WHEN DOES THE RULE OF LIABILITY MATTER?

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THE active interface between law and economics has been limited largely to antitrust and regulation, but recent work, primarily in economics, has revealed a much wider area of common interest. The new development, which deals with the definition and structure of property rights, has implications for central areas of the law, such as real property, torts, and contracts, although it originated in an economic analysis of the divergence between private and social cost. While still in its embryonic stage, the analysis has proceeded far enough for it to be called to the attention of a wider audience.

The questions with which we shall be concerned are whether and under what conditions a legal decision about liability affects the uses to which resources will be put and the distribution of wealth between owners of resources. If ranchers are held liable for the damage done by their cattle to corn fields, how will the outputs of meat and corn be affected? If drivers or pedestrians, alternatively, are held liable for automobile-pedestrian accidents, how will the accident rate be affected? What implications for extortion (an extreme form of wealth redistribution) are found in the decision about who is liable for damages?

I.

Recent developments in this area began with an article by Professor R. H. Coase. Coase's work presented a penetrating criticism of the conventional treatment by economists of divergences between private and social cost. The social cost of furthering an economic activity is the resulting reduction in the value of production that is obtainable from other activities. Such reductions occur because the resources required to further an activity are scarce and must be diverted from other possible uses. According to the view that Coase challenged, social cost, being the sum total of the costs incurred to carry on any activity, might very well differ from private cost. For example, the so-

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cial cost of running steam locomotives properly includes the fire damage done to surrounding farm crops by sparks from the locomotive. If the railroad is not required to pay for these damages, perhaps through a tax per train, then, according to the conventional analysis, the railroad would not take account of crop damage costs in deciding how many trains to run. In the absence of a specific public policy to intervene, the rate at which an activity is carried forth, which is determined solely by private cost, would diverge from the optimum rate, which is determined by social cost. In the present example, the private cost of running additional trains, being less than the social cost because crop damage is not taken into account, would encourage the railroad to run too many trains per day. The conventional economic analysis called for the levy of a tax per train, equivalent to the damages, in order to bring social cost and private cost into equality.

Coase demonstrated that the imposition of such a tax could, in some circumstances, aggravate the difficulty, but two other aspects of his work are of more concern to us. Coase (1) showed that powerful market forces exist that tend to bring private and social cost into equality without the use of a tax, and (2) discussed the conditions under which the legal position toward liability for damages would and would not alter the allocation of resources. Coase discusses an interaction between two productive activities, ranching and farming, in the context of a competitive regime in which the cost of transacting (or negotiating) is assumed to be zero. His analysis concludes that social cost and private cost will be brought into equality through market negotiations—and this regardless of which party is assigned the responsibility for bearing the cost that results from the proximity of ranching and farming.

The law, reasoning that crops stand in the way of a neighbor's cattle, can leave the farmer to bear the cost of crop damage; alternatively, reasoning that cattle stray errantly across farm fields, the law can assign liability for crop damages to ranchers. Coase's work demonstrates that either legal position will result in the same resource allocation—i.e., in the same quantities of corn and meat—and, also, that negotiations between the parties to the damage will, with either legal position, eliminate any divergence between private and social cost. If the law favors ranchers by leaving farmers to bear the cost of crop damage, then there exist incentives for farmers to pay ranchers to reduce the sizes of the herds, or to take other measures that will reduce the amount of damage. A summary arithmetic example reveals how such market transactions lead to Coase's results.

Suppose that the net return to an owner of ranchland would be increased by $50 if herd size were increased by one head of cattle but that the additional

2 Id. at 2-8.
head of cattle would impose corn damage on the owner of neighboring farmland that reduced his net return by $60. If the law did not require the rancher to compensate the farmer, the farmer would offer to pay the rancher a sum up to $60, the damage he would suffer if the rancher increased his herd by one head. The rancher would accept the offer since any amount above $50 would be more than ample compensation for the reduction in net returns associated with the smaller herd size.

Negotiations would continue until the net return to the rancher of a head of cattle exceeded the reduction in net return to the farmer associated with the damage done by that head of cattle. Such negotiations would bring the total value of corn and beef produced to a maximum since herd size would be reduced only when the consequent increase in the net value of corn output ($60 in the above example) exceeded the decrease in the net value of beef output ($50 in the example) required to reduce crop damage.

If the rule of liability were the reverse, requiring the owner of ranchland to compensate the farmer for the crop damage, the same equilibrium would be reached. Since the rancher earns a net return of only $50 and must pay damages of $60 if he raises an additional head of cattle, he would find it in his interest not to increase the size of his herd. Moreover, he would reduce the size of his herd as long as the net return forgone was smaller than the resulting increase in the net return to farming since this would be the liability to him if he did not reduce herd size by another unit. He would be led to settle upon the same herd size, with the same consequence for crop size, as he would have chosen in the absence of liability. The mix of output is not changed because negotiations between the parties eliminate all divergence between private and social cost.

The resulting equality between social and private cost is important enough to warrant a few more words. The conventional analysis of the farmer-rancher interaction would have concluded that in the absence of liability for damage (or of an appropriate tax per head of cattle) the social cost of increasing herd size would have exceeded the rancher’s private cost by the $60 damage done to the neighboring farmer’s crops. The rancher, if he were neither held liable nor taxed, would have no reason to take account of this damage and would

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3 I ignore other possibilities such as building a fence. These are discussed by Coase (id. at 3). Consideration of them changes the exposition but not the results.

One further assumption is required for the mix of output to remain unchanged. Any redistribution of wealth resulting from a change in the rule of liability is assumed to have no consequences for the demands for the products produced. Owners of farmland and ranchland should be vegetarians in equal proportions, for otherwise a redistribution of wealth between these two groups would alter the market demands for corn and beef and thereby indirectly alter the mix of output produced. The wealth redistribution problem will be discussed later when we turn to the subject of extortion.
therefore be led to raise too many cattle and impose too much damage on farm crops. It is the supposed existence of this gap between private and social cost that seems to call for a tax per head of cattle or for an assignment of liability to the rancher. Coase’s reasoning shows this logic to be in error. Even in the absence of a tax or liability for damage, the harmful effects of his activities on surrounding crops would be brought to bear on the private calculations of the owner of ranchland, for he must reckon as a true (but implicit) cost of increasing herd size the payment from the farmer that he must forgo if he refuses to agree to the farmer’s request for a reduction in herd size. Market negotiations bring the full cost of his decision to bear on him through the offers made by the farmer and thereby eliminate any difference between private and social cost. This, as Coase recognized, would not be true if the cost of negotiating could not be assumed to be negligible. We shall return to this problem later.

It is not generally appreciated that Coase’s reasoning has legal applications that extend beyond problems of the divergence between social and private cost as these typically are conceived. What is at issue in the farmer-rancher case is which party has a particular property right. In the one case the farmer has the right to allow or prohibit cattle grazing on certain specified lands, while in the other case it is the rancher who has the right. Private property takes the form of a bundle of rights, of which different components may be held by different persons. In the absence of significant negotiating cost, the use to which these property rights is put is independent of the identities of the owners since each owner will be given market incentives to use his property right in the most valuable way. Just what is the most valuable way depends on market conditions and not owner identities.

The analysis can be extended to many types of property right problems. One that is of current interest to lawyers is the continuing litigation about the legal status of the reserve clause in organized baseball. An important defense of the reserve clause has been the assertion that it prevents wealthy baseball clubs from acquiring too large a share of the good players. By applying the above analysis to this problem it is possible to refute the assertion, especially since the cost of negotiations would seem to be negligible in this case. For what is at issue is whether the identity of the owner of a player’s baseball services will alter the location of his playing activities. An application of Coase’s analysis to this problem suggests that the reserve clause should have no effect on the identity of the team for which a player plays.

When signing initially with a major league organization, a player owns his baseball talent in the sense that he has the right to offer his services for sale to any ball club. But once he signs with a major league club, he can no
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longer negotiate with other clubs for the sale of his services, although he retains the right to refuse to play. The reserve clause, which is written into every major league contract, requires major league clubs who wish to acquire the services of a player who is already under contract to purchase his contract from the club currently owning it. Thus, once a player signs with a major league organization, part of the bundle of property rights to his services are transferred from the player to the club with which he signs. The right to play on various teams passes via the reserve clause from the player to the club owning his contract, and this club can reserve the player for its own use even though other teams might be willing to pay the player more than he is receiving.

The question considered here is not whether there exists a correlation between the wealth of a club and the quality of its players. The relevant question is whether the distribution of players among teams would change were the reserve clause to be declared illegal. Would wealthier clubs acquire more good players if the right to negotiate with other teams always resided with the player?4

In the absence of the reserve clause, a player would change clubs only if he found it in his interest to do so. With the reserve clause, a player will change clubs only if the club that owns his contract finds it in its interest. It appears that a different pattern of player migration between clubs might exist with the reserve clause than without it. But the appearance is deceptive. No matter who owns the right to sell the contract for the services of a baseball player, the distribution of players among teams will remain the same.

To see why this is so, assume that a player not subject to the reserve clause receives a $15,000 per annum wage from club A for which he currently plays. Club B offers him $16,000 to play for them. If this amount exceeds the value of the player to club A, the club will not find it in its interest to make a counteroffer large enough to retain the player's services and he will join club B. However, if his services are worth more than $16,000 to club A, the club will find it in its interest to make a counteroffer large enough to retain his services. With no reserve clause the player plays for the club that most highly values5 his services.

Let us now suppose that the reserve clause is effective and, as before, that

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4 The reserve clause and other aspects of organized baseball are discussed in Simon Rottenberg, The Baseball Players’ Labor Market, 64 J. Pol. Econ. 242 (1956). The reasoning employed by Rottenberg is similar but not identical to the above argument. Rottenberg's argument is based partly on the premise, not used here, that it takes two fairly well matched teams to produce a good game.

5 Nonpecuniary aspects of his employment are discussed later, but it should be noted that the argument for retention of the reserve clause is not based on nonpecuniary job amenities.
the player is currently paid $15,000 by club A. Club B now offers club A $1,000 per annum (or its present value equivalent) for the player's contract, so that if the negotiations succeed club B will pay $16,000 for the player's services of which $15,000 is paid to the player under the terms of the purchased contract and $1,000 is paid to club A. If $1,000 per annum exceeds the player's net value to club A after it pays his $15,000 annual salary, then it will be in club A's interest to sell his contract to club B, but if the player is worth more to club A than $16,000 (equal to the $1,000 offer from club B plus the player's $15,000 salary), it will refuse to sell his contract.

The condition under which the player is transferred to club B when he is subject to the reserve clause is precisely the condition under which he will elect to transfer to club B when he is not subject to the reserve clause. He transfers to club B if club B finds his services more valuable than does club A whether or not the reserve clause is in effect. The reserve clause, therefore, cannot be expected to result in a different distribution of players among teams than would prevail in its absence.

The reader may object, suggesting that nonpecuniary considerations might make the distribution of players different depending on the legal status of the reserve clause. But this objection also would be in error. Suppose that the player, presently owned by a California club, has developed a preference for working in California. If there were no reserve clause, his preference would lead him to ask at least $1,000 more to play ball with a Chicago club than he earns playing for a California club; and, in the absence of a reserve clause, a Chicago club would need to bid $1,000 more than a California club to obtain his services. But this is also true with the reserve clause. Under reserve clause arrangements, suppose that the Chicago club offers the California club only $500 more than the player's net value to the California club. The California club, indeed, will be tempted to sell the player's contract to Chicago. It appears that the $500 increment, which would be too small to move the player were there no reserve clause, is large enough to move him if there is a reserve clause. This is incorrect because the player, when working under the reserve clause arrangement, would be willing to offer a sum of up to $1,000 (the value of the nonpecuniary amenities to him of California) to the California club to induce it to refuse to sell his contract to Chicago. Any amount above $500 would be sufficient to make the California club reject Chicago's offer since Chicago is offering only $500 more than the player is worth to the California club. (The player can "offer" such an amount by accepting a pay reduction.) With or without the reserve clause, then, the player will locate where the value he places on amenities plus the value of his baseball talent is greatest.
II

The significance of Coase's work quickly led to critical responses by Wellisz, Calabresi, and others, although Calabresi withdrew his criticism in a later paper. The criticism centered around two allegations—that the Coase theorem neglects long-run considerations that negate it and that the spirit of the work endorses the use of resources for the undesirable purpose of "extortion." The long-run issue is discussed here and the "extortion" problem in Part III. In Part IV, I discuss the problems introduced when the assumption of negligible transaction cost is dropped.

The question of long-run considerations has been raised because it would seem that different liability rules would alter the profitability of remaining inside or outside each industry. It is alleged that if farmers are left to bear the cost that arises from proximity to cattle, the rate of return to farming will fall and resources will therefore leave the farming industry. Alternatively, if ranchers are left to bear the cost, the resulting reduction in rate of return to ranching will lead to the exit of resources from that industry. Hence, even if transaction cost is zero, the market will allocate resources differently in the long run depending upon which rule of liability is chosen.

But short-run versus long-run considerations should have no bearing on the Coase theorem, which is based on the proposition that an implicit cost (the forgone payment from the farmer) is just as much a cost as is an explicit cost (the liability damage), and this proposition surely must hold in the long run as well as in the short run. One way of demonstrating this is by allowing the two activities to be merged under a common owner. A detailed example of this is given by G. Warren Nutter. If there is no special cost to operating a multiproduct firm, the costly interaction between farming and ranching will be fully brought to the owner's attention in his operation of a farming-ranching enterprise. The mix of output that he produces will be that which maximizes his earnings. 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. Since such merged operations are possible, the rule of liability is rendered irrelevant to the

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choice of output mix. But a refutation of the criticism that is based on the use of the joint product enterprise gives rise to the (incorrect) suspicion that the basic problem has been begged, since the rule of liability that is chosen cannot in this case alter the wealth of the owner of a farming-ranching enterprise. The spirit of the argument can be preserved, while the suspicion is allayed, by assuming that the advantages offered by specialization of ownership are so great that it is uneconomic to merge the two activities into a single ranching-farming firm.

If owners of farmland bear the cost of crop damage, what must be the cost conditions that are associated with an equilibrium allocation of land to farming, ranching, and other uses? For such damage to arise there must be a sufficient scarcity of land to force farms and ranches into proximity. Marginal farm acreage (acreage that just "breaks even") must earn revenue sufficient to cover all cost, including the cost of crop damage done by straying cattle.

Suppose the proximity of ranching and farming reduces the net return to the owner of farmland by $100 as compared with what could be earned were there no neighboring ranch. If ranching continues on the neighboring acres, it must be true that the net return to the owner of the ranchland exceeds $100, for otherwise the farmer would have been able to purchase the removal of cattle from neighboring land by offering $100 to the neighboring ranchers. The reduction in net return to farming brought about because of crop damage is thus implicitly taken into account by the owner of the ranchland when he refuses the offer of the owner of the neighboring farmland. The money offered by the farmer is refused by the rancher precisely because the continued use of the land for grazing brings in additional net revenue in excess of $100.

Land that is submarginal as farm or ranchland (land that cannot be profitably farmed or ranched) is unable to earn revenue sufficient to cover the explicit $100 damage cost if it is put to the plough or the $100 implicit cost if it is employed in ranching. Were this land to be employed in farming, its owner would suffer losses attributable in part to the damage done to his crops by straying cattle, whereas if it were employed in ranching its owner would suffer the implicit loss of forgoing a $100 payment from the neighboring farmer (the owners of farmland bearing the cost of crop damage). Submarginal land by definition can be neither farmed nor ranched profitably.

Now let the rule of liability be changed so that ranchers become liable for crop damage. If there is to be a long-run effect, it must be true that the cost interrelationships change in a manner that causes either the conversion of ranchland to farmland or submarginal land to farmland. But neither conversion can be made profitable by the change in liability.
Acreage that was marginally profitable in ranching must remain ranchland because it had been earning net revenues in excess of the $100 damages done by cattle to surrounding farmland. If a producing ranch were to be switched from ranching to farming to avoid the new liability its owner would forgo revenues (in excess of $100) that exceeded the resulting reduction in liability ($100). The owner of what was marginal ranchland, therefore, will continue to employ his land in ranching under the new liability rule.

The land that previously was submarginal must remain submarginal. The changed liability rule will not attract this land into farming. Submarginal lands under the original rule of liability earned insufficient revenues in farming to cover the $100 cost of crop damage. Under the new rule of liability, neighboring ranchers will succeed in negotiating with the owners of this land to keep it out of farming. Operating ranches, under the old rule of liability, had been yielding net revenues in excess of $100; therefore it will be possible and profitable for ranchers, in order to avoid the $100 crop damage that otherwise would result, to offer an amount to the owners of submarginal land that is sufficient to keep the land out of farming.

There is a temptation at this point in the argument to believe that an error has been made. Suppose that the farmer suffers damages equal to $100 and the rancher enjoys a net return equal to $110. If the rancher is not liable he will choose to continue ranching and to refuse a payment from a neighboring farmer of $100 to stop ranching. But if the rule of liability is reversed, he will continue ranching only if his $110 net return is sufficient to cover the cost imposed on the farmer ($100) plus the payment required to keep submarginal land (which can be assumed to border on another boundary of the ranch) out of farming. There has been no error in the argument, but there is an error in introducing the second neighbor halfway through the analysis. With the rancher not liable, he would have elected to remain in ranching only if the net return to ranching exceeded the payments to leave ranching offered to him by both his neighbors. If the rancher finds it remunerative to remain in ranching in the face of both these offers he must earn a sufficient net return from ranching, after the rule of liability is changed and he is held liable, to be able to pay damages to his neighboring farmer and to pay the owner of neighboring submarginal land to keep that land out of production.

The change in the rule of liability does not lead to a conversion of ranchland or submarginal land to farming. The use of land that maximized returns before the change in liability rule continues to maximize returns after the new rule is adopted, and the mix of output is unaffected by the choice of liability rule even when long-run considerations are analyzed. To understand the effect of altering the rule of liability it is important to recognize that the owner of a resource who finds it in his interest to employ that resource in a
particular way when he bears the cost of an interaction will be paid to employ that resource in the same way when the rule of liability is reversed. What can happen, and in this case does happen, when the rule of liability is changed is that present owners of land having a comparative advantage in ranching suffer a windfall loss in the value of their land while owners of farmland enjoy a windfall gain. But this redistribution of wealth cannot alter the uses of these lands.

III

The problem of "extortion" is part of the larger problem of wealth redistribution that may accompany a change in the rule of liability. Our concern here is with situations in which such a redistribution takes place. However, it should be noted that, when there is no restriction on contracting, a change in the rule of liability need not be accompanied by wealth redistribution. If owners of firms are made liable for industrial accidents, for example, then the equilibrium wage will move downward to reflect the shifting of this explicit cost from workers to employers. Employers no longer will need to cover the cost of industrial accidents in the wages they pay since this cost will be paid by them in the form of industrial accident insurance or self-insurance required by the new rule of liability. The general effect of shifting accident liability directly to firms will be merely to change the classification, not the amount, of remuneration. What under no employer liability were simply wages become under employer liability wages plus accident benefits. No redistribution of wealth accompanies the change in liability. Workers who, when they had to bear the cost of accidents directly, received $X in wages will, under the new rule of liability, receive part of the $X in the form of accident compensation and the remainder in wages, but there will be no change in their total income after taking account of expected accident costs under the two systems.

This holds strictly only if workers and employers are allowed to enter into voluntary contractual arrangements for reshifting the explicit cost back to workers, a matter that need not be discussed in detail here. If such agreements are disallowed by the law—i.e., if the costs of making such agreements is prohibitively high because of their illegality—then some wealth may be redistributed from those workers who would have found it advantageous to self-insure to workers who find it advantageous to buy insurance; such a law would force workers, in the wage reductions they must accept, to purchase insurance for industrial accidents from their employers.

The problem of "extortion" arises when a change in liability gives rise to a redistribution in wealth. In the farmer-rancher case, the relative values of nearby farm and ranchlands will be changed when the rule of liability is
altered. Under one rule of liability, with farmers required to bear the cost of crop damage, farmers will need to pay ranchers to reduce herd size; under the other rule ranchers will have to pay farmers for damages or for any alteration in the quantity of corn grown nearby. The change in the direction of payments must affect the rents that can be collected by owners of these lands and thus the market values of these lands.

In these cases the owner of the specialized resource, ranchland or farmland, that is not required to bear the cost of the interaction may threaten to increase the intensity of the interaction in an attempt to get his neighbor to pay him a larger sum than would ordinarily be required to obtain his cooperation in adjusting the intensity of the interaction downward. The owner of ranchland, if he is not liable for crop damage done by straying cattle, might, in the absence of a neighboring farmer, raise only 1,000 head of cattle. With proximity between farming and ranching, a neighboring owner of farmland might be willing to pay the rancher the sum required to finance a 200-head reduction in herd size. However, if the owner of ranchland threatens to raise 1,500 head, he may be able to secure more than this sum from the farmer because of the additional crop damage that would be caused by the larger herd size. With or without this “extortion” threat, the size of the herd will be reduced to 800 because that is the size, by assumption, that maximizes the total value of both activities. Given the interrelationship between the two activities, that is the herd size that will maximize the return to the farmer and, indirectly, the sum available for possible transfer to the rancher. What is at issue is the sharing of this maximum return.

To the extent that there exist alternative farm sites, the ability of the owner of ranchland to make such a threat credible is compromised. Competition among such owners will reduce the payment that farmers make to ranchers to that sum which is just sufficient to offset the revenue forgone by ranchers when herd size is reduced. No rancher could succeed in a threat to increase herd size above normal numbers because other ranchers would be willing to compete to zero the price that farmers are asked to pay to avoid abnormally large herd sizes. Abnormally large herd size, in itself, will generate losses to owners of ranchland and, for this reason, competition among such owners will reduce the price that owners of farmland must pay to avoid such excessive herd sizes to zero.

But if a ranchland owner has a locational monopoly, in the sense that there are no alternative sites available to farmers, then the rancher may succeed in acquiring a larger sum from his neighboring farmer in order to avoid abnormally large herd sizes. The acquisition of a larger sum by the owner of ranchland generally will require him to incur some cost to make his threat credible, perhaps by actually beginning to increase herd size beyond normal
levels. If the cost of making this threat credible is low relative to the sum available for transfer from the owner of farmland, the rancher will be in a good position to accomplish the transfer. The sum available for transfer will be the amount by which the value of the neighboring land when used as farmland exceeds its value in the next best use. If the rancher were to demand a larger payment from his neighbor, the neighboring land would be switched to some other use.

The temptation to label such threats extortion or blackmail must be resisted by economists for these are legal and not economic distinctions. The rancher merely attempts to maximize profits. If his agreements with neighboring farmers are marketed in competition with other ranchers, profit maximization constrained by competition implies that an agreement to reduce herd size can be purchased for a smaller payment than if effective competition in such agreements is absent. The appropriate economic label for this problem is nothing more nor less than monopoly. It takes on the cast of such legal classifications as extortion only because the context seems to be one where the monopoly return is received by threatening to produce something that is not wanted—excessively large herds. The conventional monopoly problem involves a reduction or a threat to reduce the output of a desired good. In the unconventional monopoly problem presented here, there is a threat to increase herd size beyond desirable levels. But this difference is superficial. The conventional monopoly problem can be viewed as one in which the monopolist produces more scarcity than is desired, and the unconventional monopoly problem discussed here can be considered one in which the monopolist threatens to produce too small a reduction in crop damage. Any additional sum that the rancher succeeds in transferring to himself from the farmer is correctly identified as a monopoly return.

The temptation to resolve this monopoly problem merely by reversing the rule of liability must be resisted. Should the liability rule be reversed and the owner of ranchland now be held liable for damage done by his cattle to surrounding crops, the specific monopoly problem that we have been discussing would be resolved. But if the farmer enjoys a locational monopoly such that the rancher has nowhere else to locate, the shoe will now be on the other foot. The farmer can threaten to increase the number of bushels of corn planted, and hence the damage for which the rancher will be liable, unless the rancher pays the farmer a sum greater than would be required under competitive conditions. The potential for monopoly and the wealth redistribution implied by monopoly is present in principle whether or not the owner of ranchland is held liable for damages. Both the symmetry of the problem and its disappearance under competitive conditions refute the allegation
that Coase's analysis implicitly endorses the use of resources in undesirable activities.

Should the law treat such classes of monopoly problem as "extortion" or "blackmail"? It may not be useful for the law to take this step because the threat is made credible by increasing the output of an economic good—cattle if the rancher is not liable, corn if he is. Because it is difficult to sort desirable from undesirable increases in herd or crop size, there is a real danger of penalizing desirable increases in herd or crop size by mistake if such wealth transfers are treated as extortion. Activities to which anti-extortion laws normally apply typically involve the use of violence or the threat to take some action that falls within a general class of actions considered socially undesirable. The application of anti-extortion legal measures in such cases is less likely to penalize socially desirable actions by mistake. In other cases, it may be possible for the courts to limit the amount of payments to levels that are reasonable compensations for costs incurred (or profits forgone), although it is not clear how easily such determinations can be made by courts. Alternatively, it is possible to attempt to eliminate the source of the problem—monopoly—but the wisdom of relying on antitrust in this context is a matter on which the author is unprepared to speak.

IV

The costly interaction between farming and ranching is not properly attributed to the actions of either party individually, being "caused," instead, by resource scarcity, the scarcity of land and fencing materials. If transaction cost is negligible, it would seem that the choice of liability rule cannot depend on who "causes" the damage since both jointly do, or on how resource allocation will be altered, since no such alteration will take place, but largely on judicial or legislative preferences with regard to wealth distribution.

Once significant transacting or negotiating cost is admitted into the analysis, the choice of liability rule will have effects on resource allocation, and it no longer follows that wealth distribution is the main or even an important consideration in choosing the liability rule. The assumption of negligible transacting cost can be only a beginning to understanding the economic consequences of the legal arrangements that underlie the operations of the economy, but little more can be done here than to illustrate the nature of the considerations.10

The most obvious effect of introducing significant transacting cost is that

10 Other considerations that arise when the cost of transacting is positive are discussed in Harold Demsetz, Some Aspects of Property Rights, 9 J. Law & Econ. 61 (1966).
negotiations will not be consummated in those situations where the expected benefits from exchange are less than the expected cost of exchanging. Exchange opportunities will be exploited only up to the point where the marginal gain from trade equals the marginal cost of trade. Of course, there is nothing necessarily inefficient in halting exchange at this point. If this were all that could be said on the subject, there would be little more to do than call the reader's attention to the similar analytical roles of transport cost in international trade and transacting cost in exchange generally. But there is more to say.

Significant transacting cost implies that the rule of liability generally will have allocative effects (as Coase recognizes). Consider the problem of liability for automobile-pedestrian accidents. To the extent that "accident" has any economic meaning it must mean that circumstances are such that voluntary negotiations between the driver and the pedestrian are prohibitively costly in many driving situations. The parties to an accident, either because of the speed with which the accident occurs or because of a failure to notice the presence of a competing claimant for the right-of-way, cannot conclude an agreement over the use of the right-of-way at costs that are low enough, ex ante, to make the effort worthwhile.

Partly as a consequence of the costliness of such negotiations, rules of the road are developed. Speed limits, traffic signals, and legal constraints on passing are substituted for the development of saleable private rights. In a specific case it may be possible to assign private rights to use the road in a way that makes the exchange of these rights feasible, but, in general, if these rules make economic sense it is precisely because the cost of transacting is expected to be too high in most cases to warrant the development of saleable private rights to the use of roads.

The practicality of such rules is not an argument for or against government action, but a rationale for the substitution of rules for negotiation. The use of rules to eliminate costly negotiations can be found in the management of privately owned parking lots and toll roads as well as in those that are publicly owned.

Such rules notwithstanding, accidents do take place. Assuming that the cost of transacting is too high to make negotiated agreements practical in such cases, we can compare the effect on resource allocation of the rule of liability that is chosen. If drivers are held liable in automobile-pedestrian accidents, the incentives for pedestrians to be careful about how and where they cross streets will be reduced. The incentives for drivers to be careful will be increased. Indeed, if each pedestrian could be guaranteed full compensation for all financial, physical, and psychological costs suffered in an
accident, then pedestrians would become indifferent between being struck by an auto and not being struck. Drivers, however, would actively seek to avoid accidents since they would always be liable, whereas if it were possible to have a system of complete and full pedestrian liability it would be the drivers who became indifferent between accidents and no accidents and it would be the pedestrians who actively sought to avoid accidents.

In a regime in which transacting cost was zero, either system of liability would generate the same accident-avoiding behavior, as the Coase analysis suggests. With driver liability, drivers would themselves avoid accidents or, if such avoidance could be purchased at lower cost from pedestrians, drivers would pay pedestrians to avoid accidents. Under a scheme of pedestrian liability it would be the pedestrians who took direct action to avoid accidents or indirect action by paying drivers to avoid accidents. Under either rule of liability those accidents are avoided for which the accident cost exceeds the least cost method of avoiding accidents, where the least cost is the lesser of either the driver or pedestrian cost of avoiding accidents. Both rules of liability, assuming zero transacting cost, yield the same accident rate and the same accident-avoiding behavior. The effect of switching from one rule of liability to another is limited to wealth redistribution.

In a situation in which transacting cost is prohibitively high, driver liability leads to the avoidance only of those accidents for which the cost of avoidance to the driver is less than the expected accident cost, and pedestrian liability leads to the avoidance of only those accidents for which the cost of avoidance to the pedestrian is less than the expected accident cost. In general, the accident rate that results will differ under these two systems since the cost of avoiding accidents will not be the same for drivers and pedestrians. Both systems will lead to higher accident rates than would be true if transacting costs were zero. The effect of positive transacting cost is to raise the cost of avoiding accidents through the foreclosure of the use of possibly cheaper cost-avoidance techniques when these can be employed only by the other party to the accident. A similar conclusion can be reached for all liability problems when transacting cost is prohibitive and when the law cannot particularize the rule of liability to take account of who is the least-cost damage avoider in every instance.

One liability rule may be superior to another if transacting costs are more than negligible precisely because the difficulty of avoiding costly interactions is not generally the same for the interacting parties. It may be less costly for pedestrians to avoid accidents or for farmers to relocate their crops than it is for drivers to avoid accidents or ranchers to reduce the number of cattle they raise. If information about this were known, it would be possible for
the legal system to improve the allocation of resources by placing liability on that party who in the usual situation could be expected to avoid the costly interaction most cheaply.

The use of words such as “blame,” “responsible,” and “fault” must be treated with care by the economist because they have no useful meanings in an economic analysis of these problems other than as synonyms for the party who could have most easily avoided the costly interaction. Whether the interaction problem involves crop damage, accidents, soot, or water pollution, the qualitative relationship between the interacting parties is symmetrical. It is the joint use of a resource, be it geographic location, air, or water that leads to these interactions. It is the demand for scarce resources that leads to conflicting interests.

The legal system does produce rules for determining prima facie “fault,” but in this context “fault” means only according to some acceptable and applicable legal precedent. In an accident involving a rear-end collision, the court generally will place the burden for proving the absence of negligence on the party driving the following car. If a car strikes a person running across a fenced expressway at night the burden of proving the absence of negligence is likely to be placed on the pedestrian. In treating such cases differently, the law bases its decisions on acceptable and appropriate precedents, but the acceptability of these precedents should not be confused with the morality of the interacting parties. A deeper analysis of these precedents may reveal that they generally make sense from the economic viewpoint of placing the liability on that party who can, at least cost, reduce the probability of a costly interaction happening. Less care need be taken by the driver of the following car in a rear-end collision than would need to be taken by the lead driver to avoid the accident, and less care is needed by a pedestrian to refrain from running across an expressway than is needed by a driver to avoid striking the pedestrian. Nor need the acceptability of such precedents be based on restitution since, as these precedents become known, their long-run effect is to deter accidents at least cost. 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.