GRAY, THE RULE AGAINST PERPETUITIES (4th ed. 1942); R. LYNN, THE MODERN RULE AGAINST PERPETUITIES (1966).

64. Under the typical "notice" or "race-notice" type of recording statute, a grantee or purchaser of property who fails to get his conveyance spread on the records in time is liable to be divested of his title by a later good-faith purchaser who thus has the power of divesting the former's title. *E.g.*, Earle v. Fiske, 103 Mass. 491, 492 (1870).

65. *See* Carlisle v. Parker, 38 Del. 83, 84-85, 188 A. 67, 69-70 (Super. Ct. 1936); Robinson v. Trousdale County, 516 S.W.2d 626, 627-28 (Tenn. 1974). Tenancy by the entireties is a form of co-ownership peculiar to married couples. Assets so held become the sole property of the surviving spouse upon the death of the first to die.

use restrictions) are, as to that matter, in a WOC-like state;[66] tenancy in common is itself an ambiguous compound of SON and WOC—WOC insofar as the law allows none of the tenants to exclude others from the *res* without the latters' consent, SON insofar as the law allows each to use the *res* at will as long as others don't object (even if the reason they don't object is that they don't know).[67]

As with boundary exclusions, the zones of tolerance for subatomic decomposition can be explained either as uniformly inefficient exceptions from the PPFC order, tolerated only because of their service to noneconomic values, or as (at least in some cases) efficient adaptations of the order. As before, we regard the first explanation as too implausible to dwell upon, and the second as tantamount to an admission that whatever the circumstantially efficient order is, it is no more PPFC in principle than it is SON or WOC.

c. Structure—We now suppose—though we haven't a clue as to how it would be done—that both the boundary and composition problems have been solved in some unproblematic way, so that we have comprehensively established both the classes of objects that are and are not appropriate for an efficient PP regime, and the kinds and degrees of decomposition that the regime can tolerate while remaining efficient. We could then, supposedly, define a private property ideal type as follows: There is a determinate class of objects—*i.e.*, of U_x, specified uses of specified things; the objects are not legally subdivisible; each object in the class belongs to a sole owner; each owner has in rem privileges over the object that exactly correspond with his in rem rights over the object—a symmetrical right/privilege. We now address the question whether it is possible to say that such a regime is efficient, even supposing that the "correct" boundaries and composition rules have been chosen.

The problem we face is that of excuses, defenses, and *damnun absque injuria*. Real legal systems all seem to contain nonliability rules of the following types:

(a) General excuses for intentional invasion of rights (*e.g.*, duress, self-defense, necessity, competition, mistake).
(b) The defense of "no proximate cause."
(c) The absence in many or most cases of liability for failure

66. That is, each individual owner may be entitled to obtain or insist upon enforcement of the restriction against all the rest, so that none can be excused without unanimous consent. *See* Berger v. Van Sweringen Co., 6 Ohio St. 2d 100, 216 N.E.2d 54 (1966).

67. *See* McKnight v. Basilides, 19 Wash. 2d. 391, 394-95, 143 P.2d 307, 309 (1943).

to act—even, in some cases, when the non-act is chosen consciously in order to inflict injury on a legally protected interest.

(d) The excuses of "inevitable accident," "accident," and "no malice," each applying in some cases but not others.

The existence of these forms of *damnum absque injuria* means that as a matter of fact there are no classes of objects with respect to which there is *full* symmetry of rights and privileges. They give rise to a wide variety of situations in which I am privileged to use my *X* in a particular way, but have no right so to use it. I can use the *X* to inflict damage on another person without having to pay compensation, but the other person is privileged to resist the injury by interfering with my use, rather than being under a duty to let me be. Suppose, for example, that you attempt to injure me, under the mistaken impression that I am assaulting you. If you succeed, you will not be liable for my injuries, but I am privileged to defend myself. I will not be liable if, in so doing, I injure you. Or take the case of a person having a seizure, who threatens an unintentional injury for which there would be no liability. Again, there is a privilege of resistance on the part of those threatened rather than a duty to submit to injury. The line at which the symmetry of right and privilege is restored is neatly illustrated by the case of *Ploof v. Putnam*,[68] where it was held that the owner of a vessel in distress was not only privileged to trespass on a dock, but had a right that the dock owner not cast the vessel off.[69]

Having found the existence of asymmetry by reason of the existence of privileges without symmetrical rights, we naturally expect also to come upon rights without symmetrical privileges, and of course we do: for example, some of the rights guarded by the law of nuisance and many private rights created by public regulatory law. If running a house of prostitution or a gambling hall is a nuisance, that means that I have a right that you not interfere with my quiet enjoyment of my land by exposing me to the activity, but it does not follow, and it is not true, that I have an equivalent privilege to inflict this experience on myself. Rather than a situation in which I can do it to myself but not to you, while you can do it to yourself but not to me, we are in a situation where no one can do it at all, even when it is arguable that no one else is affected.

68. 81 Vt. 471, 71 A. 188 (1908).
69. *Id.* at 476, 71 A. at 189.

These cases, we may note, are WOC-like, just as the cases of universal privilege to act innocently and non-negligently (or under duress, or in self-defense, or competitively, or passively), despite adverse consequences for another's enjoyment of his things, can be described as pockets of SON. Thus the situation here seems to resemble closely that which we encountered in exploring the boundary and composition questions: As to all three questions, there appears to be a choice between explaining observed deviations from the pure form of PPFC order as all inefficient but justifiable on other grounds, and admitting that without at least some of the deviations the order could not possibly be considered efficient; and since the first line is utterly implausible we are forced to the second, which is tantamount to admitting that the circumstantially efficient order is, in principle, no less SON or WOC than it is PP.[70]

E. *Nondirective Orders Revisited: The Inconceivability of Nonregulatory Efficiency*

We began these reflections by introducing the notion of formal or nondirective orders and offering to develop an analytical method for comparatively evaluating the prima facie efficiency virtues of various species of that genus. By that offer we of course implied that a nondirective order *can be* efficient, more or less. The upshot of the reflections, however, is that our implication was wrong and that there is—can be—no such thing as an efficient nondirective order.

The reason for this nihilistic conclusion is not empirical or technical but mental and conceptual: In the frame of mind in which one sees an order as more or less efficiently adapted to circumstantial facts respecting wants and proclivities, one *has* to see it as *intervention*—as a *regulatory* phenomenon. An efficient order, we have shown, will always contain elements of cognizable nondirective orders—SON, WOC, PPFC (if it, indeed, is cognizable). No doubt others could be invented which would do the conceptual work as well—but in an efficient order these elements will not be

70. This is not to be confused with a conclusion that the actual body of legal doctrine pertaining to property and contract is efficient, or that *all* the observable deviations from the pure form of PPFC represent gropings toward efficiency—a conclusion that is itself extremely implausible. *See generally* Michelman, *Norms and Normativity in the Economic Theory of Law*, 62 MINN. L. REV. 1015 (1978). *See also* Michelman, *Politics and Values or What's Really Wrong with Rationality Review*, 13 CREIGHTON L. REV. 487 (1979); Michelman, *Political Markets and Community Self-Determination: Competing Judicial Models of Local Government Legitimacy*, 53 IND. L. REV. 145 (1977).

combined in accordance with any cognizable rule or set of rules expressible through any short list of parsimonious, axiomatic formulas or principles. The *combination* is and must be ad hoc, deliberately contrived, and from time to time recontrived, to fit the shifting mosaic of wants and proclivities (and technology, and resources, etc., etc.). But to go about the task of continually choosing and combining these pieces of PPFC, SON, and WOC, with a view to maximizing some want-regarding social objective function like total wealth (or total welfare, or per-capita welfare, or equal-per-capita wealth) is, precisely, to be engaged in intervention. The case is not, then, that WOC stands for total regulation, SON for aimless disorder, and PPFC for nondirective order or freedom-under-law. The case is that, taken separately, these are all conceivable as nondirective orders, but mixed together ad hoc they are all ingredients of regulation. Insofar as they have anything whatever to do with efficiency, private property and free contract are species of intervention.