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COASE THEOREM SYMPOSIUM—PART II

THE COASE THEOREM AND THE STUDY OF LAW AND ECONOMICS

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The purpose of this paper is to provide a comprehensive assessment of the Coasian analysis, primarily through an interpretation of the positive analytic meaning and significance of the so-called neutrality theorem, the probative value of its normative message, and its place in the study of law and economics. Among other things, the paper will show that the theorem is a very limited partial-equilibrium proposition which concentrates upon certain variables to the exclusion of others which dominate the actual operation of those included, thereby giving effect to certain variables even while seemingly abstracting from them. Thus, when all the important variables are considered, the thrust of the theorem is shown to be not only incomplete, imprecise and ambiguous, but also reversed.

For the purposes of this paper, the thrust of the Coasian argument is taken to be both of the following:

> 1. Through the definition of property rights and the creation of markets for externalities, opportunities for gains from trade can lead to bargaining and the exchange of rights and thereby to the internalization of the externalities; i.e., *property rights and the market as a solution for externalities;*[1]
>
> 2. The allocation of resources is independent of property rights and liability rules, i.e., *the allocative neutrality of rights or the Coase theorem proper.*[2]

The assumptions explicit and implicit in the Coase argument are fairly well-known and stringent. They include the conventionally

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1. W. Samuels, *Welfare Economics, Power, and Property,* in Perspectives of Property 204, 205 (Wunderlich & Gibson Jr. ed. 1972).

2. *Id.* at 128ff, 131, 132.

recognized (e.g., zero transactions costs, clearly defined and transferable rights) as well as some not always explicitly stated[3] (e.g., zero income elasticity of demand for modification of the externality and for the commodity associated with the externality, absence of inflexible capital constraints, inclusion of all implicit or opportunity costs in firm decision making including side payments, etc.). In the discussion below, additional considerations are raised which further severely constrain the theorem and from which the Coasian analysis effectively (albeit with debilitating results) abstracts by assumption.

The Coase theorem applies certain facets of Pareto optimal market solutions to externalities. In fact, the language and reasoning used to derive the Coase theorem, namely, maximizing the value of production, taking advantage of gains from trade, market efficiency and the like, are precisely that of Pareto optimality. The Coase theorem, following the reasoning of taking advantage of gains from trade and market adjustments leading to maximization of the value of production, takes a very narrow characteristic of equilibrium and builds upon it with very ambiguous positive and normative significance. Among other things, both Pareto optimality and the Coase theorem (whatever their logical relation) neglect the driving force of income and wealth distribution in economic activity and the power play over income and wealth distribution that takes place, including the manipulation of property and liability rules for distributional effects and the fact that manipulative capacity is a partial function of the status quo power structure.

Hence, the allocation of resources contemplated by the theorem is not a unique allocation, whether deemed Pareto optimal or not. The allocation of resources is a function of and is specific to the power structure that gives rise to it.[4] The allocation of resources is from within the Pareto-domain or Pareto-set and is a function of the power structure, particularly the structure of rights.[5] Property rights con-

3. A Randall, *On the Theory of Market Solutions to Externality Problems,* Oregon Agricultural Experiment Station Special Report 351 (1972); A. Randall, *Market Solutions to Externality Problems: Theory and Practice,* Am. J. Agricultural Econ. 175 (1972).

4. In this paper the same definitional system is used as in Samuels, *supra* note 1, at 63-67. Specifically, by *power* is meant (1) effective participation in decision making, (2) the means or capacity with which to exercise choice (participate in decision making) e.g., property, position, rights in general. By *coercion* is meant the impact of the behavior and choices of others upon the composition of one's opportunity set, a process which is reciprocal or mutual. It includes both injuries and benefits visited through the action or choices of others (accordingly, *externalities* may be defined as the substance of mutual coercion).

5. "The positions that qualify as Pareto-optimal depend always on the rules that constrain individual behavior, and any change in the set of rules will change the boundaries of the Paretian set." Buchanan & Stubblebine, *Pareto-Optimality and Gains-from-Trade: A Comment* 39 Economica 203, 204 (1972). On multiple local maxima, *see* Baumol, *On Taxation and the Control of Externalities,* 62 Am. Econ. Rev. 307, 321 (1972).

strain the field of feasible outcomes, define the Pareto-domain,[6] and govern the allocative outcomes' substantive composition. A change in the structure of rights would bring about a change in the (optimal) allocation of resources. The allocation of resources contemplated by the Coase theorem is a function of the rights structure, partially because the cost-price structure built into the cost functions (used by Turvey to articulate the Coase theorem[7]) is itself a function of the rights structure. Moreover, the rights structure is a partial function of the law.[8] The opportunities for trade contemplated by the Coase theorem and its underlying argument are therefore a function of the power and rights structure,[9] and the maximization of the value of production is a function of, and gives effect to, the power and rights structures.[10] The allocation of resources contemplated by the Coase rule is in this fundamental respect *not* neutral with regard to legal rights: market solutions are a function of rights and rights are a partial function of the law. The Coase rule deals with liability rules, but insofar as liability rules and changes in liability rules govern the power and rights structures, the allocation of resources is not neutral with regard to liability rules or rights in general. What becomes important, accordingly, is the manner in which the identification and appropriation of rights including liability assignments is undertaken and the consequent distribution of rights (wealth).[11] Allocation is specific to the underlying rights structure which gives rise to it.

Not only does the Coase theorem neglect the driving force of income and wealth distribution upon the dynamic structure of legal rights, but it almost totally neglects the absolute importance of differing *initial* income and wealth positions. But the underlying or initial distributions,[12] and *the legal rights on which they rest at least in part,* do govern the specific allocation results generated by the rule, e.g., by defining the bounds of the Pareto domain or the Edgeworth

6. *See, inter alia,* d'Arge & Schulze, The Coase Proposition, Wealth Effects, and Long Run Equilibrium, 1, 7 Working Paper No. 19, Aug. 1972, Program in Environmental Economics, University of California, Riverside; A. Randall, *Welfare, Efficiency, and the Distribution of Rights,* in Perspectives of Property *supra* note 1, at 25, 28.

7. R. Turvey, *On Divergences Between Social Cost and Private Cost,* 33 Economica 309 (1963).

8. W. Samuels, *Welfare Economics, Power, and Property,* in Perspectives of Property, *supra* note 1, at 127, 131, & *passim.*

9. *Id.,* at 135-136.

10. *Id.,* at 136-137.

11. *Id.* The argument which calls for the complete and clear specifications of rights—which will be further considered below—is inadequate, at least inasmuch as different specifications of rights and different assignments of rights produce different allocations of resources. This is one of the central arguments of this paper.

12. What Musgrave calls primary redistribution; *see* R. A. Musgrave, *Pareto Optimal Redistribution: Comment,* 60 Am. Econ. Rev. 991 (1970).

box. Moreover, rights are not neutral in that respect alone, but also in regard to the differential impact of, say, liability rules upon allocation given differing and unequal income, wealth and liquidity distributions or positions. Change the initial distribution of entitlements, i.e., property and other rights, and the allocation of resources will be changed. An individual's ability and willingness to pay or to receive certain prices in externality internalizing transactions under the Coase theorem tend to be a function of his wealth position.[13] Quite aside from considerations of equity in regard to distributional consequences, those consequences and the corresponding allocative results will be a partial function of the initial distribution,[14] or status quo point as it has been sometimes called.

A subsidiary corollary, which the Coase theorem shares with Pareto optimality reasoning generally, concerns the optimality of doing nothing, i.e., the argument that the nonexistence of a transaction or other adjustment may be the optimal solution if and when the parties are already in optimal positions, as when the costs of an adjustment outweigh the gains thereof. One problem with this, of course, is that it directly reflects the fundamental tautology[15] of Pareto optimality which makes both transactions and the absence of transactions, whichever is the status quo, presumptively optimal. But the critical point here is that the optimality of any transaction or of doing nothing is always a partial function of the status quo power structure and the cost-price structure to which it gives effect. Adjustments, transactions and solutions are always at least partially specific to those structures. A *change* in the cost-price structure, resulting from a change in the power structure through a change in relative rights, would lead to *different* adjustments, transactions and solutions being optimal or within the Pareto-domain or Edgeworth box. A change in the power structure might mean that doing nothing would no longer be optimal, and vice versa. There is no unique relevant optimum.

The allocation contemplated by the Coase theorem is therefore a partial function of antecedently determined rights, and the theorem must be comprehended in a general equilibrium context in which

13. G. Calabresi & A. Melamed, *Property Rules, Liability Rules, and Inalienability: One View of the Cathedral*, 85 Harv. L. Rev. 1095 (1972).

14. Distributional consequences of one period become the initial distribution of the next with the allocative consequences discussed in the text. Liability rules have economic significance in terms of the initial distributions of any period and impact on the distributional consequences of that period and thereby on the initial distributions of the next period. Where the rule affects the marginal utility of money, it affects resource allocation. Schmid, *Nonmarket Values and Efficiency of Public Investments in Water Resources*, 57 Am. Econ. Rev., Papers & Proc. 158, 164 (1967).

15. Samuels, *supra* note 1, at 75-77, & *passim*.

rights are developed and changed and in which rights and changing rights have allocational impact.

The Coase theorem, again not unlike Pareto optimality reasoning generally, is usually advanced in a laissez faire context assuming and emphasizing the propriety of allocations made through market adjustments. In such use the theorem tends to reinforce status quo rights and power structures,[16] to reinforce selected elements thereof vis-a-vis other elements,[17] or to obscure the importance of antecedently determined rights in governing the substance of externality solutions and resource allocation.[18] But an opposite use of the theorem and of Pareto optimality can be made to argue in favor of different rights structures and/or different income and wealth distributions. Admittedly this may be very difficult. There seems to be something about the inner logic of Pareto optimality (and its underlying premise of consumer sovereignty) that reinforces existing rights by taking them for granted. Yet, if the central thrust of the Coase theorem is allowed, namely, the neutrality of rights in regard to allocation, then it would follow that a change in liability would not adversely affect efficiency (all other things being equal—which this paper shows to beg the critical variables involved, of course), and that goals other than efficiency can be advanced through tort law without interfering with allocative goals.[19]

Insofar as the allocation is a function of the rights structure, the interpretation of the Coase theorem that has neutrality connote *identical* resource allocations is wrong. Yet the interpretation of the Coase theorem that has neutrality signify only *equally efficient* but different resource allocations says nothing that Pareto optimality does not already say. Coase theorem allocations may or may not be efficient in terms of the Paretian or any other optimality criterion, but they are not independent of rights, for legal rights partially govern market behavior from which emanate the market forces governing resource allocation, thereby giving effect, *inter alia*, to the underlying structure of legal rights.

16. K. Arrow, *The Organization of Economic Activity: Issues Pertinent to the Choice of Market versus Nonmarket Allocation*, in The Analysis and Evaluation of Public Expenditures: The PPB System, A Compendium of Papers Submitted to the Subcommittee on Economy in Government of the Joint Economic Committee, 91st Cong., 1st Sess. 50, (1969); Samuels, *supra* note 1, at 99ff; Samuels, *In Defense of a Positive Approach to Government as an Economic Variable*, 15 J. Law & Econ. 453, 457-458 (1972).

17. Samuels, *supra* note 1, at 102 & *passim*.

18. Maximization of the value of production is a function of and gives effect to the status quo power structure and the cost-price structure derived therefrom. *See* references cited note 16, *supra*.

19. Peacock & Rowley, *Pareto Optimality and the Political Economy of Liberalism*, 80 J. Pol. Econ. 476 (1972)

THE COASIAN ANALYSIS AND THE NONNEUTRALITY OF RIGHTS AND LIABILITY RULES

The Coase theorem asserts a relationship between rights and resource allocation. Given a narrowly constrained character of the relationship articulated, the questions arise as to (a) what are the full range of relationships of rights to resource allocation, and conversely up to a point, (b) what governs the allocation of resources. The Coase theorem points to one connection between rights and allocation when, as a matter of fact, there are several, including ones that are far more important for both analytical and policy purposes than that posed by the theorem. This subsection will explore the major relations of rights to allocation, thereby giving a somewhat more complete answer to the first question than is given by the theorem, and in so doing answer the second question insofar as rights govern the allocation of resources. In addition, the reciprocal character of externalities will be considered in light of the foregoing.

A. *On the Economic Significance of Rights*

1. *The Importance of Antecedent Rights.*

The most important relationship of rights to resource allocation is given by the proposition that allocation is a function of rights; or, more elaborately, that the allocation of resources, nominally or proximately a function of market demand and supply forces, is less proximately but no less importantly a function of the weighting of preferences by income and wealth distribution. This weighting is ultimately a partial function of the assignment and distribution of legal rights. The relevant economic outcomes, namely, the substance of optimality conditions and of resource allocation, are a partial function of the structure of rights governing the structure of opportunity sets from within which choices are made. The domain of the Edgeworth box and of the Pareto-set are both governed by the structure of legal rights, and the outcome of market activity is *pro tanto* a partial function of, and specific to, the structure of legal rights. Looking at the same point from a different facet, the establishment of any efficient situation or solution requires an antecedent specification of the rights (protected interests) in terms of which efficiency is determined.[20] Efficiency is always a matter of market position, as well as the more-or-less self-chosen results from within extant opportunity sets,[21] and market position is in part a function of the structure of

20. Randall, *supra* note 6, at 28; *cf.* Samuels, *supra* note 1; Regan, *The Problem of Social Cost Revisited*, 15 J. Law & Econ. 427, 429 n. 5 & *passim*.

21. The composition of a particular opportunity set is to be distinguished from the total structure of opportunity sets. One general equilibrium dualism is indicated by the proposition

legal rights. Indeed, rights produce optimal solutions because optimal solutions are defined in terms of an equilibrium of choices based upon extant rights.[22] Therefore, in a sense, they are also defined in terms of an equilibrium of rights, but always in terms of antecedently specified rights.[23]

Such rights enable participation in the economic decision making process. Without rights, participants or potential participants are not able to act upon (for example, demand and/or supply) their preferences and capabilities. Without rights, their status as economic actors is an empty set; which is to say, the content of opportunity sets, each of which marks the decisional space at a point in time for the participant involved, is a partial function of rights, and the overall structure of opportunity sets is a partial function of rights. The working rules of property and liability law, *inter alia*, and their application through the legal process, determine the relative access to and use of property by the various participants, as well as their relative exposure to the participation of others. Different rights assignments mean different structures of participation in economic decision making.

Thus in their recent survey of the property rights literature, Furubotn and Pejovich stress the importance of the structure of property right assignments for socio-economic relations, the structure of opportunity sets and the allocation of resources:

> . . . different property rights assignments lead to different penalty reward structures and, hence, decide the choices that are open to decision makers.[24]. . . "property rights" tend to influence incentives and behavior . . . A central point . . . is that property rights do not refer to relations between men and things

that the opportunity set of an individual depends upon the total structure of power and operation of mutual coercion *and* the total structure of power depends upon the decisions made by individuals from within their opportunity sets at any point in time and over time (and perforce the operation of mutual coercion). *See* Samuels, *The Political Economy of Regulation: Public Utilities and the Theory of Power*, in an untitled volume 6 & *passim* (Milton Russell ed., to be published by Southern Illinois University Press). Thus choice from within opportunity sets is to be distinguished from the factors and forces governing the aggregate structure of opportunity sets and thereby the size and composition of individual opportunity sets.

22. J. Buchanan, *Politics, Property, and the Law: An Alternative Interpretation of Miller et al v. Schoene*, 15 J. Law & Econ. 439, 452 (1972); *cf.* Samuels, *supra* note 16, at 457-458.

23. "Pigou goes on to say that if self-interest does promote economic welfare, it is because human institutions have been devised to make it so." Coase, *The Problem of Social Cost*, 3 J. Law & Econ. 1 (1960), at 29. The point, of course, is that whatever self-interest is maximized is a function of and specific to the institutions that guide its realization, and the recommendatory force of the self-interest results is in part dependent upon the propriety of the institutions which produce those results. The role of antecedently specified rights is to give effect to the choices embodied in the institution which are echoed in the allocative results through the rights.

24. Furubotn & Pejovich, *Property Rights and Economic Theory: A Survey of Recent Literature*, 10 J. Econ. Literature 1138 (1972).

> but, rather, *to the sanctioned behavioral relations among men that arise from the existence of things and pertain to their use.* Property rights assignments specify the norms of behavior with respect to things that each and every person must observe in his interactions with other persons, or bear the cost for nonobservance. The prevailing system of property rights in the community can be described, then, as the set of economic and social relations defining the position of each individual with respect to the utilization of scarce resources.[25]

Rights, it should be clear from this, are *not* neutral with regard to resource allocation. It is on the basis of rights that economic actors are able to influence the allocation of resources, i.e., rights govern the identity and positions of participants with respect to the utilization of scarce resources. Where a person has a right which others must respect, the others are perforce less well situated, and the right holder more well situated, with regard to influencing allocation.[26] Thus Furubotn and Pejovich continue as follows:

> The value of any good exchanged depends, *ceteris paribus,* on the bundle of property rights that is conveyed in the transaction. . . . Consequently, a change in the general system of property relations must affect the way people behave and, through this effect on behavior, property right assignments affect the allocation of resources, composition of output, distribution of income, etc.[27]

The Coase theorem, which the authors also survey, operates only within this general framework, i.e., it is juxtaposed to and limited by this more general principle, although the relative position of the two are not specified by them.[28]

With respect to this fundamental and ubiquitous impact of rights on allocation, the Coase theorem actually establishes a tautological position by saying that allocation is independent of rights with the assumption that there is no effect of differential liquidity and wealth distribution. Thus, Furubotn and Pejovich echo Demsetz[29] and others by having the theorem stipulate that "*the composition of output* in the economy is independent of the structure of property rights, except insofar as changes in the distribution of wealth affect demand patterns."[30] But wealth distribution is itself a partial function of legal rights; thus the theorem really says that allocation is independent of

25. *Id.* at 1139.
26. Randall, *supra* note 6, at 30.
27. Furubotn & Pejovich, *supra* note 24, at 1139.
28. *Id.* at 1143.
29. H. Demsetz, *When Does the Rule of Liability Matter?* 1 J. Legislative Studies 15 n. 3.
30. Furubotn & Pejovich, *supra* note 24, at 1143.

rights except insofar as wealth distribution is a function of rights. Insofar as allocation is a function of wealth distribution, however, allocation is a function of rights.[31] It will be noticed further that (a) the assumption which rules out income and wealth distribution consequences makes the Pareto rule meaningless, since distributional effects are major factors with regard to increases and reductions in opportunity sets; (b) if one objectively analyzes the full range of consequences of rights and liability rules, without attempting a chain of reasoning by which to support the market, one would recognize that distributional effects *are* important, e.g., as the basis of the initial rights and opportunity set structure of the next period; (c) the Coasian-Paretian analysis, once again, neglects both the real world of power play over rights and liability imposition and the use of government in regard thereto (changes in rights due to power play with distributional consequences as the intended-desired goal, producing changes in allocation); and (d) liability rules can be used to effectuate redistribution as such.

Just as there is no unique Pareto optimum there is no unique structure of rights. Given the structure of rights there will be or tend to be an optimal solution specific thereto. Change the structure of rights and there will be or tend to be a changed solution. Calabresi and Melamed, however, have recently written that

> Economic efficiency asks that we choose the set of entitlements which would lead to that allocation of resources which could not be improved in the sense that a further change would not so improve the condition of those who gained by it that they could compensate those who lost from it and still be better off than before. This is often called Pareto optimality.[32]

They go on to discuss the minimization of costs and the maximization of the value of output, the "highest product for the effort of producing."[33] But there is no such unique allocation of resources, because there is no such unique set of entitlements (rights assignments). Any operative conclusion as to the Pareto optimality of any such situation presumes *a priori* the optimality of the set of entitlements either extant or imagined (or projected). *Rights specify efficiency, efficiency does not specify rights.* There are many sets of entitlements which would lead to Pareto optimal allocations. As Schmid has put it, property rights must be "first established to say

31. This is not unlike saying that the argument of the Coase theorem assumes the truth of the theorem. Regan, *supra* note 20, at 435. Or that the theorem is true only to the extent that it is true, which is not saying much.

32. Calabresi & Melamed, *supra* note 13, at 1094.

33. *Id.* at 1094.

who counts. Depending on the property rights, there are all kinds of Pareto-better trades possible, which would produce a whole range of price sets . . . and other performance results,"[34] including resource allocation and output composition. Allocation will always be a function of rights even where certain facets of the market follow the Coase theorem, so that allocation is also influenced by "the fact that a cost is incurred by B when he pays an indemnity to A in order to produce another unit of output, *or* when B foregoes a bribe by A designed to induce B to limit production."[35]

Moreover, not only are the rights which count the antecedently determined rights (both where status quo rights are taken for granted and where the rights contemplated are the preferred rights in the mind of the analyst or policy maker), but there are sound, traditional, even conservative reasons for making a person's entitlement *not* dependent or contingent on his having to pay others to refrain from depriving him thereof. This point has been well put by Tribe in a discussion of the Coasian analysis:

> . . . the *reasons* for recognizing in person X an entitlement to B would in all likelihood be incompatible with making X's enjoyment of B contingent upon his having to pay others to refrain from depriving him of B, *even if X were given enough resources to make such bribes.* For X's sense of self and of autonomy may be intimately bound up not just with the bare fact of having B . . . but with the *shared social and legal understanding* that B belongs to X ab initio, as a matter of right. And to the extent that this is so, the Coasian analysis would fail even if it were ultimately to assign B to X on grounds of efficiency, for being "assigned" B *on such grounds* cannot satisfy the particular need met by a recognized *right* to B in the special sense developed here.[36]

This reasoning is very powerful, although it too must be qualified by the aforementioned reasoning to the effect that rights (property) cannot properly be assigned on the grounds of efficiency[37] without presuming whose interests should count (i.e., making interpersonal

34. Schmid, *supra* note 14, at 164.

35. Furubotn & Pejovich, *supra* note 24, at 1143.

36. Tribe, *Policy Science: Analysis or Ideology?* 2 Philosophy & Public Affairs 66, 88-89 (1972). The relevant section of Tribe's article should be read in its entirety. This line of reasoning carries with it the very important implication that stated prejudices for established rights (*See, e.g.*, Buchanan, *supra* note 22, at 452) are impossible of rea'ı ;ation and, in particular, are selectively applied. In regard to the ambiguity of Pareto optimality (and, by extension, the Coase theorem) on this point, *see* Samuels, *supra* note 1, at 78-103. On the theory that rights cannot exist without this dependent or contingent element (pretenses to the contrary), *see* Samuels, *The Economy as a System of Power and Its Legal Bases: The Legal Economics of Robert Lee Hale*, U. Miami L. Rev. forthcoming (mimeographed, 1970).

37. Tribe, *supra* note 36, at 86, 87, 88, 89.

utility judgments *and* valuations); since, again, efficiency is a function of rights and not vice versa. Tribe does say that "the very concept of a right entails certain assumptions as to the *reasons given* for its recognition,"[38] but Paretian efficiency cannot be the reason without circular reasoning (following upon the analyst's choice of interests to be protected and counted). And, of course, the introduction of a right (i.e., to facilitate market solutions) is itself non-Pareto optimal in regard to those whose rights are inhibited by the new right. Rights are relative to other rights as well as to the law, and the introduction of a new right ipso facto means the lessening of another right(s).

This brings me to the ambivalent and highly selective treatment given by the Coasian analysis to rights. If rights are relative and contingent, then why are rights changes in accordance with the Coasian rules less objectionable than in accordance, say, with the goals of egalitarian radicals? One is no more immediately paternalistic than the other. The Coasian answer[39] is that its analysis is necessary in order to have the market operate. In this case, the Coasian analysis is but an attempt to lend the credo of science to normative justification of the market and its fantasies of markets everywhere, and to have everything seen in that light. The Coase theorem, whatever its tenuous relations to science and to reality, is ideology at one of its most esoteric levels.

One example of the combination of the points made in the three paragraphs immediately preceding is the tendency to evaluate the prospective assignment of a right on the basis of cost-benefit considerations.[40] This evaluation assumes the status quo cost-price structure emanating from the status quo rights structure in order to evaluate a legal change, when the legal change in question has to do with the very rights governing the costs that are to be realized in the market. The status quo rights structure gives effect to only one answer to the question of whose interests should count as costs to others; and cost-benefit analysis, by using the costs based on the status quo rights, can only tend to give further effect to those rights, when prospective legal change involves the very propriety of existing rights. Either the existing rights will be affirmed and reinforced or they will be changed through the analyst's introduction of some additional normative element (deliberately or not). The issue in evaluting rights is not how or whether rights measure up to costs but the old versus the new rights, and the *different* cost structures to which they contribute.

38. *Id.* at 101 n. 99.

39. Buchanan, *supra* note 22, at 452.

40. McKean, *Products Liability: Implications of Some Changing Property Rights*, 84 Q. J. Econ. 613, 621 (1970); *see* Samuels, *supra* note 16, at 454.

There can be Pareto optimality both before and after a change in rights. But using cost-benefit calculations tends to bias the analysis toward existing rights or rights given an equivalent status. The same is true for certain aspects of constitutional law.[41] Throughout all these considerations is the overriding principle that the allocation of resources is a function of the identification, assignment and distribution of rights (wealth). Allocation is not independent of rights. (On costs as a function of rights, see the second subsection below.)

2. Rights, Rights Equivalents and the Rights Formation Process.

It is clearly beyond the possibilities of this paper to attempt a comprehensive model of rights or of the development or dynamics of rights, but there are several matters which bear on a meaningful assessment of the Coase theorem. First, with regard to the semantics of policy, the distinction between rights as claims, as legally recognized claims, and as legally protected claims has to be kept in

41. Mishan thus comments that

> For any Pareto improvement under the L law is one which must begin from the distribution of welfare as determined by reference to the existing amounts of spillover in the economy. . . . Even if negotiation costs fall over time . . . the mere fact of the spillovers having grown over time will make any worthwhile Pareto improvement less likely. For the effect of maintaining L law for some time is to permit the growth of spillover-creating industries, and perhaps to allow some industries to flourish which would not have come into being at all under an L law. Eventually, the numbers using the products of such industries, the numbers employed in them, the wealth of the owners, and the power and influence of the managers, combine to create a formidable interest that is as difficult to oppose on economic principles as it is difficult to dislodge by political means. E. Mishan, Cost-Benefit Analysis, (Praeger, 1971), at 358-359.

The late Robert L. Hale wrote that the law formally gives protection to the property of some persons against the coercive acts of others.

> Against such coercion, since it is not recognized as stemming from government, the Constitution by itself affords no protection. But this coercive power of the others is part of the liberty and property which the Constitution does protect against governmental action, and the legislation which curtails it is undeniably governmental action. Therefore, while those who are deprived of liberty or property by the coercive power of other private persons can make no appeal at all to the Constitution for protection, those who deprive them of their liberty or property can involve it, in the very name of liberty and property, to preserve their power to deprive others of these same things. R. Hale, *Freedom through Law,* 132 (1952).

This is a good statement of the superior position of established rights, e.g., of property, and of why private interests seek government protection—all of which is obscured by the Coase theorem. It is not enough to say that such relations are reciprocal (as does the Coasian analysis), for the distribution of property is unequal or asymmetrical and, moreover, the specific issues in contention do not arise symmetrically, i.e., the different parties are not equally endangered: Alpha's constitutional protection to exercise coercion against others may not be at issue but legal control of Beta's may be, the policy question always being the *structure* of mutual coercion. On rights and other equivalents, e.g., regulation, see the next subsection in the text. Hale has an extensive analysis of inequality as a function of law (which is also obscured by the Coasian analysis); *see* Samuels, *supra* note 36, at 94ff.

mind. This has to do primarily with the dynamics of the rights formation process, which will be touched upon below. At this point, it should be clear that rights are relative both to legal limitations (not all of which are marketable, by any means) and to changing market forces (the value of a right is a function of discounted market income, and the value and therefore the right is exposed to the play of market forces). Thus even though legal protection has very limited economic significance,[42] it obviously is better to have one's interests protected as rights than not to. This is something which the Coase theorem tends to confuse: if rights do not count, then why do people want them? Rights have to be comprehended in a dynamic general equilibrium system of power, opportunity sets, choice from within opportunity sets and mutual coercion.

Second, the theorem is unsatisfactory in regard to the entire matrix of legal bases of participation in the economic process. Many bases other than nuisance liability rules and generalized property rights are neglected by the theorem or by the analysts. There are many common, statutory, administrative and constitutional law bases of rights other than nuisance liability and property laws, such as the law of contracts and of business organization, caveat emptor, replevin, strict liability to the consumer, adhesion contracts, remedies, privity (standing) and burden of proof.[43] In a general equilibrium system of rights and opportunity sets, *all* rights of economic significance have to be included. The theorem is incomplete in regard to the totality of legal factors of economic significance that govern exposure to the power of others. Change of these legal factors will affect the structure of externalities, the structure of externality solutions through the market, and the allocation of resources, as well as the distribution of income and wealth.

Third, one of the major errors of the Coasian analysis, one which is directly reflective of the laissez faire, noninterventionist tenor of the usual Coasian discussion, is that it neglects the fact that government regulation is the functional equivalent of property rights. Perhaps the

42. Thus, for example, increasing the cost of something in the market through creation of a right protecting an interest (see below) may price the product out of the market or involve fewer sales because of demand elasticity and therefore less protection or realization of the interest than without the creation of the right, *ceteris paribus* other rights enabling and structuring participation in the market. Economic significance is partially a matter of the law and partially a matter of market conditions, but always a matter of how individuals (not presumptively reasoning analysts) define their own interests. This is also a good example of what I elsewhere call a general equilibrium dualism, namely, that market forces are a function of rights *and* that rights or the value of rights is a function of market forces. Samuels, *supra* note 21.

43. *See* Samuels, *supra* note 1, at 139-140 & *passim;* and Calabresi & Melamed, *supra* note 13, at 1122 n. 62 & *passim.*

word "neglects" should be replaced by "rejects," because, as has been seen above, the Coasian analyst is concerned lest government regulation impinge upon efficient solutions defined in terms of existing (or hypothesized) rights. Here the Coasian analyst is allowing a normative preference to obscure a positive fact, for regulation is functionally equivalent to rights in governing the terms of access to and use of what one comes to call one's property. Participation in the economy is a function both of what are identified as property rights *and* of other phenomena such as regulation. Indeed, the distinction ultimately breaks down inasmuch as what is thought of as rights are themselves a partial function of *past* regulatory actions of government. Thus when a pollution control board sets standards, it is, rightly or wrongly, providing the functional equivalent to establishing rights insofar as the creation, identification and assignment of market opportunities is concerned. On the one hand, there is more to the world of power than what comes to be called "rights"; on the other, setting standards is one way of giving legal effect to someone's property-right claims. A property-right equivalent has been created, when it has become important or valuable to do so (and which could not have been readily anticipated, as required by the Coasian notion of fully and clearly defined rights. Regulation, as a property-right equivalent, is one way of resolving that problem, though conservatives fail to see it.) The neglect of this role of regulation is but one example of presumptive optimality reasoning. To say that someone may "over-estimate the advantages which come from governmental regulation,"[44] or that government regulation may go "too far,"[45] is to recognize only rights per se (vis-a-vis regulation); and to presume the propriety of existing rights is thereby to presume in favor of the existing law of property as opposed to a prospective change in the law.[46]

Fourth, what this means is that the Coasian analysis (and that libertarianism which defines freedom in terms of no change through law)[47] neglects[48] the fact that there is no once-and-for-all-time rights creation,[49] but rather a continuing process of legal rights evolution. The process of determining legal rights is joint and/or contemporaneous with all other activity. The legal framework of the market is

44. Coase, *The Problem of Social Cost*, 3 J. Law & Econ. 18 (1960).

45. *Id.* at 28.

46. Samuels, *Interrelations between Legal and Economic Processes*, 14 J. Law & Econ. 435 (1971).

47. *See inter alia*, B. Leoni, *Freedom and the Law*, (1961).

48. Or only shows its normative and nondescriptive character.

49. *Compare* Buchanan, *supra* note 22, at 452, *with* Samuels, *supra* note 16, at 456 & *passim*.

dynamic and not static,[50] whether one likes it that way nor not.[51] What is commonly called intervention (since government is present *ab initio,* i.e., in already existing rights) is only a change in the interests to which government will lend its support.[52] It is only one episode in the historic process, neglected by the Coasians,[53] wherein relative rights are worked out. Rights are like prices. They are episodic resting places in the play of market and other forces, including the legal process. This may not be congenial, but that is the way it is, normative fantasizing notwithstanding. Those, then, who argue that regulation (e.g., setting pollution standards—for which this should not be read as a brief) distorts the free market, are only giving effect to the antecedently (pre-regulation) specified rights, when the central policy issue is precisely that rights pattern (and the accompanying cost structure) versus the new rights pattern (and its accompanying cost structure).[54]

In light of the earlier discussion, the Coasian analyst is not consistent in this matter. The Coasian analyst both extols existing rights and injects his own contemplated rights changes, though not always recognizing either the fact or the consequences thereof for other rights. The juxtaposition of creating property rights, so extolled by them, and regulation, so denigrated by them, is improper analytically; though much of the analysis is intended to operate on that basis and to function to abort environmental-protection regulation other than through the creation of property rights and markets for externalities. Whatever one thinks of the correct or desired strategy(ies) for environmental protection, the distinction between rights and regulation is false. Rights are changed through creating new rights, explicitly identified as such, and through regulation. One may be perceived as more congenial than the other, but they are functionally equivalent for present purposes. To hold otherwise is analytically improper, although it has its role in legitimizing the market (with the performance of the role having its own distinctive paternalistic character).

One of the conclusions to which the foregoing leads is that, whatever one thinks of government or of the particular things that particular governments do, government is not superfluous and redun-

50. Samuels, *The Classical Theory of Economic Policy,* 126-160 (1966).

51. Samuels, *supra* note 16, at 458.

52. Samuels, *supra* note 46, at 441-442 & *passim.*

53. Samuels, *supra* note 16, at 456 & *passim.*

54. On the general equilibrium openendedness of coupling ecological and socio-economic factors, *see* Samuels, *Ecosystem Policy and the Problem of Power,* 2 Environmental Affairs 580 (1973).

dant. The very process of rights determination (as clear as rights can be or are) is a continuing and broad phenomenon, though the Coasians would have us believe, or pretend, otherwise. Government is not irrelevant to resource allocation, nor are rights; and a positive approach to the roles of government and of rights, including regulation, in regard to resource allocation[55] would, *inter alia,* show the limited positive and limited and ambiguous normative significance of the Coasian analysis, however much one tended to concur with their general normative position.[56] In these matters, the Coase theorem is, again, more a doctrine than a scientific theorem.

3. Costs and Rights.

A further principle which is both more fundamental and more universal than the Coase theorem, but which is ignored and obscured by the Coasian analysis, is that costs are a partial function of rights.[57] The Coase theorem takes costs as given, but costs themselves are a function of rights; that is to say, rights help govern whose interests are made a cost to others. The costs actually registered in the market are from a wide range of possibilities. The cost-price structure is a function of and specific to the opportunity-set structure between individuals and to the choices made from within opportunity sets by individuals. The opportunity set structure is a function of the power structure and mutual coercion, so that the costs registered through the market are a partial function of the rules and rights governing the access to and use of power (property). Costs are ultimately a partial function of legal arrangements.[58] As Tideman has put it, "Social decisions about property rights can be analyzed as decisions as to which costs will be compensated and which ones will not . . . the most controversial questions of public policy can be stated usefully as questions of what losses should go uncompensated."[59] Costs are partially a function of and specific to the power and rights structures.[60] Therefore, inferences made with respect to rights or to

55. Samuels, *supra* note 1, and *supra* note 16.

56. Samuels, *supra* note 16, at 459.

57. This principle is analyzed and its implications explored in W. Samuels & A. Schmid, *Costs and Power* (mimeographed, 1972).

58. McKean, *supra* note 40, at 617; Pearce & Sturmey, *Private and Social Costs and Benefits: A Note on Terminology,* 76 Econ. J. 152, 153, 156, 157.

59. T. Tideman, *Property as A Moral Concept,* in Perspectives of Property *supra* note 1, at 202, 203. *Cf.* Mishan, *A Reply to Professor Worcester,* 10 J. Econ. Literature 61 (1972). These include Mishan's amenity rights (E. Mishan, *The Costs of Economic Growth* (1967)) and Calabresi and Melamed's moral costs (*supra* note 13, at 1102, 1112ff).

60. Coase quotes one case as follows: "Without smoke, Pittsburgh would have remained a very pretty village." Coase, *supra* note 23, at 20. Such a statement reverberates with problems of power structure and of whose costs count, as in industrialization versus nonindustrialization.

policies affecting rights, which are based on market costs, give effect to the rights on which the costs are themselves based. Similarly, maximization of the value of production is always in terms of the costs, which are given effect in part through legal rights governing whose interests are to count as costs to others. To evaluate costs and benefits in terms of the maximized value of production is to reason circularly to give effect to already extant costs and the rights reflected or given effect therein.[61]

The costs used by the Coase theorem, e.g., with regard to the marginal equivalences, are costs that are themselves a partial function of rights.[62] Yet the theorem would have it that allocation is independent of rights. For the Coase theorem, despite its silence and/or negativism, the existing structure of rights, through costs, antecedently influences the social decision as to which harms are the most serious and the economic desirability and feasibility of various alternatives,[63] and ultimately the allocation of resources, even with zero transaction costs.

The initial article by Coase (echoed in the literature in this regard) considered rights as factors of production. Yet, curiously, the effective thrust of the theorem is that rights are not factors of production, since allocation is independent of rights. And, of course, the subsequent elaboration and defense of the theorem has tended to take rights as given. Thus Demsetz, in explicating and defending the Coase theorem, has written that

> The rule of liability that is chosen can have no effect on his decisions because the owner of such a firm must bear the interaction cost whichever legal rule is adopted. The cost interdependence is a technical-economic interdependence, not a legal one.[64]

This is not true, either practically or theoretically. Demsetz himself, in an earlier article on property rights, recognized that costs are a partial function of rights, inasmuch as the law helps determine which costs, out of a range of possibilities, become operative as rights:

> It is clear, then, that property rights specify how persons may be benefited and harmed, and, therefore, who must pay whom to modify the actions taken by persons. The recognition of this leads

The answer, positively or normatively, is not simple; but the costs that are effectuated in the market are a partial function of the law.

61. *See* Coase, *supra* note 23, at 15-16, 40.

62. Costs, as a function of rights, govern the structure of cost curves, the so-called Pareto-relevant and irrelevant regions, and *inter alia* the results of bargaining.

63. Coase, *supra* note 23, at 2.

64. Demsetz, *supra* note 29, at 19.

> easily to the close relationship between property rights and externalities.[65]

Rights *are* a factor of production—he who is without rights will not have his interests count as a cost to others, *ceteris paribus*. Externalities are a function of the structure of rights. Externalities involve costs shifted to others through rights and liability rules. This is utterly neglected by the (conservative) use of the Coase theorem, which takes rights and the costs derived therefrom for granted. The theorem's laissez faire animus, or the partial equilibrium character, is contrary to the profound implications of asking whose interests count or ought to count as a cost to others.

Legal liability rules, it is admitted by all (see below), govern transactions costs which inhibit exchange. The same is the case, as a general principle with *all* costs. All costs are partially a function of the existence, non-existence and structure of rights; and *all* costs, not just transaction costs, inhibit or channel exchange. With respect to legal liability rules, such rules can bring an interest into consideration (say, in negotiation), which the parties would not necessarily have hitherto or otherwise counted as a cost, given prior problems of organizability, etc. The liability rule helps govern which interests will *actually* count as costs. The same is true of all legal rights. Coase's assumption that all costs are considered by the firm, including the implicit or opportunity costs, as discussed above, is unrealistic. Actual market costs depend in part on whose interests are made a cost to others, through rights. Here again it is better to have one's interests protected in rights than not to have them. It is better to have rights than not to have them. Rights do count.

Costs as a function of rights is a rival though complementary principle of greater generality than (and is antecedent to and therefore limiting upon) both Pareto-optimality and the Coase theorem. The principle of costs as a function of rights effectively reverses the thrust of the Coase theorem with regard to the importance of the legal system and rights to allocation. The allocation of resources is a partial function of the identification and assignment of property and other rights, in part through the latter's impact upon the cost-price structure. This principle and the Coase theorem both have to be comprehended as parts of a general equilibrium system, in which it is true that the value of rights is a partial function of costs *and* costs are a partial function of rights.[66] Allocation cannot be

65. Demsetz, *Toward a Theory of Property Rights*, 57 Am. Econ. Rev., Papers & Proc. 247 (1967).

66. Also: costs are a function of the power structure *and* the power structure is a function of costs, and the structure of costs is a function of the opportunity set structure (and choice from

independent of rights, when, *inter alia,* the cost functions (and demand functions, for that matter) which enter into the determination of allocation are themselves a partial function of rights.

B. On Transactions Costs and Other Allocative Considerations

The Coase theorem assumes zero transactions costs in order to make its assertion about the independence of allocation from rights. But if the statement of a theorem should have any substantive affinity with the real world, the appropriate theorem would be that allocation is a partial function of differential liability placement and the differential transaction cost system erected by each.

By the zero transaction cost assumption the Coasian analysis does, of course, recognize that transaction costs—by which are meant the costs of organization, negotiation and administration and enforcement of contracts and other private and/or public arrangements—are a major limitation to internalization and *ipso facto* (though not solely) a cause of the divergence between social and private costs and benefits.[67] But the handling of transaction costs by the Coasian analysis distorts the real world importance thereof: transactions costs in fact dominate real world cases. Zero transaction costs are the unusual, indeed the exceptional, case. The choice of transaction cost systems (i.e., liability rules) govern the allocative consequences. Furubotn and Pejovich remark that the zero transactions cost assumption is a "simplification . . . recognized as unrealistic,"[68] but one would not recognize this from much of the standard literature extolling the Coase theorem. The qualification is often given, but the analysis proceeds as if the qualification was minor and trivial. Much more meaningful, though less doctrinally congenial, would be the proposition that allocation is a function of transaction costs which are a partial function of the law.

Moreover, transactions costs are treated by the Coasian analysis as an aberration, as an unfortunate impediment to negotiation and internalization, as if in a perfect world such friction would be absent. Yet transactions costs do represent relevant interests, or at least interests no less relevant than the typical non-transaction costs. Transaction costs represent the protection of interests through rights as they become valued through the market, which is the case with all other costs. Nor is there any reason to single out transaction costs for the treatment given them by the Coase theorem: *all* costs inhibit

within opportunity sets) *and* the opportunity set structure is a function of the structure of costs. Samuels & Schmid, *supra* note 57, at 8.

67. Furubotn & Pejovich, *supra* note 24, at 1143-1144.

68. *Id.* at 1143. *See also* Calabresi & Melamed, *supra* note 13, at 1096: "But no one makes an assumption of no transaction costs in practice."

exchange and transactions. Pareto optimal and internalizing solutions are always a partial function of costs, and costs are always a partial function of legal rights, including the so-called transaction costs.

The general principle should be that transaction costs are a partial function of the transaction system, which in turn is a partial function of the legal liability rule.[69] Thus Crocker found that changes in the effective liability rule can have pronounced effects on internalization per se, on resource allocation, and on the magnitude of the critical externality (pollution emissions). The new liability rule brought about internalization that had not been effectuated before, and with it changes in values and allocation. The change in liability rule gave rights status to certain interests which now had to be brought and made into a cost to others. The new liability rule produced a new transactions system with allocative consequences.[70]

The liability rule has allocative consequences in part because the rule governs the status quo point and the transactions costs generated by the rule govern the ability of the bargainers to move from the status quo point.[71] Liability rules govern the distribution of burden between the so-called Pareto-relevant and Pareto-irrevelant externalities, no unimportant phenomenon;[72] and they govern the adjustment transactions and their allocative results.[73] Change of the liability rule opens up new areas for the Pareto-domain, new avenues for transactions and consequent alterations in the allocation of resources.[74] Changes in liability rules will produce shifts in the cost curves, something which the Coasian analysis escapes by presuming that the cost curves will always include all implicit or opportunity costs. But the real world phenomenon is that costs (including but not solely transaction costs) will get registered in the market and in the cost curve depending upon the liability rule in operation. The legal system delimits the bargaining system, and the liability law does matter.[75]

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69. *See* Randall, *On the Theory of Market Solutions to Externality Problems, supra* note 3, at 41, 42; Furubotn & Pejovich, *supra* note 24, at 1146; Mishan, *supra* note 59, at 63ff; and McKean, *supra* note 40, at 618, 626.

70. Crocker, *Externalities, Property Rights, and Transactions Costs: An Empirical Study,* 14 J. Law & Econ. 451 (1971); Randall, *Market Solutions to Externality Problems: Theory and Practice,* Am. J. Agricultural Econ. 179-180 (1972); and, for other references, and discussion, Furubotn & Pejovich, *supra* note 24, at 1144.

71. *See* the works of Mishan and Randall cited above.

72. J. Weld, *The Social Cost of the Coase Theorem,* 11-13, 22 & *passim,* presented at the Symposium on Environmental Economics and the Law, University of California, Riverside, February 24-25, 1972.

73. *Id.* at 28-29; Mishan, *The Postwar Literature on Externalities: An Interpretive Essay,* 9 J. Econ. Literature 20 (1971).

74. Mishan, *Pareto Optimality and the Law,* 19 Oxford Econ. Papers (1967); Mishan, *supra* note 73; Mishan, *A Reply to Professor Worcester, supra* note 59, at 59.

75. Mumey, *The "Coase Theorem": A Reexamination,* 85 Q.J. Econ. 718, 722-723 (1971).

Transactions costs based upon liability rules govern, then, the distribution of the burdens of negotiation. In a world of asymmetrically distributed transaction costs,[76] the locus of liability is important with regard to distributional consequences (in addition to (a) the aforementioned impact of the allocative impact of initial distribution, (b) the likelihood of negotiation, (c) the realization of the internalization objective and (d) the allocation of resources). In a world of asymmetrical transaction costs and of standardized contracts (contracts of adhesion), the nature of the liability rule will have profound impact on the direction in which the bargains are made. Indeed, as Arrow has pointed out, *"It is not the presence of bargaining costs per se but their bias that is relevant."*[77]

Thus, the law is an instrument with which to skew distributional results by manipulating transactional systems to change the structure of power. As Demsetz has clearly pointed out, "The public policy question is which groups of market participants, *if any*, are to receive governmentally sponsored advantages and disadvantages, not only in the subsidization or taxation of production, but also, in the creation of advantages or disadvantages in conducting negotiations."[78] Such advantages and disadvantages are not abberational. They are an inevitable result of particular liability rules and particular transaction systems. Indeed, Madelyn Kafoglis' view of externalities as "discrepancies between alternative legal and social arrangements"[79] is very appropriate here. What is involved is whose interests are to be made to count as costs to others, *pro tanto* through different liability rules. Complex decisions are necessary in the choice of liability rules,[80] but it is always a matter of which (whose) interest the government should support or will be used to support; the former stating the point normatively and the latter positively. Thus, as Regan puts it,

> . . . once we realize that the legal rule affects (or, if we rely on bargaining, presumably effects) the allocation of resources and the distribution of welfare even granting Coase's assumption, we will not be tempted to speak as if the only function, or even the primary function, of legal rules when there are transaction costs is to help us approach some unique optimum which would exist if only transactions were costless. If there are externalities, then there are decisions to be made about the distribution of welfare

76. Calabresi & Melamed, *supra* note 13, at 1120-1121 & *passim;* and references given in Samuels, *supra* note 1, at 137 n. 210.

77. Arrow, *supra* note 16, at 51. ". . . the critical impact of information on the optimal allocation of risk bearing is not merely its presence or absence but its inequality among economic agents." *Id.* at 55.

78. Demsetz, *Why Regulate Utilities?*, 11 J. Law & Econ. 55, 61 (1968).

79. Kafoglis, *Marriage Customs and Opportunity Costs*, 78 J. Pol. Econ. 421, 423 (1970).

80. Calabresi & Melamed, *supra* note 13, at 1122 & *passim.*

> even if we assume an "initial distribution of wealth" which is specified in every other respect than the rules concerning externalities.[81]

The principle that transaction costs are a function of liability rule (with allocative consequences) is analytically and empirically more important than the Coase theorem. This has been demonstrated with regard to pollution levels which are a matter of wide concern. Much of the contemporary situation of water and air pollution is the result of the fact that the past liability rule, which has been effectively one of zero liability for pollutors despite the letter of certain (unenforced) statutes, has produced negligible change and *especially* negligible market change. The policy significance of the Coase theorem must be seen in this perspective (and must not be diluted by the presumptive reasoning of the optimality-of-doing-nothing argument).

A serious matter of inconsistency and further unrealism is contained within the Coasian analysis. As d'Arge and Schulze have pointed out, the Coasian analysis contemplates the non-pareto optimal introduction of an externality into an otherwise perfect system," and then asserting that regardless of legal rules, the system will regain its perfection."[82] But this conflicts with the assumption of zero transaction (including information) costs: ". . . these perturbations would not occur in a competitive system with zero transactions . . . costs. They would be known and bargained for prior to their occurrence irrespective of the liability rule selected."[83] This another example of how the Coasian analysis would eliminate the very problem causing concern.[84]

There is the argument that

> where a market for an external diseconomy does not exist it should not exist, since the benefits from such a market clearly cannot exceed the costs of its operation. The absence of an observable market is, in itself, a market solution.[85]

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81. Regan, supra note 20, at 437.
> Imposition of liability for damages is not just something to be decided on the sole basis of ethical considerations about the distribution of income. Rather, it is a crucial variable for economic and social policy with regard to externality.

Randall, *On the Theory of Market Solutions to Externality Problems, supra* note 3, at 45.

82. d'Arge & Schulze, *The Coase Proposition, Wealth Effects, and Long Run Equilibrium*, 2 Working Paper No. 19, Program in Environmental Economics, University of California, Riverside (1967).

83. *Id.* at 3.

84. *Per contra,* McKean argues that zero transactions costs does not mean zero informational costs and no uncertainty. McKean, *supra* note 40, at 618. The world of perfection is hard to adequately specify; it may be specified to the analyst's selective delight.

85. The argument is generally associated with Demsetz. The quotation is from Randall, *Market Solutions to Externality Problems: Theory and Practice, supra* note 3, at 176-177 n. 3.

This position is, of course, a beautiful example of the presumptiveness of most optimality reasoning. Whatever is, is, and moreover should be, or else it would be different. It is the optimality of doing nothing. But such optimality is a function of the transactions system and costs produced by the extant liability rule. As Randall observes,

> . . . the fallacy is obvious. The unprofitability of market solutions does not prove that solution by any other method must also be unprofitable.[86]

—including a change in liability rule enabling a different market solution. Once again, solutions are functions of and specific to the power (rights) structures which give effect to them, including the cost-price structure which serves as an intermediary mechanism. It is by taking costs as given—when as a matter of fact they are a variable function of rights, including liability rules governing which costs are forced upon which economic actors—that the Coasian analysis is able to yield its narrow conclusion about the independence of rights and allocation. This compounds the error made by assuming that all opportunity costs are considered in firm decision making.

Our final consideration of transaction costs has to do with the arguments (a) that transaction costs should be minimized (so as to maximize the value of production through internalization requiring transactions); (b) that in choosing between alternative transaction cost systems (i.e., alternative liability rules), that one with the lowest costs should be selected; and (c) that the placement of liability should be on the party most able to avoid costly solutions. Thus Demsetz argues that

> If courts are to ignore wealth, religion, or family in deciding such conflicts, if persons before the courts are to be treated with regard only to the cause of action and available proof, then, as a normative proposition, it is difficult to suggest any criterion for deciding liability other than placing it on the party able to avoid the costly interaction most easily.[87]

Calabresi and Melamed would include among the criteria for handling the transaction cost problem:

> . . . (1) that economic efficiency standing alone would dictate that set of entitlements which favors knowledgeable choices between social benefits and the social costs of obtaining them, and between social costs and the social costs of avoiding them; (2) that this implies, in the absence of certainty as to whether a benefit is

86. *Id.* at 177 n. 3.
87. Demsetz, *supra* note 29, at 28.

> worth its costs to society, that the cost should be put on the party or activity best located to make such a cost/benefit analysis; (3) that in particular contexts like accidents or pollution this suggests putting costs on the party or activity which can most cheaply avoid them; (4) that in the absence of certainty as to who that party or activity is, the costs should be put on the party or activity which can with the lowest transaction costs act in the market to correct an error in entitlements by inducing the party who can avoid social costs most cheaply to do so; and (5) that since we are in an area where by hypothesis markets do not work perfectly —there are transaction costs—a decision will often have to be made on whether market transactions or collective fiat is most likely to bring us close to the Pareto optimal result the "perfect" market would reach.[88]

The principle and driving force of cost minimization is hardly to be questioned, but cost minimization is always within some structure of rights giving effect to costs (really to some costs and not to others), so that the problem must be faced directly as to whose interests are *not* to be given effect in the process of cost minimization and, further, who is to determine this. There are several very important points to be made here. First, although Demsetz writes of the courts ignoring wealth, even where the courts ignore wealth explicitly, they cannot ignore it implicitly, given the importance and impact of initial or extant wealth distributions discussed above. Indeed, to ignore wealth explicitly is to give effect to and reinforce the status quo wealth distribution. Second, Calabresi and Melamed write of "knowledgeable choices" and the "party or activity best located to make . . . cost/benefit analysis;" but that is to beg the all-important question of the role of the existing distribution of rights and power. Thus, they write of bringing us "close to the Pareto optimal result which the 'perfect' market would reach," where there is no unique Pareto optimal result, only results specific to the power structure; and when the very act of legislating (through statute or court decision) liability rules (through the joint rights determination process discussed above) will also govern the rights and power structure and thereby the Pareto optimal result, including the social determination of those best able to make knowledgeable choices and best located to make cost-benefit analyses. Third, acknowledgement of the three arguments listed at the beginning of this paragraph, all focusing on cost minimization, shows once again the dual thrust of the Coase theorem. On the one hand, rights and liability are said to be irrelevant, yet on the other, the placement of liability is said to be important. The

88. Calabresi & Melamed, *supra* note 13, at 1096-1097. *Cf.* Tribe, *supra* note 36, at 86-87.

theorem has it both ways only because it inadequately describes reality, i.e., liability rules do affect costs and that is more significant than the contrived neutrality. Fourth, the critical problem begged by the cost minimization line of reasoning is whose interests are recognized as costs. Clearly there is circularity, if cost minimization is conducted using the status quo cost-price structure, when that structure is a partial function of rights and liability placements, and when the critical policy issue is not whose do count but whose should count, e.g., in real property registration and transfer systems.[89] Cost minimization always has to be juxtaposed to propositions governing whose interests are to count as costs to others and which therefore should not be excluded through minimization. Here is where rights (and liability placements) come in, and here is where the Coasian analysis is deficient.[90] There is no more justification in saying that in perfectly working markets there are no transaction costs, than in saying there are no costs. Transaction costs, no less than non-transaction costs, represent interests, too, and do so through various legal arrangements. Fifth, it may be the case that cost minimization would be tantamount to letting the stronger party win.[91] As Calabresi and Melamed put it, the argument of minimizing the administrative costs of enforcement "will never justify any result except that of letting the stronger win, for obviously that result minimizes enforcement costs."[92]

1. Further Allocative Considerations.

The foregoing analyses have shown several major respects in which rights are not allocatively neutral. The operation of the principles involved therein severely constrain, if not eclipse and reverse, the thrust of the Coase theorem in regard to neutrality. In addition, there are other allocative considerations that operate to severely qualify the thrust of the Coase theorem, several of which have been touched on earlier. First, there are the effective assumptions of zero income elasticity of demand;[93] the absence of inflexible capital constraints, or the zero cost of capital; and the long run survival of the firm,[94] which involves the knotty problem of long run rent, among other things.[95]

89. *Cf.* Hite, *et al., The Economics of Environmental Quality* 83-84 (1972), and papers by Tarlock, Gibson, Johnstone, and Payne (and the references given) in Perspectives on Property, *supra* note 1.

90. Randall, *Market Solutions to Externality Problems: Theory and Practice, supra* note 3, at 182; and *On the Theory of Market Solutions to Externality Problems, supra* note 3, at 47.

91. Stronger, that is, given the status quo rights structure.

92. Calabresi & Melamed, *supra* note 13, at 1093; *cf.* 1096-1097.

93. Calabresi & Melamed, *supra* note 13, at 1095 n. 14; and Randall, *supra* note 3 and 6.

94. Weld, *supra* note 72, at 24, 25; Mishan, *Pareto Optimality and the Law, supra* note 74.

95. Randall, *supra* note 3 and 6.

Second, there is the question of whether the marginal curve is the critical curve for analysis, rather than alternative total cost curves, with their corresponding marginal curves (including the complexities of alternative configurations of costs based upon alternative configurations of rights). After all, as Coase says, the problem has to be looked at both in total and at the margin. Third, there is the problematical short run and long run symmetry between compensation and bribes.[96] Fourth, there are a whole host of differences made operative by different liability rules, such as research and development consequences,[97] differences in the specifics of risk aversion and assumption,[98] differences in the marginal utility of money,[99] differences in liquidity and other asset limitations upon the capacity to bribe and the receptivity to bribes, differences in the propensity to create externalities,[100] and so on.[101] Finally, there are the reemployment effects of resources displaced by any utilization of lower transaction cost systems.[102]

THE PLACE OF THE COASE THEOREM IN LEGAL-ECONOMIC ANALYSIS AND POLICY

The historical significance of the Coase theorem is that it brought within orthodox economic theory[103] the explicit consideration of important institutional factors, specifically legal rights and liability rules. The Coasian analysis, derived from orthodox neoclassical microeconomics and welfare economics, is seminal in this respect at least. Its strength, however, is also the source of its profound limitations. The total Coasian tradition represents a feat of intellectual ingenuity, but how much does it contribute to legal-economic analysis and policy?

1. The Coase theorem is a blend of normative and positive analysis and is therefore primarily a normative proposition. The almost religious devotion shown by its advocates[104] is coupled with an aura

96. Tybout, *Pricing Pollution and Other Negative Externalities*, 3 Bell J. Econ. & Mgt. Sci. 252 (1972), and other references given.

97. Johnson, *A New Fidelity to the Regulatory Ideal*, 59 Geo. L. J. 869, 871; *cf.* 872, 873, 876. *See also* Mishan, *The Postwar Literature on Externalities: An Interpretive Essay*, *supra* note 73, at 23; and *Pareto Optimality and the Law*, *supra* note 74.

98. d'Arge & Schulze, *supra* note 82, at 12, 14.

99. *Id.* at 13.

100. *Id.*; and Mishan, *supra* note 59.

101. Mishan, *The Postwar Literature on Externalities: An Interpretive Essay*, *supra* note 73, at 21ff. & *passim.*; Samuels, *supra* note 1, at 141-143.

102. *Compare* Demsetz, *Wealth Distribution and the Ownership of Rights*, 1 J. Leg. Studies 223-224 (1972).

103. *Per contra, see* Samuels, *The Scope of Economics Historically Considered*, 48 Land Econ. 248 (1972), and *supra* note 50, 237ff, and the references given in note 117, *infra*.

104. *See, e.g.*, Worcester, Jr. *A Note on "The Postwar Literature on Externalities: An Interpretive Essay,"* 10 J. Econ. Literature 57-8 (1972).

of science for what is primarily a normative or ideological principle. This goes deeper than simply adding a normative premise to an otherwise positive proposition or converting an *is* proposition into an *ought*.[105] The Coasian analysis is itself fundamentally an *ought* analysis, and its policy inferences that appear to be derived from an *is* analysis are really derived from *ought* premises underlying it.[106] At best, the Coase theorem is an example of analysis in the gray area at the border between theory as explanation and theory as legitimation. For all practical purposes, the Coasian analysis is power-thought,[107] with evocative qualities more akin to ideology than to science.

2. The Coase theorem involves ideological symbol manipulation. The theorem has fit into and reenforced that frame of mind which defines economics in terms of the market and further only in terms of resource allocation, and which rationalizes market adjustments of conflicts without deep or with only selective attention to the structure of power operating through the market. It is part of the libertarian tradition which glorifies the market and denigrates government but which has its own agenda for the state, an agenda which appears to many to be specific to the interests of certain classes. The theorem represents a new chapter in the use of the economic mode of reasoning to support an ostensibly láissez faire approach to the use of government. It is part of the apologetics and theology of the market and of private property, or more specifically, of those institutions as they have developed primarily in the United States. It is part of the Chicago (formerly Austrian) approach to economics, now directed at the study of law and economics, using economic theory in whatever way it will safely contribute. It thereby builds in selected facets of the status quo, legitimizing selected status quo rights and/or selected rights introduced in the name of market creation and efficiency. That is to say, it gives a privileged status to status quo rights such that they would be changed only with a unanimity rule except as manipulated by safe Coasian policy makers. It attempts to provide and rationalize a particular and ambiguous, but presumably safe, normative answer to the problem of externalities. The fantasy aspects of the analysis are to be understood at least partially against this background. If one were to query as to why, if liability placement does not affect allocation, there should be so much concern over the Pigovian model, the answer—in addition to the obvious analytical and policy factors (e.g., the Pigovian model prejudices choice against the pollutor)—re-

105. *Compare* Worcester, *supra* note 104, at 57, *with* Mishan, *supra* note 59, at 60 n. 4.

106. *See* Samuels, *You Cannot Derive "Ought" from "Is,"* 83 Ethics 159 (1973). One problem is the selectiveness and therefore incompleteness of the relevant normative analysis; another is the presumptiveness yet implicit nature of its normative analysis.

107. W. Hutt, *Economists and the Public* (Cape, 1936).

sides in the anti-state animus of the Paretian-Coasian tradition. Pigou, in short, must be discredited and shunted aside for the same reason as Keynes. He opened too many doors to unsafe, potentially radical, governmental activism. Even if one is sympathetic to the pro-market point of view, one nevertheless must acknowledge the Coase theorem and its limits in this light.

3. Analytically, the Coase theorem represents a partial equilibrium model and chain of reasoning inclusive only of a selected subset of the variables involved in the interrelation of legal and economic processes.[108] And this subset is manipulated in a particular way. The theorem must be comprehended within a general equilibrium system of choice and power in which market exchange is both a dependent and independent variable along with rights and the capacity to generate initial externalities and to participate in externality solutions, especially (but not solely) of the market type, as well as in the market *per se.* Caution must be exercised. If partial equilibrium models can profoundly distort and limit[109] the key features of the complex totality involved, so can general equilibrum models. As Hahn has written, "Equilibrium economics, because of its well known welfare economic implications, is easily convertible into an apologia for existing economic arrangements, and it is frequently so converted."[110] General equilibrium models must be used with care to maintain their positive quality, and especially in such a way as to serve the heuristic function of revealing and enabling the exploration of deep problems and processes necessarily not reached by partial equilibrium models. What the Coase theorem represents, unfortunately, is the taking of a partial equilibrium proposition, one generated in a particular way to particular normative ends, for a general equi-

108. Let the allocation of resources be a function of a, b, c, . . . , n variables, with g representing the liability rule. The Coase theorem says that the allocation of resources is a function of the marketization of externalities but that is so only to the extent, *ceteris paribus,* that externalities are marketed. The Coase theorem also says that allocation is independent of the liability rule, g, but other factors affect and/or operate through the liability rule: g can be so singled out by the Coase theorem only because of its particular handling of the other variables, whereas the other variables could be so manipulated to make the liability rule appear to be *the* critical variable on which allocation is dependent. Thus Calabresi and Melamed urge that

> Framework or model building has two shortcomings. The first is that models can be mistaken for the total view of phenomena, like legal relationships, which are too complex to be painted in any one picture. The second is that models generate boxes into which one then feels compelled to force situations which do not truly fit.

Calabresi & Melamed, *supra* note 13, at 1128.

109. Tribe, *supra* note 36, at 85-86.

110. Hahn, *Some Adjustment Theories,* 38 Econometrica 1 (1970); also quoted in E. K. Hunt, *Externalities and Contextualism* 10, Working Paper No. 12, Program in Environmental Economics, University of California, Riverside (1971). The welfare economics implications reflect the normative premises of the analysis and are tautological therewith.

librium conclusion, as if it covered the entire field of law and economics.

There is infinitely more to the study of law and economics than can be studied completely by either the conventional normative or positive use of the models of neoclassical microeconomics and welfare economics, the Coase theorem in particular. Because of the narrow scope of variables considered relevant, if for no other reason, these models do not adequately analyze the complexities of the interrelations between legal and economic processes, especially the resolution of the problem of order.[111] They give exaggerated weight to the resource allocation problem,[112] while the distributional element is given obscured and incomplete as well as question-begging effect.[113] These models given an incomplete account of law as an economic alternative, as a vehicle for achieving private and collective economic goals. They present a distorted part of the larger picture of the field of law and economics which must include analyses of power as a function of rights *and* rights as a function of power, analyses of the modes of legal participation in economic decision making, and analyses of the modes of legal resolution of economic policy issues. They make an important stab, through the Coasian analysis, at understanding legal-economic phenomena (discounting for the moment its primary normative or ideological standing), but they do so in such a way as to foreclose, within the terms of the theorem and its assumptions, analysis of the really deep problems of law and economics. Yet the Coase theorem—though not in the hands of the Coasians—paradoxically shows the importance of the role of government despite its formal neutrality proposition. Inadvertently, it helps to pinpoint the importance of the role of legal choice in regard to resource allocation and the formation and distribution of economic welfare. Objective analysis of the Coase theorem, which would function to rationalize the market as the distributional mechanism of economic welfare, reveals the deep and critical role of government in that distribution. The Coasian analysis, broadly contemplated, opens the door to the problems of which structure of property rights and liability exposures is desirable, whose interests are to be made costs to others through rights and rights-equivalents, and how the socio-economic-political-legal decisions with respect thereto are made. Moreover, the Coasian analysis, again broadly contemplated, points to the use of the state to change legal rights to improve transactions

111. Samuels, *supra* note 46, at 448-450.

112. Mishan, *The Postwar Literature on Externalities: An Interpretive Essay*, *supra* note 73, at 26.

113. Samuels, *supra* note 1, at 141, 143 & *passim*.

systems, to create new Pareto-efficient opportunities not hitherto possible, and to rearrange the conditions for the acquisition and use of power in the market, albeit not necessarily on terms or in ways or directions congenial to the Coasians. Despite the neutrality proposition, the Coasian analysis ineluctably points to the absolute importance of the processes of determining legal rights and liabilities of economic significance. This is no mean feat, though it was hardly part of the intentions of the Coasians.

4. The Coase theorem abstracts from the ways in which rights and liability rules have allocative effect and then concludes that rights and liability rules are neutral in regard to allocation. But rights are not allocatively neutral, allocation is not independent of rights. The Coase theorem is only one of several chains of reasoning articulating the relations of rights to allocation. It is only one of several discernible principles and not the most important. Some of these other principles, stated generally, are:

> a. Rights enable and structure participation in the economic decision making process.
>
> b. Resource allocation is a function of the structure and distribution of rights.
>
> c. Allocation is a function of the transaction system and costs generated by particular liability rules.
>
> d. Regulation is functionally equivalent to rights in structuring power and governing allocation.
>
> e. Costs are a function of rights, governing whose interests will count as a cost to others.
>
> f. Externalities and externality solutions are a function of the power structure which is a function of rights.

These are all stated as partial equilibrium propositions. Alternatively, they can be stated as parts of what are called above general equilibrium dualisms; each functional relationship is only a partial functional relationship. They point to the overriding importance of such additional themes as: efficiency specific to the power of opportunity-set structure; power play over rights and rules, including the capacity to generate initial externalities and to shift costs to others, as a critical process; the selectivity of cost inclusion; the limits of analysis which only gives effect to the rights antecedent to the costs used in the analysis; and so on. These principles and themes are more descriptively and analytically important than the Coase theorem. They warrant careful study and so do numerous other facets of the interrelations between legal and economic processes. For example, far more important and revealing than the Coasian analysis would be objective explorations into the factors and forces which govern which

non-Pareto optimal legal and non-legal changes are made subject to compensation and which are not. Such a study would reach truly fundamental aspects of law and economics.

5. The Coasian analysis is also inconclusive in regard to legal policy dealing with rights and externalities. It begs or gives an incomplete if not distorted or normative answer to the problem of whose interests are to count through legal rights that are necessarily antecedent and specific to optimal solutions. It suggests that legal rights are irrelevant at the same time that, broadly contemplated, it suggests opportunity for re-distributive measures without necessarily having adverse consequences for allocative efficiency. If the meaning of the Coasian analysis is to consider the total effects of alternative legal and other arrangements, then the Coase theorem tends to abort the asking of broad and deep questions concerning the policy implications or premises of such alternatives. After all, the Coase theorem has been held to say that rights are allocatively neutral and are a relatively minor matter. As for externalities, the Coasian analysis is articulated and explicated in terms of tautologies, and the real world phenomena and problems of market failures are countered by the Coasian analysts' "description" of how things would work out if markets were "perfect." The market cannot resolve all externalities, and where it can internalize an externality it does not do so in such a way that allocation is independent of rights and liability rules. The market *may* adjust rights, and adjustment-biased allocation *may* tend to be independent of liability rules, but in most if not all cases allocation will be influenced by liability placement and associated transaction costs, and more importantly, also by the power structure generated by the entire spectrum of rights of economic significance.

Coase wrote of the Pigovian doctrine that "Not being clear, it was never clearly wrong."[114] One could say the same thing about the Coase theorem or doctrine, though perhaps it would be more accurate to say in its case that given the way it manipulates variables, it is primarily symbol manipulation. The theorem is not wrong; worse, it is severely incomplete and misleading yet with the appearance of final truth. It is the grand tautology of welfare economics and bids to be the same of law and economics. Legal-economic policy makers and analysts must be careful about overgeneralization to policy from any theorem based on narrow assumptions as to what would be the case when the limits embodied in those assumptions do not square with the real world wherein the problems are precisely those eliminated by the assumptions, when the normative conclusions of the theorem are

114. Coase, *supra* note 23, at 39.

tautological or circular with ambiguous premises built into supposedly straightforward reasoning, and where there is much room for selective perception and inclusion of rights, government, costs, and so on. Such a theorem is the Coase theorem.

6. I shall conclude with these comments.

The Coase theorem is a good example of the proposition that the value and meaningfulness of any analytical tool or principle is a function of both its strengths and weaknesses. The Coase theorem is an important proposition, but it has its limits, which are very confining. Its meaningfulness and significance must be comprehended by juxtaposition to other principles some of which, by a curious inversion generated by an objective analysis of the theorem, reverse the very thrust of the theorem itself. The Coase theorem has been a significant contribution and has served to crystalize and legitimize the field of law and economics. The field will bear further exploration. Research into the economics of property rights is still in its initial stage, and many questions remain to be explored.[115] In time, however, law and economics will generate their own paradigms and will graduate from the present dominance of "the economics of" to a corpus of analysis which will incorporate and apply a wide range of theories and models. The present "economic" approach is dominated by a narrow (Chicago-Austrian) approach to a narrow aspect or problem (allocation). There is more to both economics and law and economics than can be accommodated by such an approach,[116] particularly when it more resembles an economic theology than science.

There are other traditions in the explorations of property rights and the interrelation of legal and economic processes.[117] The Chicago-Austrian approach is not the only approach and indeed is not an approach that can readily reach the deepest problems of law and economics considered as a positive inquiry (except when developed with the breadth and honesty of a Frank Knight), in part because of the normative preoccupations and ambitions which channel its inquiries and conclusions. Law and economics deal with a complex set of deep problems with respect to which the Chicago-Coasian approach represents only one particular normative position. The study of law and economics must not have its consciousness either constricted or monopolized by casuistic theories and approaches

115. Furubotn & Pejovich, *supra* note 24, at 1142. As an agenda, *see* Schmid, *Analytical Institutional Economics*, 54 Am. J. Agr. Econ. (1972).

116. Samuels, *supra* note 103.

117. Samuels, *Legal-Economic Policy: A Bibliographical Survey*, 58 Law Library J. 230 (1965), and *Legal-Economic Policy: A Bibliographical Survey*, 1965-1972, 66 Law Library J. 96 (1973).

which inhibit or normatively channel consideration of the important issues and deep problems, whatever position one personally may take on them. The study of law and economics must not become the prisoner of the ideology to end ideologies.[118] The legal rules of the game[119] are too important in regard to both the conduct and the results of legal-economic or economic activity. They are not neutral except to those who prefer to fail to see the important respects in which they discriminate and/or are used to discriminate. The central problems of the field of law and economics are all characterized by existential choice, sometimes constrained by past choices. The Coase theorem performs its greatest disservice by obscuring the dimensions, possibilities and consequences of what choices are in fact made.

118. J. Robinson, *Economic Philosophy* 53 (1962); quoted in Hunt, *supra* note 110, at 13.
119. Robinson, *supra* note 118, at 124 ff.