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# COASE DEFENDS COASE: WHY LAWYERS LISTEN AND ECONOMISTS DO NOT

Stewart Schwab\*

THE FIRM THE MARKET AND THE LAW. By Ronald Coase. Chicago: University of Chicago Press. 1988. Pp. vii, 217. \$29.95.

In The Firm the Market and the Law, Ronald Coase has collected five of his major articles and has newly written a thirty-one-page introduction and twenty-nine-page reply to his critics. The book is a slim one, but Coase's resume has always shown quality rather than sheer output. The book is certain to attract attention: when the founding guru of law and economics responds to his critics, people will listen. And it is worth listening, for we can gain insight into the Coase Theorem by seeing the tacks Coase takes in defending himself. Of equal interest, however, is the book's overall tone. In the new material (and in several of the reprinted articles) Coase complains of being ignored. Most legal academics would scoff at the charge; Coase's real complaint is that fellow economists have ignored his ideas and approach to economics.

I begin this essay, in Part I, by briefly describing how the contents of this book emphasize Coase's main themes. In Part II, I evaluate Coase's technical responses to his critics, for the responses can help us understand the Coase Theorem. In Part III, I explore the implications of legal scholars' fascination with Coase compared with the more stand-offish treatment he receives from mainstream economists. It is here that paradigms and politics come to the fore.

#### I. THE THEMES OF COASE

Coase has repeatedly emphasized transaction costs as the key to understanding economic institutions. In his classic 1937 article, *The Nature of the Firm* (pp. 33-55), Coase asks why firms exist when, alternatively, workers and owners of capital could come together in a decentralized way through individual contracts made in open markets. The answer, Coase suggests, is that markets are expensive: individual prices are costly to determine and individual contracts are expensive to

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I had stimulating conversations about these issues with Don Gjerdingen, David Lyons, Steve Shavell, Steve Shiffrin and Hal Varian. I also benefited from presenting the argument to the faculty workshop at Michigan Law School and the law and economics workshops at Boalt Hall and Stanford law schools.

write and enforce (pp. 38-40). The firm, with its internal markets, arises to avoid these costs. To understand the firm, then, one must examine how the firm avoids the costs of markets. In the even more famous *The Problem of Social Cost* (pp. 95-156), published in 1960, Coase asks why firms cannot optimally solve conflicts that arise when their actions harm each other. The answer, again, is the costs of bargaining. If these costs were zero, Coase asserts, parties would maximize their joint output, regardless of which side had the initial right to harm the other. This is the famous Coase Theorem.

Transaction costs are not the only unifying theme in Coase's work. Also ever-present is Coase's skeptical view of government intervention in private markets.<sup>1</sup> Those familiar with *The Problem of Social Cost* will recall the tone of its latter sections. As an illustration, consider:

The kind of situation which economists are prone to consider as requiring corrective governmental action is, in fact, often the result of governmental action. Such action is not necessarily unwise. But there is a real danger that extensive governmental intervention in the economic system may lead to the protection of those responsible for harmful effects being carried too far. [p. 133]

The anti-government view is even more prevalent in another essay reprinted in this volume, *The Marginal Cost Controversy* (pp. 75-93), originally published in 1946. Coase thinks of this essay, along with the two more famous articles, as "the core of this book," stating that "all embody essentially the same point of view" (p. 1). *The Marginal Cost Controversy* argues that utility companies with declining marginal costs should charge a dual price: a set fee to capture the fixed overhead costs, and a quantity charge to reflect the marginal costs. The view he attacked assumed that efficiency required government regulation: the government would subsidize the fixed costs and require the monopoly to set price equal to marginal cost.

The final two reprints amplify Coase's dual themes. Industrial Organization: A Proposal for Research (pp. 57-74), first published in 1972 as a conference paper, reiterates the importance of transaction costs in understanding markets, and bemoans the fact that The Nature of the Firm is an article "much cited and little used" (p. 62). Coase calls for more institutional study by industrial organization economists. The last article in the volume, the Lighthouse in Economics (pp. 187-213), first published in 1974, emphasizes the anti-government theme as well as the need for detailed institutional analysis. Economists have often used the lighthouse as an example of something that must be provided by the government as a collective good — since the marginal cost of

<sup>1.</sup> In Part III I will ask whether these two themes are necessarily linked (i.e., whether one can agree with Coase that a rich contextual study of transaction costs is the best way of understanding the interplay between the law and the market, without concluding that unregulated markets are generally superior to government intervention). For now I merely report that the transaction cost and anti-government themes pervade these articles.

another ship using a lighthouse is zero. In this article, Coase gives an extensive historical account of the British lighthouse system, revealing that lighthouses were often privately financed and operated. Coase claims not that lighthouses should be left to private enterprise (that must await detailed study), but that economists should not use the lighthouse as an obvious example of a service that only government can provide.

Although the five pieces thus present two unifying themes — the importance of transaction costs in understanding economic institutions and the dangers of government intervention in the economy — one might wonder why Coase excluded other of his pieces. For example, his 1972 piece on durable goods,<sup>2</sup> and his writings on the economic view of man<sup>3</sup> remain important and admirable works. But such are the problems of a gifted scholar looking back on over fifty years of work: some worthy articles must be slighted.

More interesting is how Coase does not emphasize another, probably more fundamental insight that his work reveals: his conception of externalities as a reciprocal problem. Lawyers and economists typically think the polluter causes the pollution problem, the spark-generating railroad causes the fire hazard, and the crop-trampling cows harm the farmer. But Coase's approach emphasizes that the problem is reciprocal and that the law makes a choice in protecting these "victims." By so doing, the law harms the harm-causing actors. As I tell my torts students, it takes two to tort.

#### II. DEFENDING THE COASE THEOREM

One of the famous points in the exegesis of *The Problem of Social Cost* is that Coase never states a theorem. In the present book, Coase credits George Stigler with coining the term "Coase Theorem" and first formulating it precisely.<sup>4</sup> Coase also comes close to stating the theorem himself when he reiterates the argument of *The Problem of Social Cost*. In a world of zero transaction costs, Coase repeats, "the allocation of resources would be independent of the legal position" (p. 174). Thus, in Coase's famous rancher/farmer parable, the parties would produce the same amount of cattle and corn under a rancher-favoring open-range law or a farmer-favoring enclosure law (assuming zero transaction costs) (pp. 13-14, 97-104).

<sup>2.</sup> Coase, Durability and Monopoly, 15 J.L. & Econ. 143 (1972).

<sup>3.</sup> Coase, Adam Smith's View of Man, 19 J.L. & Econ. 529 (1976).

<sup>4.</sup> Coase quotes Stigler: "[U]nder perfect competition private and social costs will be equal" (p. 158) (quoting G. STIGLER, THE THEORY OF PRICE 113 (3d ed. 1966)). Coase suggests that the qualifying phrase "under perfect competition" is unnecessary. P. 175. I agree. Most interpreters of the Coase Theorem have applied it to bargaining situations of bilateral monopoly rather than to competitive markets where all actors take prices as given. Robert Cooter has well analyzed the competitive market and bargaining strains of the Coase Theorem. See Cooter, The Cost of Coase, 11 J. Legal Stud. 1 (1982).

The Coase Theorem has at least two major formulations.<sup>5</sup> Coase has here stated the weak version: the allocation of resources is independent of the legal position. The weak version is consistent with some inefficient bargains, as long as the legal position does not contribute to the inefficiency. The strong version asserts that bargains are efficient regardless of initial legal entitlements. Coase, in his new statement, does not claim 100% efficiency, suggesting only that the proportion of inefficient bargains "will be small" (p. 161). Coase thus seems to advocate the weak version of the Coase Theorem.

Coase vigorously defends this Theorem from the central theoretical attacks that twenty-five years of scholarship have developed. His concessions are minor and grudging. Coase finds the critiques, although often persistently made by able economists, "for the most part, either invalid, unimportant or irrelevant" (p. 159). Nevertheless, in part because Coase left much of the detailing of his argument to others, we can glean useful insights about the Theorem from seeing how Coase replies to his critics.

#### A. Efficient Bargains

Coase first responds to critics questioning the basic assumption that, with zero transaction costs, parties will reach an agreement that maximizes joint wealth. Coase singles out as a critic Nobel Prize winner Paul Samuelson. Readers of the legal literature may be more familiar with similar and more extensive arguments by Donald Regan<sup>6</sup> and Robert Cooter.<sup>7</sup> Samuelson argues that the Coase Theorem envisions a situation of "insoluble bilateral monopoly... with all its indeterminacies and nonoptimalities." Rational self-interest "does not necessitate that there will emerge, even in the most idealized gametheoretic situation, a Pareto-optimal solution that maximizes the sum of two opponents' profits, in advance of and without regard to how that maximized profit is to be divided up among them." The economic theorist, says Samuelson, can rule out non-Pareto-optimal out-

<sup>5.</sup> See Schwab, A Coasean Experiment on Contract Presumptions, 17 J. LEGAL STUD. 237, 242-43 (1988).

<sup>6.</sup> Professor Regan criticizes the Coase Theorem for offering no model of individual behavior from which one can deduce that, even without transaction costs, efficient bargains will always occur. Regan suggests by way of counter-example that individually rational threats of noncooperation will occasionally lead to inefficient bargaining outcomes. Regan, *The Problem of Social Cost Revisited*, 15 J.L. & Econ. 427 (1972).

<sup>7.</sup> Cooter, supra note 4, at 1. Cooter suggests that the Coase Theorem presents the rosiest assumption about bargaining. He introduces the polar opposite theorem, the Hobbes Theorem, which assumes that "people will exercise their worst threats against each other unless there is a third party to coerce both of them." Id. at 18. See also notes 37-44 infra and accompanying text.

<sup>8.</sup> P. 159, quoting Samuelson, *Modern Economics Realities and Individualism,* Texas Q. 128 (Summer 1963), reprinted in 2 P. SAMUELSON, THE COLLECTED SCIENTIFIC PAPERS OF PAUL A. SAMUELSON 1411 (1966).

<sup>9.</sup> P. 161, quoting Samuelson, 3 P. SAMUELSON, supra note 8, at 35 (emphasis omitted).

comes only by fiat or by tautologically redefining what constitutes nonrational behavior.

Coase, not wanting to resort to fiat or tautology, concedes Samuelson's theoretical point by acknowledging that "[i]t is certainly true that we cannot rule out such [a non-Pareto-optimal] outcome if the parties are unable to agree on the terms of exchange . . ." (p. 161). But, he insists, "there is good reason to suppose that the proportion of cases in which no agreement is reached will be small" (p. 161).

Note how limited Coase's concession is. He admits that occasionally parties will fail to agree, but assumes that whenever agreement is reached it will be optimal. The only inefficiency Coase recognizes, then, is failure to make the deal, ignoring the possibility of an inefficient deal. When parties are bargaining over a single, indivisible item, Coase is correct that inefficiency occurs only when the deal falls through. But Coase ignores deals involving multiple or divisible items. For example, if the issue is how many cows the rancher can let roam, and both sides are bluffing about the value and costs of roaming, one can easily imagine the farmer agreeing to let the rancher graze only two cows when three would be the efficient number.

Coase relies on Edgeworth in defense here. Edgeworth's famous box shows two people with initial quantities of two divisible goods trading to make both of them better off. The Edgeworth analysis does not predict the precise bargain that the parties will reach, but does insist that the parties will continue trading until they have exhausted all possible mutually beneficial trades. Only when the parties reach the Pareto-optimal contract curve (the points where no trade can benefit both parties) do the parties stop trading. Coase recognizes the similarity between Edgeworth's analysis and his own assertion that parties will make all mutually beneficial trades, and notes that the indeterminacy of the final result does not imply that the result is non-optimal (p. 163).

Another strategy against Samuelson, which Coase does not follow, would be to deviate from Edgeworth and fall back on the weak-efficiency version of the Coase Theorem. While standard bargaining theory may not demonstrate that bargainers always reach efficient bargains, the Coase Theorem remains relevant for policymakers as long as bargainers tend towards efficiency and initial legal entitlements do not affect the degree of inefficiency. For example, the weak-efficiency hypothesis of bargaining would be supported by finding that 80% of rancher/farmer deals are efficient whether bargaining around an enclosure rule or an open-range rule.

<sup>10.</sup> F.Y. EDGEWORTH, MATHEMATICAL PHYSICS 20-29, 54-56 (1881).

<sup>11.</sup> Coase suggests that an unconscious memory of Edgeworth's *Mathematical Psychics*, which Coase studied some 50 years ago, may have helped lead him to the Coase Theorem. P. 160.

The major point, despite the narrowness of Coase's concession, is that Coase recognizes that theory cannot rule out the possibility that parties, even with zero transaction costs, may not always reach efficient bargains. This concession destroys any dogmatic or tautological view of the Coase Theorem. The tautological Coase Theorem insists that parties must reach efficient bargains under zero transaction costs, so that if one sees an inefficient bargain it must be due to transaction costs. Coase clearly does not take this tack here. He recognizes that individually rational bargainers may not reach efficient bargains under low transaction costs, but suggests that the proportion of cases will be small. In other words, the Coase Theorem should be viewed as an empirical, potentially falsifiable prediction. If we see many transactions that are inefficient, or if varying legal rules affect the level of efficiency even when transaction costs seem low, we should reject the theorem.

By destroying the tautology, of course, one no longer has a "theorem," for theorems are simply interesting tautologies. (Perhaps we should call the insight the Coase Prediction rather than the Coase Theorem.) The real issue, however, is whether the strong tautology that "parties will bargain to an efficient solution unless something prevents them from doing so" is interesting. I find it more interesting to concede that bargaining theory does not show that all parties reach efficient bargains, even under ideal conditions, and to inquire whether waivable legal entitlements affect bargains. Coase may be sympathetic to this approach.

One advantage of this approach is that the Coase Theorem, as I will continue to call it, loses some of its dogmatic character. Some free-market advocates attempt to apply the tautological Coase Theorem in reverse to "prove" the efficiency of unregulated bargains. If transaction costs do not seem significant in a particular situation, these advocates infer that the parties must be bargaining efficiently. Without an explicit theory of bargaining or observations about efficiency, this proof amounts to little more than faith.

Another advantage of viewing the Coase Theorem as an empirical prediction is that one can accommodate the approach of Robert Cooter. Cooter argues that the key impediment to efficient bargains is not transaction costs, but strategic bargaining.<sup>13</sup> Even with zero trans-

<sup>12.</sup> See, e.g., Calabresi, Transaction Costs, Resource Allocation, and Liability Rules, 11 J.L. & ECON. 67, 68 (1968).

<sup>13.</sup> Cooter, supra note 4, at 17-29. Some scholars, particularly those treating the Coase Theorem as a tautological proposition, incorporate strategic bargaining as an aspect of transaction costs. See, e.g., R. POSNER, ECONOMIC ANALYSIS OF LAW 54-55 (3d ed. 1986). Whenever parties fail to reach an efficient bargain, transaction costs must be present, but one possible transaction cost is strategic bargaining. One problem with lumping strategic bargaining together with transaction costs is that the policy remedies are very different. To remedy strategic bargaining, a policymaker attempts to reduce the worst threats a bargainer can impose (e.g., by a quantum meruit theory of paying the other party the value of its work, even if the parties could not agree

action costs, says Cooter, bluffs, threats and other strategies to get a larger share of the gains of trade may prevent the parties from trading at all. Cooter suggests a Hobbes Theorem<sup>14</sup> as a polar opposite to the Coase Theorem: parties will always carry out their worst threats and never reach efficient bargains, unless a Leviathan controls the strategic behavior.

The empirical issue between Coase and Cooter (or Hobbes) is clear: With zero transaction costs, how often will parties reach an efficient bargain, and what circumstances will increase the likelihood of efficient bargains? Some empirical work along this line has begun,<sup>15</sup> and it seems a fruitful way to interpret the costless Coase Theorem.

In this book, Coase makes only an armchair empirical defense of his theorem by observing that we "do not usually seem to let the problem of the division of the gain stand in the way of making an agreement" (p. 162). Indeed, he notices that raw materials, machinery, land, and buildings are bought and sold all the time. Coase can easily explain this: Those who cannot conclude agreements will neither buy nor sell and will earn little income. Such uncooperative traits have little survival value. Thus, Coase finds it plausible that humans are inclined to "split the difference" and make the deal, rather than avoid mutually beneficial bargains (p. 162).

Coase's Social Darwinism may be convincing in competitive or thick markets where cooperative individuals have alternatives to dealing with someone who threatens or bluffs. In situations of bilateral monopoly, however, uncooperative traits may well be able to survive. <sup>16</sup> Successful bargainers must trade off the number of deals made and the share they get of each deal. Bluffs and threats often help get a

on a contract). To remedy transaction costs, one attempts to make the mechanics of negotiating easier (e.g., by making it easier for parties to get together; or by interpreting contract clauses to be those that typical parties would make, so that only unusual parties need undertake the costs of drafting explicit clauses on these issues).

<sup>14.</sup> Cooter, by modestly not calling this the Cooter Theorem, wisely distances himself from Coase's extreme approach.

<sup>15.</sup> See, e.g., Vogel, The Coase Theorem and California Animal Trespass Law, 16 J. LEGAL STUD. 149 (1987); Ellickson, Of Coase and Cattle: Dispute Resolution Among Neighbors in Shasta County, 38 STAN. L. REV. 623 (1986); and Donohue, Diverting the Coasean River: Incentive Schemes to Reduce Unemployment Spells, (mimeo 1988) (on file with the Michigan Law Review). Experimental testing on the Coase Theorem has been done by Hoffman and Spitzer in a series of articles; see, e.g., The Coase Theorem: Some Experimental Tests, 25 J.L. & Econ. 73 (1982); Entitlements, Rights, and Fairness: An Experimental Examination of Subjects' Concepts of Distributive Justice, 14 J. LEGAL STUD. 259 (1985). See also Harrison & McKee, Experimental Evaluation of the Coase Theorem, 28 J.L. & Econ. 653 (1985); Schwab, supra note 5. Again, not everyone agrees that the Coase Theorem should be viewed as an empirical proposition. See, e.g., Coleman, Efficiency, Exchange, and Auction: Philosophic Aspects of the Economic Approach to Law, 68 CALIF. L. REV. 221, 225 (1980) ("Coase's theorem is not an empirical claim but is instead an analytic truth about what it means, under certain conditions, to act rationally.").

<sup>16.</sup> And, as one who has recently been through the house-hunting rat race, the observation that buildings are bought and sold does not convince me that parties never fail to make mutually beneficial deals.

higher share but cause some deals to fall through. Certainly a plausible strategy is to maximize neither the number of deals nor the share per deal, but to bluff a little to gain a higher share, recognizing that a few deals may fall through.

I do not want to push the value of nasty bargaining too far. Work by Axelrod<sup>17</sup> and Frank,<sup>18</sup> for example, emphasizes that cooperative strategies (we can call them Coasean strategies) can survive, even in a cut-throat, selfish world. My main point, with which I think Coase would agree, is that the issue of how often parties reach efficient bargains under low transaction costs should be resolved by empirically testing theories of bargaining.

#### B. Wealth Effects and the Invariance Thesis

Legal entitlements not only have possible efficiency effects but may also affect the distribution of wealth between the parties. Supporters of the Coase Theorem have not focused on these wealth effects, <sup>19</sup> but wealth distribution is an important element in public policy and thus the effects are worthy of study in their own right. Further, critics of the Coase Theorem have used wealth effects to attack Coase's "invariance" efficiency claim.

Coase, in *The Problem of Social Cost*, argued not only that parties would reach an efficient bargain regardless of initial legal entitlements, but also argued the stronger "invariance thesis" that parties will reach the same efficient result regardless of initial legal entitlements. This invariance claim has led to one of the more confusing chains in the Coase Theorem literature, leading Cooter in 1982 to make the blanket conclusion that "now there is agreement that the invariance version is untenable."20 A major argument against the invariance thesis relies on the wealth effects of legal entitlements. Whether parties trade initial legal entitlements depends, in Coase's view, on whether the holder values an entitlement less highly than another user. But value depends on a person's willingness and ability to pay for the entitlement, which in turn depends on a person's wealth. If initial legal entitlements affect wealth, and wealth affects valuations, then initial placement of the legal entitlement may affect who values it most highly. Initial placement thus may change which outcome is efficient, destroying the invariance thesis. In this book, however, Coase defends the invariance thesis, with only the most grudging qualifications, by denying that legal entitlements affect wealth distribution. It is worth reexamining the debate.

<sup>17.</sup> R. AXELROD, THE EVOLUTION OF COOPERATION (1984).

<sup>18.</sup> R. Frank, Passions Within Reason (1988).

<sup>19.</sup> See, e.g., Hoffman & Spitzer, supra note 15, at 93 n.47.

<sup>20.</sup> Cooter, supra note 4, at 15.

In The Problem of Social Cost, Coase assumed that legal entitlements would affect wealth. For example, in discussing the farmer/rancher parable, he concluded that an agreement to waive an entitlement to compensation "would not affect the allocation of resources but would... alter the distribution of income and wealth between the cattle-raiser and the farmer" (p. 100). Many later writers likewise state flatly that, according to the Coase Theorem, legal entitlements affect wealth distribution but not the efficient allocation of the entitlement.<sup>21</sup> But the issue is more subtle, and indeed not yet fully resolved.

A basic distinction exists between property entitlements and contract entitlements. Demsetz suggested that property rights affect wealth distribution but contract rules do not.<sup>22</sup> For example, the rancher with an open range right immediately benefits from letting his cattle run free from liability. The rancher may sell this right if it is worth more to the farmer, but it is worth something to the rancher and thus increases his wealth. A contract right, by contrast, gives value only if the nominal beneficiary gets a contract to which the benefit attaches. An implied warranty of habitability, for example, benefits the tenant only if she can get a lease. But to get such a lease, the rent must cover the cost of the warranty to the landlord. Thus contract rights do not increase the wealth of the nominal beneficiary, at least in competitive markets.<sup>23</sup>

Waivable contract rights (or contract presumptions) may, in some situations, increase the wealth of the nominal beneficiary.<sup>24</sup> The basic line is probably between thick, competitive markets and thin markets where individual bargaining over surplus occurs. In competitive markets, price equals cost and cost is the minimum possible cost; if the contract presumption would increase costs, the parties will write around it (assuming low transaction costs), and cost and price remain unchanged. But in markets where price can exceed cost, a favorable contract presumption may increase one's bargaining power. Even if the beneficiary waives the presumption, he may receive a greater share of the surplus for doing so.

<sup>21.</sup> See, e.g., A. POLINSKY, AN INTRODUCTION TO LAW AND ECONOMICS 12 (1983) ("[T]he choice of the legal rule redistributes income by the amount of the least-cost solution to the conflict"); Coleman, supra note 15, at 225 ("The traditional understanding of Coase's theorem might be summarized as follows: allocative efficiency... does not depend on the initial assignment of entitlements.... The initial assignment of entitlements, however, does affect the relative wealth of the competing parties simply because the assignment determines which party has to do the purchasing (or what economists misleadingly call 'bribing')."

<sup>22.</sup> Demsetz, When Does the Rule of Liability Matter?, 1 J. LEGAL STUD. 13, 16-18 (1972). For a critique, see Schwab, supra note 5.

<sup>23.</sup> I have contrasted property rights and contract rules in more detail elsewhere. See Schwab, supra note 5. One qualification to the blanket statement in the text is that a non-waivable or coercive contract rule will affect wealth if the rule mandates greater benefits than the beneficiary would voluntarily pay for. Such coercive rules are inefficient: depending on the specific context, the rule may increase or decrease the relative wealth of the beneficiary.

<sup>24.</sup> See Schwab, supra note 5.

Thus, the line between contract rules and property rights may not be as clear as supposed, with some contract rules, as well as property rights, having wealth effects. But one should not overemphasize the wealth effects of property rules. Property rights are transformed into contract rights when the initial entitlement-holder sells the right. Buyers cannot benefit from the open-range rule until they purchase ranch land. But the price of ranch land with open-range rules will exceed the price of ranch land where ranchers are liable for damage, offsetting the value of the rule. The wealth of subsequent ranchers is thus unchanged by the legal rule.

Demsetz first noted that the value of the legal rule will be internalized in the price. He suggested, however, that a change in legal rules would give windfall gains or losses to the current owners of land. For example, a rancher who bought his land under an enclosure rule (thinking he would have to pay for fencing) is suddenly wealthier when the rule switches to open-range. Although later ranchers will pay more for the land, eliminating the wealth effect, Demsetz argued that a switch in legal rule would create a one-time wealth effect.<sup>25</sup>

Coase, however, now challenges even the one-time wealth effect (assuming zero transaction costs). As he puts it, "a change in the liability rule will not lead to any alteration in the distribution of wealth" (p. 171). Rejecting wealth effects, Coase can flatly call the wealth distribution argument against the invariance thesis "wrong" (p. 171). To make the argument, Coase emphasizes the power of the zero-transaction-costs assumption. With zero transaction costs, contracts could be written and enforced to cover every contingency, including a possible switch in legal rules. For example, a land purchase contract could give a rebate if the legal rule became less favorable to the buyer. The zero-transaction-costs assumption eliminates any timing problem. Even if the legal rule switches decades later, the seller will immediately give the buyer a rebate.

Such a fanciful contract illustrates the bizarre character of a world with zero transaction costs. Coase's argument does not work in a world with a time dimension, where buyers cannot rely on sellers reappearing years later to readjust contracts. Consider a buyer and seller of ranch land bargaining under the shadow of a favorable open-range rule. The parties know that the land will be less valuable if the legal rule ever switches. If the deal must be consummated now (rather than having the timeless luxury of waiting to see if the rule indeed switches), the price will be discounted by the probability of a switch in legal rule. Nevertheless, the buyer will lose if the rule actually switches, for he must now incur the costs of fencing without paying a fully discounted price for the land. If so, the switch in rule would affect wealth.

<sup>25.</sup> Demsetz, supra note 22, at 19-22.

Coase concedes that entitlements affect wealth if contracts cannot anticipate all contingencies. He gives the example of a newly discovered asset, such as a cave (pp. 157, 173-74). Even in a world of zero transaction costs, says Coase, it is hard to conceive of parties dealing with contingencies they cannot anticipate.<sup>26</sup> In the cave example in his 1959 article The Federal Communications Commission, 27 Coase argued that "[w]hether the cave is used for storing bank records, as a natural gas reservoir, or for growing mushrooms depends, not on the law of property, but on whether the bank, the natural gas corporation, or the mushroom concern will pay the most in order to be able to use the cave."28 Coase now admits that it "never entered my head" (p. 173) to qualify this argument with wealth effects. If the demand for mushrooms differs among the possible claimants to the cave, the assignment of title will affect the relative demand for mushrooms, natural gas, and bank services. The resulting change in relative prices may alter the amount the various businesses are willing to pay for the cave, thus possibly affecting the way the cave is used. Coase concedes that it is "conceivable" (p. 174) that the criteria for assigning ownership to previously unrecognized rights, if it leads to dramatic changes in relative demand, may alter the allocation of resources. But apart from "such cataclysmic events as the abolition of slavery, these effects will normally be so insignificant that they can safely be neglected" (p. 174).

Coase's limited concession suggests when wealth effects are most likely to invalidate the invariance thesis. The cave example, like all of Coase's examples, involves legal entitlements for producers rather than consumers. Increasing the wealth of a producer does not alter its willingness and ability to pay for factors of production. Rather, producers will choose the level and combination of factors that maximizes profits. Thus, awarding a legal entitlement to a business firm, even if it alters its wealth, does not affect the firm's willingness and ability to pay for the entitlement. Since the initial legal award does not alter willingness and ability to pay, the legal award does not directly affect which outcome is efficient. So far, then, the invariance thesis remains intact.

But as Coase admits, the wealth created by a firm's legal entitlement conceivably has an indirect effect on the valuation of the entitlement. This occurs when we consider the possible changes in demand that occur as the legal entitlement alters the wealth of the firm's shareholders. Demand will change if the consumption patterns of shareholders differ systematically by firm. For example, ranch owners may

<sup>26.</sup> A "zero transaction cost" zealot would say that this limitation on information means it is not a zero transaction cost situation, but Coase is not quite so zealous.

<sup>27.</sup> Coase, The Federal Communications Commission, 2 J.L. & Econ. 1 (1959). This article is the precursor to The Problem of Social Cost.

<sup>28.</sup> Coase, supra note 27, at 25.

love bread while farm owners prefer steak (smelling cows all day makes one a vegetarian, perhaps). If the initial legal entitlement favors ranchers, and bread and steak are normal goods, the relative demand for bread will be higher than otherwise. If the effect is great enough, it could be profitable to turn some ranch land into farm land. If so, the invariance thesis is destroyed because the efficient allocation of resources will depend on initial legal entitlements.

This indirect effect of the change in shareholders' income seems far-fetched. A more natural assumption is that the relative demands of shareholders do not vary systematically by firm. If so, the wealth effects of initial legal entitlements to firms will not change the efficient outcome.

More serious, however, are the wealth effects arising when the legal decision involves consumers rather than producers. A property entitlement can increase a consumer's wealth.<sup>29</sup> This shifts out his budget constraint, directly affecting his demand for goods, including his willingness and ability to reject offers to purchase his entitlement. This direct effect of the legal entitlement on a consumer's budget constraint makes wealth effects more significant for consumers than producers. Correspondingly, the invariance thesis becomes more problematic for consumer entitlements.

As an example, compare a Civil-War-type draft, which lets draftees buy their way out for, say, \$40,000 per period, with a volunteer army paying \$40,000 per period. The question is whether, as the invariance thesis claims, the same people will be in the army in either case. Some people, unwilling or unable to pay \$40,000 to escape the draft, would reject the lure of a volunteer army paying \$40,000. People are wealthier when the army has to bribe them in, and this directly increases their willingness and ability to pay for civilian life.<sup>30</sup> Even though the result may be efficient in either case, it is a different efficient result.

In sum, two things must occur for wealth effects to invalidate the invariance thesis. First, the legal entitlement must affect wealth. Second, the wealth must so greatly change the willingness and ability to pay for the entitlement that the most highly valued user of the entitlement changes. Property rights are more likely than contract rules to

<sup>29.</sup> We must remember Coase's argument that legal rules have no wealth effects because contracts can anticipate all legal rules that might affect the item in question. See text following note 25 supra. Coase's argument, which was not completely convincing for entitlements affecting producers, has even less force for entitlements affecting consumers. If parents had the perfect foresight implied by zero transaction costs, they might be able to anticipate the legal rules under which their children and grandchildren would live, but no contract price regulates the changing value of children's entitlements. Unlike the goods that producers use or make, people are not bought and sold. Thus, although parents might anticipate a draft, they will not be compensated for the fall in their children's wealth.

<sup>30.</sup> See Demsetz, Toward A Theory of Property Rights, 79 Am. ECON. ASSN. PAP. & PROC. 347, 349 n.2 (1967).

have wealth effects, so the invariance thesis is more plausible for contract rules. Among rules with wealth effects, only those involving consumers, as opposed to producers, will directly affect the willingness and ability to pay for the entitlement. The invariance thesis is thus more plausible for entitlements involving producers.<sup>31</sup>

#### C. Rents and the Invariance Thesis

Consider the size of a rancher's pocketbook and herd under both an open-range law and an enclosure law. The invariance thesis insists that the law will not affect the size of the herd (again, assuming low transaction costs and the absence of wealth effects). Under either law, the rancher adds cattle until the value of another cow equals its marginal cost. Under an enclosure law, where the rancher is liable for corn damage, the cost of the extra steer is the rancher's greater liability for corn damage. Under an open-range rule, the cost of the extra steer is the opportunity cost of forgoing the farmer's bribe.

Suppose when the rancher is liable he will not add a sixth cow to his herd, because the value of the corn trampled by this sixth cow (for which he is liable) exceeds the value of this sixth cow. When the law switches to an open-range rule, the Coase Theorem relies on the bribes of farmers to force the rancher to internalize the trampling costs and ensure the same result.

Regan and others have noted that this story assumes farmers are earning economic rents and thus are able and willing to bribe ranchers to reduce the size of their herd.<sup>32</sup> Economic rents occur, by definition, when the farmer earns more than he could in his next-best alternative.<sup>33</sup> If the farmer is earning only a normal return in farming (meaning he could do as well in an alternate job), he is not earning rents but only normal profits. The traditional economic picture of a competitive market insists that at least some farmers (and perhaps all farmers)

<sup>31.</sup> Kelman has emphasized the problems of applying the Coase Theorem to consumers (implicitly suggesting it has greater plausibility for producers). He argues that "[c]onsumers do not behave in a way such that the Theorem holds true." Kelman, Consumption Theory, Production Theory, and Ideology in the Coase Theorem, 52 S. CAL. L. Rev. 669, 678 (1979). Kelman goes well beyond the issue of wealth effects (although many economists try to limit Kelman's arguments to wealth effects), declaring that consumers treat realized costs differently from opportunity costs.

<sup>32.</sup> Regan, *supra* note 6; Auten, *Discussion*, in Theory and Measurement of Economic Externalities 38 (S.A.Y. Lim. ed. 1976).

<sup>33.</sup> The technical definition of "rent" differs from ordinary usage, where rent is what a tenant pays a landlord. The two are connected, however. Economists first applied their technical definition of rent to income earned from land. It was thought that land would remain in production as land (what else could it be?) no matter how much a landlord received for it or how much it was taxed. The income earned was greater than that necessary to keep it used as land, and was thus "rent." See Alchian, Rent, in 4 THE NEW PALGRAVE: A DICTIONARY OF ECONOMICS 141-43 (1987).

earn zero rents.<sup>34</sup> But a farmer earning zero rents can do as well in another occupation, and would therefore refuse to pay the rancher a positive bribe to earn zero rents. Rather, the farmer would turn to the other occupation which also earns normal profits and does not require a bribe. Regan suggests this contradicts the invariance claim. The farmer is willing to farm when the legal rule favors farmers. But when the rule switches, the farmer must pay a bribe and now turns to another occupation.<sup>35</sup>

Coase finds Regan's contention "plausible" but "wrong" (p. 164). Suppose the farmer has the initial entitlement. Since he earns no rents from farming, he would be willing to sell his entitlement for an infinitessimal sum and turn to alternative occupations and investments. If the rancher can have the entitlement for free, asks Coase, how can one say the rancher does not have the right to it? Liability and non-liability are interchangeable at will. The rancher and farmer, each earning zero rent, "are equally likely to stay or leave. What will happen is completely unaffected by the initial legal position" (p. 165).

Coase's argument is clever. The marginal producer is indifferent between operating and not operating. The definition of a person earning zero rents, or only normal profits, is that she could do as well elsewhere. Such a person oscillates between production and nonproduction even without a switch in legal entitlement, so the switch cannot be the cause of the oscillation. The ambiguity in land use arises because the activities are equally efficient, not from shifting legal entitlements. The invariance thesis survives this attack.

#### D. Coase and Pigou

One senses that Coase sees his life's work as an effort to combat the evil of Arthur Pigou, an early twentieth-century British economist.<sup>36</sup> The Pigovian approach emphasizes that a "natural" or laissez-faire economy will not be optimal when the private costs of an action differ from its social costs. These externalities<sup>37</sup> create a presumption that

<sup>34.</sup> If all farmers are earning extra-normal profits, then resources would flow into farming, absent some entry barrier — violating the Coasean invariance prediction.

<sup>35.</sup> Regan, supra note 6, at 434-35.

<sup>36.</sup> Coase reveals that he possesses Pigou's copy of a 1904 work on Municipal Monopolies, and has studied Pigou's markings and comments to discover his manner of working. P. 22 n.33. The "bent of Pigou's mind" suggests no "real interest" in the details of his subject. P. 22. Coase reports that Pigou's biographer notes that Pigou always sought "realistic illustrations for quotation in his own work." *Id.* (quoting Robinson, *Arthur Cecil Pigou*, in 12 INTERNATIONAL ENCY-CLOPEDIA OF SOCIAL SCIENCES 92, 94 (1968)). But, Coase responds, by acquiring illustrations in this way, Pigou often fails to realize their significance. P. 23.

<sup>37.</sup> Most modern economists label the divergence between private and social cost an "externality" problem, and view Coasean private bargains as one way of solving the externality problem. Coase credits Paul Samuelson with coining the term in the 1950s. P. 23 n.35. Coase here explains why he never used the term "externality" in *The Problem of Social Cost*, but spoke only of an action's "harmful effects." His goal was to show that the right to incur a "harmful effect" was no different than the right to any other factor of production, and that sometimes it is useful

government intervention can improve the situation through liability rules or, more commonly, through taxes and subsidies.

Coase's reaction to this Pigovian approach was, of course, a major theme of *The Problem of Social Cost*. In a "brilliant, theoretical counterattack," Coase observed that in a frictionless and perfect-information world in which the omniscient Pigovian government operates, private parties could solve the externality problem without government help. In our world of transaction costs, private parties do not eliminate externalities when the transaction costs of doing so exceed the benefits. Likewise, however, the costs of government intervention may exceed the benefits. The mere presence of externalities in our economy does not create a presumption that action by a real-world government — an authority that is "ignorant, subject to pressure, and corrupt" (p. 26) — is preferable to an untamed externality.

But Coase, in *The Problem of Social Cost*, went beyond observing that private parties do not need a government in a Pigovian world (except for the background function of setting clear entitlements and enforcing bargains). Coase argued that Pigou "was mistaken in his economic analysis" (p. 138), that "the Pigovian analysis seems to give the wrong answer" (p. 141), and that "both the analysis and the policy conclusions [of the Pigovian tradition] are incorrect" (p. 149). Coase insisted that intervention by even an ideal Pigovian government might be worse than laissez-faire. This stronger argument has proved most controversial.

In The Problem of Social Cost, Coase analyzed two classic examples (both taken from Pigou) to demonstrate that government intervention could be worse than laissez-faire, even assuming private parties could not make bargains. The first example involves the railroad whose sparks burn farmers' crops. Pigou thought the railroad would operate too many trains unless the government made the railroad liable for damage to the farmers, thereby forcing it to consider the full costs of operating trains.<sup>39</sup> Coase presented a numerical example showing that imposing liability could lower the overall social output. The reason, Coase explained, is that if farmers were compensated for the value of their burnt crops, they would not care if their crops

to eliminate harmful effects from production — and sometimes it is not. As employed today, the term "externality" carries with it the connotation that the government should take steps to eliminate them. Pp. 26-27. Coase realizes his effort in terminology was clearly unsuccessful, because even sympathetic observers call *The Problem of Social Cost* a study in externality. P. 27.

<sup>38.</sup> Professor Horwitz has characterized the Coase Theorem as a "brilliant counterattack" on the presumptive validity of state intervention in private markets. See Horwitz, Law and Economics: Science or Politics?, 8 HOFSTRA L. REV. 905, 906 (1980).

<sup>39.</sup> Coase faulted Pigou's historical research in proposing this example of the inadequacy of laissez-faire. P. 23. A statute of Parliament exempted railroads from common law liability for sparks. Thus, government intervention imposed no liability. As Coase's critique here shows, Coase (along with many law and economics scholars) sharply distinguishes intervention by the legislature from rules created by common law.

burn, and so would put their crops too close to the railroad. This inefficient behavior could outweigh the railroad's inefficiency, under no liability, of running too many trains.

The second example concerns the infamous factory that pollutes nearby residences. Here the Pigovian solution — as Coase interpreted it - was to tax the factory an amount equal to the damage to neighboring properties from each additional puff of smoke. The flaw in the Pigovian solution, according to Coase, is similar to the flaw in the railroad example: residents will move too close to the factory, ignoring the extra taxes they impose on the factory. As residents approach the factory, the factory's tax rate rises, inducing the factory to install more expensive pollution-abatement devices. A cheaper solution, however, may be to have residents live elsewhere. Coase suggested that a tax system, if used at all, should tax the factory and the residents an amount equal to the additional costs incurred by the factory to avoid the damage. Under a single-tax system, Coase thought, there would be too little smoke and too many people near the factory. This Pigovian tax solution may be worse than the no-tax result of too much smoke and too few people (pp. 151-53).

Others have since shown that Coase overstates Pigou's errors. Robert Cooter, in an important article, analyzed the railroad spark parable.40 Coase assumed that railroad liability meant the railroad would have to pay farmers the market value of the burnt crops. From this assumption Coase correctly concluded that farmers may grow crops too close to the railroad, not caring if they are destroyed. But, Cooter demonstrates, if the measure of damages is the fall in the farmers' land value rather than the value of the burnt crops, a liability scheme will induce farmers to place their crops an efficient distance from the tracks and will induce the railroad to run the efficient number of trains.<sup>41</sup> Farmers will not gain from putting valuable crops close to the tracks, for they are compensated only for the difference in the best use of the land without sparks and the best use with sparks. Thus, Cooter demonstrated, a liability policy where damages are based on the fall in farmer's land values will always be more efficient than a program of no liability (assuming that transaction costs prevent bargaining).

William Baumol has repelled Coase's attack on the Pigovian tax solution to the pollution problem.<sup>42</sup> "[T]aken on its own grounds," Baumol insists, "the conclusions of the Pigovian tradition are, in fact, impeccable."<sup>43</sup> Just as Coase chose a wrong measure of damages in

<sup>40.</sup> Cooter, supra note 4.

<sup>41.</sup> *Id*.

<sup>42.</sup> Baumol, On Taxation and the Control of Externalities, 62 Am. Econ. Rev. 307 (1972); see also W. Baumol & W. Oates, The Theory of Environmental Policy (1975).

<sup>43.</sup> Baumol, supra note 42, at 307.

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the railroad example, Coase emphasized the wrong measure of taxes here. A government tax, based not on damages particular residents suffer but on the fall in land values from pollution, can induce an optimal amount of pollution and an optimal amount of residential development near the factory.

In these new notes, Coase continues to trash Pigou. The Pigovian approach, he says, has had an "extraordinary hold . . . on the minds of modern economists" and Coase's hope is "to weaken that hold" (p. 159). Coase realizes that "[s]ome have suggested that I was too harsh in my criticism of Pigou, but I believe what I said was essentially correct" (p. 20). Coase was "essentially correct" to emphasize that a policy analyst must compare either an ideal laissez-faire world of zero transaction costs (where, according to the Coase Theorem, externalities do not exist) with an ideal Pigovian government solution, or compare the inefficiencies of a world of externalities (arising from high transaction costs) with the costs of intervention by an imperfect government. Nevertheless, Coase has had to back away from his extreme rhetoric that even ideal government intervention may be worse than the externalities it tries to correct.

Coase admits as much in responding to Baumol's critique.44 He concedes that "Baumol's taxing system is conceivable and if put into practice it would have the results he describes" (p. 182). But, he argues, the information required on which to base a tax is immense. Coase sees "no way in which the information required for the Pigovian tax scheme could be collected" (p. 184).

Coase concludes by ridiculing economic theorists,45 with their extensive use of complicated math:

My point was simply that such tax proposals are the stuff that dreams are made of. In my youth it was said that what was too silly to be said may be sung. In modern economics it may be put into mathematics [p. 185].

Coase's rhetoric is still too strong. Yes, modern mathematical economics is difficult to understand and translate immediately into policy. But the rigor is useful in forcing the modeler to articulate assumptions. For example, hidden ambiguities about a liability scheme can be forced into the open when one must write, "court award = x," and must describe x as either a function of damages to crops or of the fall

<sup>44.</sup> It is a shame that Coase apparently is not familiar with Cooter's The Cost of Coase, supra note 4, for it contains, in addition to an analysis of the proper measure of damages, several other penetrating observations of the Coase Theorem. In particular, it would have been interesting to hear Coase's reaction to the "Hobbes Theorem," which Cooter posits as the polar opposite to the optimistic Coase Theorem. See supra note 7.

<sup>45.</sup> Coase has long disparaged mathematical economists. For example, in his 1946 article on The Marginal Cost Controversy, Coase finds much of the literature, "at least to the nonmathematical reader," irrelevant to the foundation of the argument. P. 76 n.5. Later in that 1946 article, he dismisses "Hotelling's mathematical formulation" as coming "to much the same thing." P. 83 n.18.

in land values. Coase's reluctance to use mathematics contributed to the ambiguity in his argument.

Coase's major point on methodology, however, remains valid. An advocate of intervention must compare the costs and benefits of a government solution with the private solution, and not presume that private imperfections imply that government intervention will improve things. But Coase's trashing of the theoretical consistency of the Pigovian approach remains unconvincing. If he means to attack the increasingly technical approach of economists, he indeed is crying in the wilderness (and his prophecies will not be heard for a long time). If he is calling for more institutional analysis to enrich stark models (the work of Oliver Williamson comes to mind)<sup>46</sup> then he is on stronger ground. I return to this point in examining why economists ignore Coase.

## III. THE ATTRACTION OF LAWYERS (BUT NOT ECONOMISTS) TO COASE

Coase's new writings have the tone of an old prophet looking back on others frolicking behind, oblivious to the "long, arduous, but rewarding journey" of the Coasean approach (p. 31). My message, bemoans Coase, has been ignored. Humbly, Coase says, the fault may partly arise from "inadequacies in my exposition" (p. 1). But that cannot fully explain the shunning, for Coase thinks his ideas are so simple that seemingly anyone should fully embrace them upon hearing the argument. "[T]he argument in these papers is, I believe, simple, so simple indeed as almost to make their propositions fall into the category of truths which can be deemed self-evident . . ." (p. 1).

That his ideas have been ignored rather than embraced suggests, says Coase, that economists have a fundamentally different way of looking at economic problems, and thus ignore, reject or misunderstand his argument. Economists assume frictionless markets, whereas Coase emphasizes transaction costs. Economists analyze the appropriate policies of a perfect government, whereas Coase emphasizes that the governmental cure may be worse than the private-market disease. Economists, snipes Coase, have a bent for "blackboard economics," whereas a serious analysis of transaction costs in a particular situation

<sup>46.</sup> O. Williamson, The Economic Institutions of Capitalism (1985); O. Williamson, Markets and Hierarchies (1975).

<sup>47.</sup> In blackboard economics, the teacher "fixes prices, imposes taxes, and distributes subsidies (on the blackboard) to promote the general welfare." P. 19. "Undoubtedly," says Coase, blackboard economics is "an exercise requiring great intellectual ability, and it may have a role in developing the skills of an economist, but it misdirects our attention when thinking about economic policy." P. 19. To formulate economic policy, says Coase, we must examine how "the economic system would work with alternative institutional structures." Pp. 19-20. Similarly, Coase says sarcastically, the Pigovian approach of taxing externalities has, whatever its merits, "the added attraction. . . [of] look[ing] impressive on a blackboard or in articles, and [in requiring] no knowledge of the subject." P. 179.

requires more than a simple graph. And we have already noted how disparaging Coase has been of the mathematical trend in modern economics.<sup>48</sup>

Some economists might deny Coase's charge that their profession has ignored him. Coase's two major articles appear frequently on reading lists in Industrial Organization or Public Finance and are often cited in the literature. But, Coase would reply, referring specifically to *The Theory of the Firm*, the paper is "much cited and little used" (p. 62).

Assessing whether someone's work is little used or influential is difficult. For our purposes, the prime issue is not whether economists ignore Coase in some absolute sense, but whether the relative attraction is stronger for legal scholars than economists. To anyone who has scanned a recent law review, the idea that Coase complains of being ignored must come as a shock. Contemporary legal scholarship clearly takes Coase and his Theorem seriously and expends considerable effort exploring the implications of his approach. Tort, contract, and property scholarship are chock full of references, and public law subjects ranging from administrative law to zoning are not far behind. Although he and his Theorem are not without controversy in the law schools, and indeed may be on the defensive in recent years, Coase can hardly complain of being ignored in the law school world.

One bit of comparative evidence might be found in the relative rates of citation to Coase in legal and economics journals. A search of the Social Science Index <sup>49</sup> revealed 1109 citations to *The Problem of Social Cost* since 1972. Of these, 53% were in journals whose primary subject was law, while only 32% were in journals whose primary subject was economics (15% of the cites were to journals in other subjects).<sup>50</sup> This evidence is consistent with Coase's claim that he is relatively ignored by economists.<sup>51</sup>

Textbooks may be a better place than journal articles to search for influence. Coase does receive a mention in Samuelson's introductory textbook, *Economics*, <sup>52</sup> but not in Varian's graduate level

<sup>48.</sup> See supra text at note 45.

<sup>49.</sup> I thank Barbara Vaccaro, Reference Librarian at the University of Michigan Law School, for her efforts in this search.

<sup>50.</sup> Lest lawyers think this is due to the over-abundance of law review articles, law subject journals contained only 84,043 articles since 1972 while economics journals had 131,580 articles (Law and economics had 2318 articles). Thus, economists had over 50% more articles from which they could generate cites.

<sup>51.</sup> In absolute terms, The Problem of Social Cost is probably one of the most-cited articles in the law review world. See Shapiro, The Most-Cited Law Review Articles, 73 CALIF. L. REV. 1540, 1546 (1985) ("without question [it] would have qualified for the tabulation of most-cited articles if Journal of Law and Economics were indexed by Shepard's"). See also GREAT AMERICAN LAW REVIEWS (R. Berring ed. 1984) (including The Problem of Social Cost in an anthology of the 22 "greatest" pre-1965 law review articles).

<sup>52.</sup> P. SAMUELSON & W. NORDHAUS, ECONOMICS (12th ed. 1985). The reference is hardly

text.<sup>53</sup> In contrast, many of the leading casebooks in torts, contracts, and property deal with Coase, some extensively.

Citation evidence from articles or textbooks is far from conclusive. One problem is the possibility of "obliteration." Some writers — and Coase may be among them — are so influential that their ideas become integrated into the common body of knowledge and scholars no longer explicitly cite their work.<sup>54</sup> Problematically, obliteration occurs more often in economics scholarship, which does not have the penchant of law review writing to cite everybody for everything.<sup>55</sup> Thus, the relative frequency of Coase citations in law journals may reflect styles of citation rather than degree of influence. A greater problem is that a citation merely reflects awareness of the work's existence, rather than agreement. Clearly, many legal scholars citing Coase disagree vehemently with his approach and conclusions. Nevertheless, hostility itself reflects influence. Those attacking the Coasean approach find it sufficiently disturbing to merit a response, and a view that is largely ignored rarely merits response.

I do not rely on citation evidence when I claim legal scholars are attracted to Coase. By "attract" I mean that many find his work gives important insight to the legal system, and many others find his views sufficiently disturbing to motivate them to respond. That legal scholars ranging from Richard Posner<sup>56</sup> to Bruce Ackerman<sup>57</sup> to Pierre Schlag<sup>58</sup> treat Coase's vision as an exemplary approach to law suggests an attraction of the legal mind to Coase. That scholars ranging from Robert Cooter<sup>59</sup> to Owen Fiss<sup>60</sup> to Mark Kelman<sup>61</sup> attack the vision does not lessen this conclusion. For both supporters and opponents, Coase has helped set the terms of debate about the legal system.

In sum, I think it fair to say that Coase correctly perceives himself as outside the mainstream of economics;<sup>62</sup> by contrast, he has significantly influenced legal thought. It is far more difficult for a law student to graduate without a serious encounter with the Coase Theorem

favorable. Samuelson and Nordhaus note that neither Coase nor anyone else has shown that parties necessarily reach efficient results from bargaining. *Id.* at 718-19.

- 53. H. VARIAN, MICROECONOMIC ANALYSIS (2d ed. 1984).
- 54. See Shapiro, supra note 51, at 1543-44.
- 55. See generally Rodell, Goodbye to Law Reviews, 23 Va. L. Rev. 38 (1936) (complaining of over-footnoting in law reviews).
  - 56. R. Posner, supra note 13, at 7.
  - 57. B. Ackerman, Reconstructing American Law 46-71 (1984).
- 58. Schlag, An Appreciative Comment on Coase's The Problem of Social Cost: A View From the Left, 1986 Wis. L. Rev. 919.
  - 59. Cooter, supra note 4.
  - 60. Fiss, The Death of the Law?, 72 CORNELL L. Rev. 1 (1986).
  - 61. M. KELMAN, A GUIDE TO CRITICAL LEGAL STUDIES (1987); Kelman, supra note 31.
- 62. To put it more boldly (but for its placement in an obscuring footnote), Coase will never win the Nobel Prize for Economics. Gary Becker, whom Coase thanks in his *Preface* (p. vii) and whose interests overlap Coase's, will.

than it is for students obtaining a Ph.D. in economics. If we accept this premise, the interesting speculation is why Coase is so dominant in legal scholarship, yet (by his own admission) is a bit player to economists. What insight can this attraction give us about law or legal scholarship?

Before seeking answers we must remind ourselves that Coase has several themes that radiate differently in law and in economics. First, Coase emphasizes that externality problems are reciprocal: the rancher harms the corn, but only because the farmer locates near the cows. Second, the Coase Theorem asserts that parties will reach efficient bargains regardless of initial legal entitlements, absent transaction costs. Third, Coase warns against favoring government intervention simply because private markets work imperfectly. With these various themes, the relative attraction of lawyers over economists to Coase is unlikely to have a single explanation.

#### A. Insights and Paradigms

Perhaps Coase has more insights for law than for economics. A central question of law is whom the law should favor and how to justify favoring one group over another. Traditionally, the law addressed this by asking such questions as who had the property right, who caused the harm, who acted reasonably. Coase, however, emphasized the reciprocal nature of the problem and argued that legal analysts could not determine who caused the harm until the parties' rights had been defined. Further, no natural way of defining rights existed. The Coasean approach was a major challenge to the traditional way of thinking about these fundamental issues.<sup>63</sup>

In addition, legal academics before the Coasean revolution rarely considered the feedback effects of legal rules. The Coase Theorem, which assumes that people will modify their behavior in response to legal rules, presented a new mode of analysis. For example, in determining the effect of a rule holding doctors negligent if they do not give glaucoma tests, the Coase Theorem challenges legal scholars to consider that doctors still may not give the test if it is not cost effective.<sup>64</sup>

Economists, on the other hand, are more apt to take the initial distribution of rights or entitlements as given and examine how parties will trade or respond to them. Thus, some of the "first-order" issues of entitlements to which the Coase Theorem speaks are of lesser importance to economists. Further, economists in 1960 were already accustomed to thinking of feedback effects, so the Coase Theorem was

<sup>63.</sup> See Gjerdingen, The Politics of the Coase Theorem and Its Relationship to Modern Legal Thought, 35 BUFFALO L. REV. 871 (1986).

<sup>64.</sup> See generally Helling v. Carey, 83 Wash. 2d 514, 519 P.2d 981 (1974); Wiley, The Impact of Judicial Decisions on Professional Conduct: An Empirical Study, 55 S. CAL. L. Rev. 345 (1982).

less startling.<sup>65</sup> An arrogant economist might say of the Coase Theorem:

Coase didn't tell economists anything we didn't already know. Legal scholars were so mixed up in their thinking that an obvious point like "people will negotiate around unfavorable legal rules if they can" was news to them. This trivial point became a theorem.

One problem with the "relative insight" explanation is that Coase thought in 1960, and continues to think today, that he is advising economists how to examine their issues, not advising lawyers how to study the legal system. As he said in 1981, "I have no interest in lawyers or legal education. . . . My interest is in economics. . . . I do think some knowledge of legal institutions is essential for economists working in certain areas, but it's what it does to economists that interests me, not what it does to lawyers." 66 Coase thinks that economists simply are too fixated on their own framework to listen to his message.

Coase's response suggests a related explanation: the greater receptivity of legal scholars to new approaches.<sup>67</sup> The timing of Coase's message is important here. In 1960, when Coase published *The Problem of Social Cost*, legal scholars were thrashing. Legal Realism had long since destroyed anyone's belief in the autonomy and formal logic of law. Yet Legal Realism was an essentially negative insight. While destroying prior assumptions about the coherence of law, it gave only limited positive explanations. The economic approach arrived at a time of self-doubt for many legal scholars.<sup>68</sup> Its claimed ability to explain the common law as a set of efficiency-enhancing rules was attractive, even though it ran counter to many intuitions and presuppositions of legal scholars.

<sup>65.</sup> The Coase Theorem certainly was new to economists. George Stigler recalled the seminar where Coase first presented "The Problem of Social Cost" as "one of the most exciting intellectual events of my life." The vote at the beginning of the seminar was 20 for Pigou, with only Coase supporting his position. At the end, all participants voted for Coase. See Kitch, ed., The Fire of Truth: A Remembrance of Law and Economics at Chicago, 1932-1970, 26 J.L. & ECON. 163, 221 (remarks of George Stigler).

<sup>66.</sup> Kitch, supra note 65, at 192-93. Coase continued his comment:

I think you can often learn more about how the economic system works by reading law books and cases in law books than you can by reading economics books because you do get descriptions of actual business practices which are difficult to explain. Many of the examples which are given in economics books are made up by the economists and don't represent actual practices at all.

Id. at 193.

<sup>67.</sup> Lest I be accused of obliteration, let me acknowledge that the relative receptivity explanation draws on the approach of Thomas Kuhn. Kuhn suggests that the search for truth occurs within paradigms, and that someone calling for a new paradigm is unlikely to be heard unless the old paradigm becomes too burdened with complexity or unsolved problems. See T. Kuhn, The Structure of Scientific Revolutions (1970).

<sup>68.</sup> Obviously, all was not doom and gloom in law schools during the 1960s. In particular, constitutional lawyers, defending or attacking the Warren Court, were the relatively new, major players on the stage. The Coasean approach, which reemphasized private law, especially the common law, sought to bring law and lawyers back to their roots. Perhaps this explains some of its attraction.

In contrast, in 1960 the economics profession was at a high point of internal consensus and external prestige and influence. The Keynesian approach had seemingly tamed the business cycle, and policymakers at the highest level listened to economists — witness the famous Kennedy tax cut of 1963, enacted at the recommendation of economists to stimulate aggregate demand. Stagflation and the debate over deregulation were yet to come. In microeconomics, the central questions revolved around comparisons of competition with monopoly and oligopoly. Economists were content with their paradigm<sup>69</sup> and not interested in the questions of an anachronistic scholar urging instifutional economics.

Today, Coase's questions are hot topics in economics. Economists are keenly interested in examining the procedure and results of small-numbers or nonmarket bargaining, such as occurs in internal labor markets. But Coase has proven unhelpful to modern economists in answering these questions, for he provides no model and little guidance on how bargains will be struck. His axiomatic theorem simply asserts that efficient bargains will occur unless transaction costs prevent them. Coase was very elusive in suggesting what form these transaction costs might take.

Economists are making progress on these issues, by turning to non-cooperative models of bargaining as distinct from axiomatic models. The seminal model may be by Ariel Rubenstein. Modelling the decision to divide a pie, Rubenstein suggests that when bargainers know how much the other side values a trade, the initial offer will be one the other side will just be willing to accept. But theory and evidence suggest that bargaining will be inefficient when bargainers do not know how much the other side values a trade. Economists are now trying to design mechanisms by which parties will reveal their valuations and thus be induced to bargain efficiently. The results suggest pessimism, at least without heavy government involvement. A model by Myerson

<sup>69.</sup> One must be careful in attributing this to Coase. The claim that efficiency can explain the common law comes largely from Richard Posner rather than Coase, who at best is ambiguous about his claims of efficiency. For example, when discussing the famous doctor/confectioner case of Sturges v. Bridgman, 1 Ch. D. 852 (1879), Coase notes that "the judges seem to have been unaware" that preserving the area for residential or professional use is desirable "only if the value of the additional residential facilities obtained was greater than the value of cakes . . . lost." P. 107. See generally Schlag, supra note 58, at 923-24.

Perhaps this suggests a "great Person" theory for the relative prominence of Coase in law. Richard Posner, an extremely prolific scholar, has championed the Coase Theorem in law. No comparable advocate has been moved to apply Coase's insights in economics.

<sup>70.</sup> For an excellent and readable summary of these developments as they relate to the Coase Theorem, see Farrell, *Information and the Coase Theorem*, 1 J. ECON. PERSP. 113 (1987).

<sup>71.</sup> Rubenstein, Perfect Equilibrium in a Bargaining Model, 50 ECONOMETRICA 97 (1982). For a discussion of Rubenstein's model, see Sutton, Noncooperative Bargaining Theory: An Introduction, 53 Rev. Econ. Stud. 709 (1986), and sources cited therein.

and Satterthwaite,<sup>72</sup> for example, suggests that private contracts will never be efficient if parties have private information about their valuations and are free to walk away from contracts that are unfavorable.

Some of this new economics literature cites Coase<sup>73</sup> because Coase asserted results about bargaining that the new literature attempts to analyze. One might infer that Coase influenced the developments here. But I think Coase correctly perceives he has not. These articles are highly mathematical and present highly stylized models of bargaining. They could not have been written until economists developed the technical tools of noncooperative bargaining theory, and precise handling of the tools is what the economics profession admires and rewards. Coase in no way influenced the development of these tools. Indeed, as I noted earlier,<sup>74</sup> Coase has been hostile to the overly mathematical style of modern economics.

Coase remains, in other words, outside the paradigm of economics. Certainly, as the new bargaining literature indicates, economists are beginning to examine issues that are of interest to Coase. But his call for economists to study more seriously the details of law and other institutions is a cry in the wilderness. Economists are too likely to hear it as a call for institutional economics. The battle over institutional economics was lost long ago.<sup>75</sup> It is not sufficient to roll up one's sleeves and scrutinize in mind-numbing detail some industry or market or firm without a clear theory of what one is looking for. The mass of detail is too overwhelming, and the policy suggestions at the end of the study fail to convince. The modern economics paradigm of using theory to create falsifiable predictions, and then attempting to falsify them through econometric study, makes economics feel like a science. Anyone suggesting another approach is spitting into the wind.

#### B. The Politics of Coase

Perhaps some of the attraction of Coase's ideas may be explained by ideology. This is a disturbing view of scholarship, but one to which lawyers in particular are accustomed. A lawyer or legal scholar has an agenda, often a normative one, and may use whatever tools are helpful in advancing that agenda. So if Coase's ideas further lawyers' agendas, they may be attractive to lawyers for that reason alone.

<sup>72.</sup> Myerson & Satterthwaite, Efficient Mechanisms for Bilateral Trading, 29 J. ECON. THE-ORY 265 (1983).

<sup>73.</sup> For example, Farrell cites Coase, but Rubenstein, Sutton, and Myerson and Satter-thwaite do not.

<sup>74.</sup> See supra note 45 and accompanying text.

<sup>75.</sup> See Kitch, supra note 65, at 175 (comments of Harold Demsetz). See generally id. at 231-33 (Kitch's afterword suggests three stories to explain the attraction of Chicago law and economics: the truth of its vision, the demand for ideas to explain changing social conditions, and the use of its ideas to legitimate the powerful).

Undeniably, ideas are sometimes accepted or rejected because of their political content. But a general warning about political explanations may be appropriate at the outset. This explanation for an idea's attraction is perhaps too powerful, precisely because both acceptance and rejection can be termed political. Demsetz, for example, has asserted that institutional economists of the 1920s were "politically motivated" when they rejected economic price theory because they "[d]esired to be shorn of the constraints that the theory . . . impose[d] on political action." Demsetz's proposition can be turned on him, of course. Perhaps the acceptance of price theory was similarly based on politics: the desire to impose constraints on political action.

Certainly Coase's work has significant political overtones. Some have suggested that it is politically conservative in the sense of favoring the rich over the poor and denouncing government intervention in private markets. Some might be tempted to use this political bias of Coase to explain his attraction to legal scholars. But I find the assumption that Coase — or, more accurately, his Theorem — is necessarily conservative to be dangerously overbroad. A fuller critique of the Theorem must distinguish the positive Coase Theorem of zero transaction costs with the normative "mimic the market" policy prescription for high transaction costs. Those concerned with wealth distribution could embrace the costless Coase Theorem as an ally.

If transaction costs are low, the Coase Theorem declares that efficiency is unaffected by the placement of the initial legal entitlement. This positive analysis has important normative implications. In particular, the costless Coase Theorem implies that efficiency arguments are irrelevant in countering a proposal to give initial legal entitlements to the needy or the deserving. The law has no reason to award entitlements to those willing and able to pay the most for it because, under zero transaction costs, the needy or deserving holders of the entitlement can trade it without any efficiency loss to those willing and able to pay more. We can emphasize this point by labelling it *The Distributive Corollary of the Coase Theorem:* 

With zero transaction costs, initial entitlements cannot be justified on efficiency grounds, and so should be awarded on the basis of need or desert.

<sup>76.</sup> For disparaging remarks about institutional economics from George Stigler, Milton Friedman and other members of the Chicago school, see Kitch, *supra* note 65, at 169-73.

<sup>77.</sup> See, e.g., Horwitz, supra note 38, at 911, 912; Kelman, supra note 31, at 673-78.

<sup>78.</sup> If scholars are attracted to an idea because of its political implications, and if the Coase Theorem is politically conservative, and if legal scholars are more attracted to Coase than are economists, one might conclude that legal scholars are more politically conservative than economists. Remembering that my definition of "attract" included active opponents, one might conclude that legal scholars are more politically polarized than are economists. While either conclusion may be true, I suggest it so cautiously because I am skeptical of the first and second assumptions required to make it.

<sup>79.</sup> See Gjerdingen, supra note 63, at 916-17 (1986).

Who is needy or deserving is not self-evident, and indeed is a major inquiry of moral philosophy. But the Distributive Corollary says our inquiries should *focus* on ethics, since no trade-off exists between equity and efficiency.<sup>80</sup> Modern economists have little to say about this ethical question. Legal scholars, who as jacks-of-all-trades are applied philosophers as well as applied economists, have relatively more to say. Perhaps the Distributive Corollary and its emphasis on ethics suggests some of the relative attraction of the Coase Theorem to legal scholars.

The Distributive Corollary applies only when transaction costs are low. Indeed, some scholars have read into the Coase Theorem a normative principle of "mimicking the market" when transaction costs are high. Under this approach (advocated most prominently by Richard Posner<sup>81</sup>), the law should award entitlements not to the needy or deserving but to those who would have paid the most for it but for the high transaction costs. This principle of wealth maximization, however, is only one approach to awarding initial legal entitlements under high transaction costs. It reflects an ethical principle that must compete with other ethical arguments before we use it as the criterion for awarding entitlements. In other words, we must compare Posner (perhaps amplified by the sympathetic approach of Nozick<sup>82</sup>) with Rawls,83 Dworkin,84 and others before deciding how to award initial entitlements. I am skeptical that even one who agrees with Coase's positive analysis of the effect of law under low and high transaction costs would side with Posner in an ethics debate with Rawls.

In sum, it is wrong to say that the positive Coase Theorem requires a particular ethical view on wealth distribution. To put it crassly, acceptance of the Theorem does not require or even suggest that one favors the rich over the poor. Indeed, one can use the Distributive Corollary to defeat any efficiency-based arguments against favoring the poor with entitlements.

The Coase Theorem does, however, lead one to certain views about the relation between individuals and society, views that are controversial in the legal world. The Coasean approach, consistent with mainstream economics, views society as an amalgam of individuals and views rights and entitlements as (potentially at least) commodities to be traded to higher-value users. This individualistic, nonpaternalis-

<sup>80.</sup> Cf. A. OKUN, EQUALITY AND EFFICIENCY: THE BIG TRADE-OFF (1975).

<sup>81.</sup> See R. POSNER, THE ECONOMICS OF JUSTICE 48-115 (1981). Coase was much more ambiguous in advocating this "mimic-the-market" approach to legal policy. See Schlag, supra note 58, at 933-43 (Posner gives Coase's insights a right-wing normative gloss).

<sup>82.</sup> R. Nozick, Anarchy, State and Utopia (1974).

<sup>83.</sup> J. RAWLS, A THEORY OF JUSTICE (1971).

<sup>84.</sup> Dworkin, What is Equality? Part 2: Equality of Resources, 10 PHIL. & PUB. AFF. 283 (1981).

tic, 85 noncommunitarian view of individuals' relation to society is more frequently contested in law than in economics. Much legal scholarship, particularly within Critical Legal Studies, has a different premise. Much legislation is likewise based, at least on first examination, on a differing view: that law must protect people from themselves as well as others.86

For liberal legal scholars accepting Coase's individualistic framework, however, a basic controversy is whether Coase's prime themes are necessarily linked. Does emphasizing the importance of reciprocity and transaction costs in understanding markets make one skeptical of government intervention to correct the problems posed by transaction costs? Far from being linked, the two insights may be in some tension. Coase's vision of pervasive transaction costs emphasizes the problems of markets. Market failure can occur from free riders, limited information, convex production sets, moral hazard, adverse selection, and bounded rationality, to name a few manifestations of transaction costs. Liberals are attracted to this idea, for it emphasizes that private markets do not produce optimal results. They can view Coase's message about government intervention as merely a caution to be careful.

Bruce Ackerman has taken this approach, separating Coase's two themes and declaring that the essential Coasean insight justifies an "activist" state. RACKERMAN argues that Coase tells an activist story at odds with the reactive legal order, which "assume[s] the legitimacy of the ongoing structure of activities. Coase's story has a "broad temporal frame" that begins not when the cow strays into the farmer's field, but by asking how the rancher and farmer might have structured their activities to avoid trouble in the first place. This "is precisely the point at which the activist lawyer would want to begin."

George Priest, reviewing Ackerman's project, is more skeptical about separating the strands, concluding that "Coase's message is ultimately nihilistic." Priest reminds Ackerman that "Coase's moral

<sup>85.</sup> Schlag characterizes this Coasean (or what he would call Posnerian) view as "paternalistic" rather than nonpaternalistic. It is paternalistic, Schlag says, to require that individuals, to be counted, express their needs and desires in terms of willingness to pay. See Schlag, supra note 58, at 949, n.117.

<sup>86.</sup> Using a Critical perspective, Schlag has attempted to separate Coase from his right-wing followers (principally Posner) by distinguishing the idea that the legal rule exists to maximize the value that individuals place on society's good, from the more basic Coasean insights of reciprocity and what Schlag terms "feedback loop[s]." Schlag, supra note 58, at 926. Schlag sees something "radical and dialectical" here: "Coase's insight not only destabilizes the received wisdom of the common law and its conventional moral and aesthetic architecture, but it puts us on guard against thinking that a new architecture would somehow solve our problems." Id. Schlag recognizes, however, that most CLS scholarship is critical of Coase. Id. at 947 n.105.

<sup>87.</sup> B. ACKERMAN, supra note 57, at 54.

<sup>88.</sup> Id.

<sup>89.</sup> Id. at 54, 55.

<sup>90.</sup> Priest, Gossiping About Ideas, 93 YALE L.J. 1625, 1635 (1984).

judgments over the years were profoundly hostile to every form of the activist state."<sup>91</sup> Owen Fiss has likewise attacked the law and economics perspective on law.<sup>92</sup>

I sympathize with Ackerman's recasting of Coase's message. For present purposes, however, it merely illustrates the political ambiguity inherent in Coase. This ambiguity calls into question whether politics best explains why lawyers have been more attentive than economists to Coase and his Theorem. I think not: the cast of political characters influenced by Coase is too complicated. The better explanation is a matter of insights within paradigms. Academic lawyers ask more questions than do economists (whether they find answers is a separate question), and the Coasean framework is a provocative source for those who venture beyond the dismal science.

<sup>91.</sup> Id.

<sup>92.</sup> Fiss, supra note 60, at 7.