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## THE DECISION FOR ACCIDENTS: AN APPROACH TO NONFAULT ALLOCATION OF COSTS

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*Although it may seem desirable to seek to eliminate accident-causing activities, virtually all societies decide that many activities, though certain to cause some accidents, are nonetheless valuable enough to be allowed. Professor Calabresi examines this "decision for accidents" in light of the goals of accident law such as deterrence and compensation. Although he does not propose a specific liability plan or scheme, he formulates a theoretical framework for nonfault liability in which risky activities reflect in their market prices the cost of their accidents, and in which specific "useless" conduct is deterred by criminal and semicriminal penalties. He next analyzes what is meant by "costs of accidents" and concludes with an examination of the methods of allocating accident costs to the activities involved in accidents.*

### I. INTRODUCTION

I TAKE it as given that the principal functions of "accident law" are to compensate victims and reduce accident costs. Such incidental benefits as providing respectable livelihoods for a large number of lawyers and insurance agents are at best beneficent side effects. The notion that accident law's role is punishment of wrongdoers cannot be taken seriously. Whatever function we

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Much of this article was in draft before Professors Blum and Kalven of the University of Chicago delivered their extremely provocative Shulman lectures at Yale; all of it was written before those lectures were available in Blum & Kalven, *Public Law Perspectives on a Private Law Problem—Auto Compensation Plans*, 31 U. CHI. L. REV. 641 (1964). Accordingly, while I shall from time to time refer to their work, I have made no attempt in this piece to meet directly all of their telling arguments.

In view of the exhaustive bibliography on the general theme of this article available in GREGORY & KALVEN, *CASES ON TORTS* at xlix-lix, 689-786 (1959), and updated by Blum & Kalven, *supra* at 642 n.2, I have excluded purely bibliographic footnotes. By the time this article appears another important work on this theme will be available. Keeton & O'Connell, *Basic Protection—A Proposal for Improving Automobile Claims Systems*, 78 HARV. L. REV. 329 (1964).

may wish to ascribe to punishment in criminal law, it simply will not carry over to civil accident suits. If the time-honored, though somewhat shopworn, distinctions between legal and moral fault and between damages and degree of culpability which prevail in tort law do not sufficiently demonstrate this proposition, then surely the prevalence of insurance priced on the basis of categories that have little to do with any individual insured's "goodness" or "badness" must.

Reduction of accident costs might arguably be viewed as covering even compensation of victims. For "compensation" as an aim means only that it is deemed more desirable for persons other than the injured to pay the costs of the injury. This is because if many pay the cost of an accident rather than one, or even if one pays it over time, the social dislocation costs of the accident may be reduced;<sup>1</sup> this is the basis of the theory of loss spreading. And even if loss spreading means no spreading — if it means only that the man with the deeper pocket pays — the same cost-reduction effect may be said to exist. For when those who are "more able to pay" pay, we believe that fewer secondary undesirable effects will occur.<sup>2</sup>

Whether it is true that fewer such undesirable effects will actually occur is not certain. Still, it should not be too surprising that theories supporting paying for public perils like accidents by taxing the rich to some degree should find favor; our whole structure of paying for other public perils, like defense, is based on the assumption that fewer secondary social harms — costs — will result if the wealthy pay the greater proportion of the price.

But reduction of accident costs is more commonly taken to mean reducing the number of accidents or the costs of administering laws that deal with them.<sup>3</sup> To equate these aims with the savings that "compensation spreading" may achieve would

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<sup>1</sup> Calabresi, *Some Thoughts on Risk Distribution and the Law of Torts*, 70 YALE L.J. 499, 517-19 (1961). The use of terms like "cost," "cheaper," "afford," and "socially more expensive" in the current article is extremely sloppy from any economist's viewpoint; I have used the terms in this unrigorous way in an attempt to make the article intelligible to noneconomists. This effort may be misguided but I think it is essential. It would not be too difficult to translate these terms into their relatively precise economic meanings. I have not, however, done this consistently in footnotes because it would make the piece even less readable than it is. Some appropriate definitions may be found in my article, *supra* at 503-04 nn.15 & 18.

<sup>2</sup> *Id.* at 527-28.

<sup>3</sup> The cost of administering accident law is in a sense the control that tells us if any system of reducing overall costs is worth it, or whether we would not be better off with a less effective, but cheaper, system.

be confusing. For this reason, compensation and reduction of accident costs will be treated separately.

Many recent writers have tended to focus on compensation as the main purpose of accident law. Were this emphasis proper, there would be no justification for limiting compensation to accidents and not spreading it across the board to illness, old age, and all the troubles of this planet. Of course, we do spread compensation beyond accidents to some extent, but it is the fact that we only do it "to some extent" that is crucial. Why is compensation for illness — even in highly welfaristic countries — much less complete than compensation for accidents? And why is the accident field kept a separate entity, where methods that achieve a fair degree of compensation spreading are used, but which would be woefully inefficient if compensation spreading were the only aim? Surely, if the type of cost reduction with which we are concerned is solely or principally that accomplished by diminishing secondary costs — social and economic dislocations — then a generalized system of social insurance covering all types of severe injuries would be the only efficient system.<sup>4</sup>

The answer is that accidents are not the same as diseases. There are ways to reduce the primary cost of accidents — their number and severity — that can, indeed must, be an important aim of whatever system of law that governs the field. One way is to discourage those activities that result in accidents and to substitute safer ones for them. Another is to encourage care in the course of an activity.<sup>5</sup> "Activity" and "care" are not, of course, mutually exclusive categories. If "activity" is defined narrowly or if "care" is broadly viewed, the concepts tend to merge. The activity of driving is not thought to be careless although a predictable number of accidents result from it. Driving through a busy intersection without brakes is careless and not an activity. Between these relatively clear cases the distinction becomes more difficult, as, for example, navigating without radar. In addition, an activity may properly be defined as the doing of something by

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<sup>4</sup> There might, of course, be perfectly respectable political objections to such a social insurance system, despite agreement that compensation is the overriding goal and despite the fact that social insurance is the cheapest way of accomplishing it.

<sup>5</sup> But discouraging dangerous activities and encouraging care in the course of an activity are not the only aims of the system; as we have seen before, compensation is an equally important aim. As a result we may well not want to go as far as we otherwise would in trying to reduce the primary cost of accidents if this would be accomplished at the expense of compensation.

an actuarial class, which may tend to do it carelessly. Treating the problems of accident law in terms of activities rather than in terms of careless conduct is the first step toward a rational system of resource allocation. The question is to what extent an economically rational system is our goal.

## II. THE NATURE OF THE DECISION FOR ACCIDENTS

Our society is not committed to preserving life at any cost. In its broadest sense, this rather unpleasant notion should be obvious. Wars are fought. The University of Mississippi is integrated. But what is more interesting to the study of accident law, though perhaps equally obvious, is that lives are used up when the *quid pro quo* is not some great moral principle but "convenience." Ventures are undertaken that, statistically at least, are certain to cost lives. Thus, we build a tunnel under Mont Blanc because it is essential to the Common Market and cuts down the traveling time from Rome to Paris, though we know that about a man per kilometer of tunnel will die. We take planes and cars rather than safer, slower means of travel. And perhaps most telling, we use relatively safe equipment rather than the safest imaginable because—and it is not a bad reason—the safest costs too much.<sup>6</sup>

Of course, it is rarely known who is to die. Indeed, in the uncustomary case of an individual—a known individual rather than a statistical unknown—in a position of life or death, we are apt to spend very much more to save him than in any conceivable money sense he is worth. And while I do not doubt this is as it should be, it seems odd that we should refuse to apply the same standards of "value beyond any price" when we deal with the same man's life as part of a statistic. But odd or not, it is the case.

A decision balancing lives against money or convenience when made in the broadest terms is not purely an economic one. The decision whether the Mont Blanc tunnel is worth building is not based solely on whether the revenue received from tolls through the completed tunnel will pay for the construction costs, including compensation of the killed and maimed. Neither is the deci-

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<sup>6</sup> It should be apparent that while some of these accident-causing activities also result in diminution of accidents (the Mont Blanc tunnel may well save more lives by diminishing traffic fatalities than it took to build it), this explanation does not come close to justifying most accident-causing activities. Thus, grade crossings are allowed because they are cheap, not because they save more lives than they take.

sion whether to allow prostitution based solely on whether it can pay its way. Such a pure free enterprise solution has never been acceptable. It was in fact rejected by even the most classical of classical economists, though they felt it necessary to explain the rejection in terms of a theory that is as narrow or broad as any society, welfaristic or free enterprise, cares to make it.<sup>7</sup> The real issue, whether or not expressed in terms of these economists' "hidden social costs" or "hidden social savings" theory, is how often a decision for or against an activity is to be allowed regardless of whether it can pay its way. Such decisions operate, on the one hand, to create subsidies for some activities that could not survive in the market place, and on the other, to bar some activities that can more than pay their way. The frequency with which decisions to ignore the market are made tells something about the nature of a society — welfare or *laissez-faire*. What is clear is that in virtually all societies such decisions to overrule the market are made, but are made only sometimes.

Characteristically, in the field of accident law the decision whether or not to take lives in exchange for money or convenience is sometimes made politically or collectively without a balancing of the money value of the lives taken against the money price of the convenience, and sometimes made through the market on the basis of such a value. The reasons for this varying approach are not entirely reasons of principle. Great moral issues lend themselves to political determination. These questions must necessarily be decided in whatever political way our society chooses to decide moral questions. But "rotary mowers versus reel mowers," "one method of making steel as against another" are questions difficult of collective decision. For one thing, they occur too frequently. Every choice of product and use hides within it a decision regarding safety and expense. The dramatic cases we resolve politically. We ban the general sale of fireworks regardless of the ability or willingness of the manufacturer to pay for all of the injuries that result. But we cannot deal with all issues involved in all activities through the political process. For most, the marketplace serves as the rough testing ground. A manufacturer is free to employ a process even if it occasionally kills or maims if he is able to show that consumers want his product badly enough to enable him to compensate those he injures and still make a profit. Economists would say that except

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<sup>7</sup> See, e.g., PIGOU, *THE ECONOMICS OF WELFARE* (4th ed. 1932).

in those few areas of collective decision, this is the best way to decide if the activity is worth having.

All this is just saying, in a slightly different way, that one of the functions of accident law is to reduce the cost of accidents, by reducing those activities that are accident prone. Activities are made more expensive, and thereby less attractive, to the extent of the accidents they cause. In the extreme cases they are priced out of the market: the market mechanism may thus eliminate an otherwise useful activity because it maims too many.

Since the smallest practical subdivision of an activity has been defined as larger than any particular mode of conduct that might be characterized as faulty, it might at this point be contended that it is throwing out the baby with the bath to aim at deterrence of activities rather than simply trying to eliminate conduct that is responsible for accidents. Why not forbid talking while driving through busy intersections rather than seek to deter driving generally? Why discourage perfectly useful activities when there is available an accident law based on fault, which ferrets out particular undesirable conduct?

Such questions assume two things: that we can define the undesirable conduct that is responsible for accidents apart from the cost of accidents it causes, and that we deter it through the current system of accident law based on fault. The first of these propositions is not totally unreasonable. There are acts or activities that we would bar in our society regardless of the willingness of the doer to pay for the harm they cause. It is these that we call "useless"<sup>8</sup> and feel that there is no societal loss in deterring them specifically. But certainly even if some such activities can be isolated, there are a great many other activities whose undesirability consists only in the fact that they result in accidents and then only to the extent that people would, if they knew the costs of these accidents, prefer to abstain from the activity rather than pay those costs. I think the discussion of "decisions for accidents" has shown that much.

Those acts or activities that we call "useless" fall into two categories. The first comprises those in which the doer has suffi-

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<sup>8</sup> This is, of course, an interesting use of words. Driving without having an inspection, like drunken driving, prostitution, and widgets, undoubtedly has its adherents. They are—let us assume—willing to pay for the accidents they cause, yet as a society we say they may not so choose and bar the activity anyway. We call the activity valueless and say there is no societal loss in proscribing it, not because it has no value, but because we do not accept individual judgments as to its value.

cient control over the deed so that criminal penalties are appropriate. If these penalties are properly set, they must inevitably do a better job of deterrence than the fault system. The second comprises those in which the doer has such insufficient control that criminal penalties are, under our system, deemed inappropriate. How many acts or activities actually fall in this category is doubtful, but it is certainly as to these that the traditional fault system may be relevant. The question then is, Can we not deter these acts or activities more effectively than through a system of fault liability which, together with insurance, merely raises somewhat the cost to those who as an actuarial class tend to do these acts or activities? I suggest, and it is not a particularly original suggestion, that a system of noninsurable tort fines assessed on the individual doer of the "useless" act, together with general nonfault liability, would do a far better job of deterring valueless activities of this type.

This leaves those acts or activities that, as a society, we are unprepared to call valueless — those activities that, subject to some subsequent political reconsideration and modification, we want to permit to the extent that they can pay for their accident costs. I would suggest, though it is not crucial to my analysis, that these comprise the bulk of the decisions as to accidents. Despite Learned Hand's formulation that negligence is a balancing of the "danger of an activity" against what must usefully be given up to avoid that danger,<sup>9</sup> it is altogether too clear that a system of fault liability is designed to deal only with "useless" conduct and not with the more subtle interests involved in measuring the value and danger of an activity. If using a threshold of terrazzo is not deemed careless, then a system based on fault — as an all-or-nothing proposition — will have no effect whatever on this activity.<sup>10</sup> The best way we can establish the extent to which we want to allow such activities is by a market decision based on the relative price of each of these activities and of their substitutes when each bears the costs of the accidents it causes. This can be done by a system of nonfault enterprise liability, a system that assesses the costs of accidents to activities according to their involvement in accidents. By contrast, our fault system, with insurance, assesses the cost of an activity not according to the number of accidents it causes but according to the number of

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<sup>9</sup> *Conway v. O'Brien*, 111 F.2d 611, 612 (2d Cir. 1940), *rev'd on other grounds*, 312 U.S. 492 (1941).

<sup>10</sup> See *Erickson v. Walgreen Drug Co.*, 120 Utah 31, 232 P.2d 210 (1951).

accidents it causes in which certain predetermined indicia of fault can be attributed to it. This results in a deterrence of only faultily caused accidents in an area where by hypothesis we are interested in deterring activities not because of some moral implications but because of the accidents they cause.

It follows from the above that the job of accident deterrence can be done more efficiently through criminal and semicriminal penalties aimed at useless conduct, plus nonfault enterprise liability,<sup>11</sup> than under a fault liability system. Two all-important cautions remain, however. The first is that we must know how to allocate the cost of accidents among competing accident-causing activities. Unless we have some way of deciding whom to burden with what part of the cost, the market will not help much in deterring the accident-causing activity. The second problem is no less puzzling. Even if we know what activity causes what accidents, it is not enough to say we will discourage that activity by making it bear the cost of that accident. For we must decide what the cost of an accident is. And this is not as simple as it seems. Is it the economic loss, is it pain and suffering, or is it the price needed to buy a willing victim? If the market is to tell us whether we want an activity despite its accident costs, we have

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<sup>11</sup> Such a nonfault enterprise liability does not at all preclude us from making collective judgments against the market—either to bar activities that seemingly can pay their way or to subsidize some that seemingly cannot. For example, let us assume that under a fault standard we discourage 18–25 year olds from driving because they cause proportionately more accidents than other groups of drivers when they are doing something we currently term “faulty.” Let us further assume that people over 60 are involved in proportionately as many accidents—but that currently they do not pay as much insurance because their accidents are not “caused by their fault.” A nonfault system would put the two groups in similar insurance categories. To start with, fewer people above 60 could afford to drive. If accidents were our concern—rather than metaphysical or moral fault notions—this would be a good result. But at this point we might feel—collectively—that driving at least at certain ages is too important and that individual members of our society ought to be allowed to drive whether they can afford it or not, or—which is really the same—that driving by these people is so important for our society as a whole that we cannot let the market bar them from driving despite their accident proneness. If this were so, we would as a group, politically, make a decision for accidents—reversing the market pressure against them—by subsidizing the groups we wished to have drive *despite* their accident records. But in doing this we would also have to face the question of how many classes of people we wished to subsidize. We might conclude that though drivers 21–25 and 60–70 should be subsidized, driving by 18–21 year olds and those over 70 is not worth subsidizing. The importance of having them drive would not justify overruling the market discouragement to their driving that had resulted from their accident proneness.



to put in approximately the right costs. It is these two crucial questions that I want to consider next, in reverse order.

### III. WHAT COSTS SHOULD BE INCLUDED

Assuming the activity responsible for an accident is in every case knowable, the first problem is to determine the cost of the accident. The task is simplified when the only costs are economic ones — that is, costs such as property damage that are calculable in terms of market values. Although problems in determining exact cost persist, there is at least no argument as to the subject of the computation. Indeed, if economic damages were the only costs of accidents there would be no objection to complete market rule. If building a tunnel under Mont Blanc would cost  $X$  million lire in property damages — and only in property damages — the enterprise would be deemed desirable if it remained attractive to investors who took these costs into account.

An exception to letting the market prevail would arise in areas where a component of the damage involves some noneconomic values. Thus, before a “nuisance” that can pay its damages is allowed to continue, a political or judicial decision that it is worthwhile must be reached. A market test of whether the activity can pay for the property it destroys does not demonstrate that it could pay for the noneconomic value it destroys.<sup>12</sup>

There are three ways of determining whether an activity ought to be allowed to destroy noneconomic values: political or judicial judgment (the government should have eminent domain powers; the Mont Blanc tunnel is desirable but must pay its economic damage costs); market judgment based on a rough conversion of noneconomic values into dollar amounts (let the jury decide the cost of pain and suffering, as well as of work hours lost; if the tunnel can pay for it, let the tunnel be); or a combination of the two. Thus, there may in some cases be a political decision that if an activity meets the market costs of some or all of its noneconomic damage costs (as estimated by a jury) it is sufficiently worthwhile to be allowed. In other cases the judgment might be that although an activity meets all of these noneconomic costs as

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<sup>12</sup> Presumably this is because we recognize that property ownership has some important noneconomic values which we want to protect. This does not mean, however, that we wish to make a taker who has an equivalent social utility (a “worthwhile” nuisance or the government in an eminent domain proceeding) pay for this noneconomic value.

best estimated, it still ought to be barred simply because it barely meets these and the activity is not considered good enough in the face of our distrust of a jury's estimate of these noneconomic values.

In fact, of course, we use all three methods in varying degrees and in varying areas. It is worthwhile to consider a little more closely the nature of these mixed determinations of what is properly the "cost" of an accident. Admittedly, confusion in making such determinations is engendered by a perhaps irrelevant, but humanly overwhelming, factor — compensation. I say that this is perhaps irrelevant for there is no reason — a priori — why whether a man gets compensation for pain and suffering should be tied to whether the activity that caused the accident should be made to pay the costs. Pain and suffering damages could be collected and not given to victims, or might not be collected from accident causers and yet paid out to victims from a social insurance fund. The question whether, in terms of achieving the proper "allocation of resources" (the proper degree of deterrence of accident-causing activities), it is socially desirable to make the activity pay for the pain and suffering it causes is logically separate from the question whether some money equivalent of pain and suffering is to be shifted or left as chance makes it fall.<sup>13</sup>

Assuming that the problems of compensation and allocation of burdens can be separated, the problem of what cost an activity should bear must be approached in terms of the function of cost allocation in deterring accident-causing activities. The function is not to abolish all accident-causing activities. Rather it is to cause the price of products or activities more nearly to reflect their costs. In other words the accident costs of making widgets out of aluminum are to be put on aluminum widgets, and the accident costs of making widgets out of steel are to be put on steel widgets, so that the nation of buyers can decide, on the basis of a full picture of what it costs to have each, how many of each are desired.

I have elsewhere described the ethical and economic postulates that underlie the notion that the best product mix is achieved when production decisions are made on the basis of consumer choices grounded on prices that reflect the costs — including the

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<sup>13</sup> This is so unless, of course, leaving the burden of pain and suffering or other similar types of damages on the victim is expected to affect the victim's behavior and his activities in a "resource allocation sense."

accident costs — of competing products.<sup>14</sup> I have also pointed out that by and large we are still committed to these ethical and economic postulates. I shall not repeat that discussion here. It is enough for this article to assume *arguendo* that the best product and activity mix will be achieved if prices of goods and activities reflect what we feel are the true costs they impose on society.

This assumption underlies a determination of (a) what the costs of an accident are, and (b) whether an activity will be allowed (1) if it meets its economic costs, (2) if it meets both economic and noneconomic costs, or (3) only if it can “buy a willing victim.” It describes a system in which the costs that people feel to be relevant to the decision between aluminum and steel widgets must be included in the costs of manufacturing each.

For example, suppose that my Electromobile is destroyed in an accident. Although its market value was only one hundred dollars, I had a great sentimental attachment to it because my Aunt Euphoria gave it to me. Ought the price of driving to reflect the destruction of this sentimental value? Do we feel in choosing between driving and riding trains that the fact that driving — let us assume — destroys more of such sentimental values than trains is something about which we wish to know? Is it something we wish so strongly to know about to go through the expense of estimating it in a thousand and one accidents in order to have it become a part of the relative price difference between driving and riding?

Silly as this example may be, it has the virtue of demonstrating that certain types of noneconomic damages are not normally treated as costs. Others, like pain and suffering, are taken into account when assessing the cost of an accident. The line between them is drawn by some form of collective judgment. When the expense of estimating the cost to society of some species of noneconomic damage is thought reasonable, then that cost is computed and entered into the relative price of activities.

The process of computation that has been adopted indicates a certain lack of faith in the accuracy of a translation of noneconomic values into dollar amounts. First, a political or judicial decision is made as to what kinds of costs are not worth bothering with. Then, a jury, often thought to be the institution most likely to reflect collective judgment, evaluates in each case what the

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<sup>14</sup> Calabresi, *supra* note 1.

nonmoney costs are worth. Thus, we allow an *ad hoc* reexamination of the political decision.<sup>15</sup> The limitations that necessarily inhere in this rather haphazard way of deciding what are real costs and their amount, as well as the fact that the choice must be influenced by the expense of evaluating these nonmoney costs, go far toward explaining why the market is only allowed to operate to a limited extent in deciding for or against accidents.

The nonmoney value of my home destroyed when International Phtui Works — an alleged nuisance — renders it unlivable may be real enough. But this should not be considered when the cost of evaluation is so great that the relative price of Phtuinuts would be biased more by including it than by leaving it out.<sup>16</sup> The only alternative is to try to decide at the beginning, collectively, whether Phtuinuts could pay for this value ignoring the cost of evaluation. In a real sense this is what we do when we decide that the Phtui Works, though a nuisance, will not be enjoined but only be made to pay economic damages. This may also be what we decide when we prohibit some accident-causing activities though they can pay their economic costs, and even perhaps the estimated dollar value of pain and suffering.

Needless to say, many decisions are in the other direction. Driving is allowed if drivers can pay economic loss plus a large measure of noneconomic loss. Although the activity does not even then bear the full measure of its cost, the additional computation is simply too expensive to undertake. It is assumed — decided collectively — that to the extent that these nonincluded losses are greater than in competing activities, driving is of sufficiently greater uncomputed noneconomic value to cover them.<sup>17</sup>

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<sup>15</sup> In practice, moreover, both the original political decision and the jury's *ad hoc* reexamination are made with the knowledge that compensation depends on the judgment. This probably tends to emphasize the question whether a real cost is involved. That is, it tends to dramatize the consequences of refusing to award a noneconomic cost, and therefore to make us think twice before we decide that a cost is not worth computing and entering into the relative price of activities.

<sup>16</sup> Technically, there would be a greater misallocation of resources if the cost were computed and included than if it were left out.

<sup>17</sup> This is just making the best of a bad situation. Failing to include these losses means that people will drive more than they should; failing to include uncomputable noneconomic benefits means they will drive less than they should. There is no assurance that the two will even out or, more important, that they will stand in the same relation to each other with respect to driving and with respect to other activities that compete with driving. But since computing them would, *ex hypothesi*, result in a greater bias than not computing them, this is the best we can do. We can then comfort ourselves in the knowledge that resource allocation

#### IV. WHAT IS A COST OF WHAT ACTIVITY

The difficulty of deciding which costs are relevant is painfully apparent. When compounded with the problem of deciding what costs are allocable to which activity, the game of deterring competing accident-causing activities by making their prices reflect their full cost and letting the market decide may well seem not worth the candle. Why is it sometimes thought that a heart attack is caused by an automobile accident and sometimes by the victim's occupation? Is a pedestrian-auto accident to be attributed to driving or walking? Despite their familiar ring, these questions are not meant to herald a metaphysical search for ultimate causes. Rather they must be approached in terms of a "social cost accounting" system,<sup>18</sup> in which activities are made to bear their costs in pursuit of sounder resource allocation.

The methodology involved in finding the accident costs of an activity is deceptively simple. The cost of any activity, *A*, includes the sum of the cost of accidents in which *A* alone is involved and some part of the cost of all other accidents in which *A* is involved with other activities. Solving the problem is more complex. A solution requires that criteria be evolved for apportioning the cost of an accident among those activities that caused it. There is no formula for allocating the cost of an accident among the activities involved, as there is no such formula for allocating overhead costs among activities that share the same facilities. One is reduced to making guesses in light of the goals of the system, as do cost accountants and regulatory agencies. When the system extends to the whole of society, the goals become harder to define and the guess more open to error. A cost accountant for an oil-drilling company need not study the effect on the rest of the economy of buying extra equipment needed to recover gas as well as oil. A student of accident law cannot a priori neglect the effects of discouraging driving on, for example, walking, busing, and cycling.

##### *A. Bargaining Situations*

There are, happily, some situations in which it will not matter which of two activities initially bears the cost of an accident since

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even in theory is an exercise in doing the best possible and not in achieving perfection.

<sup>18</sup> This phrase for describing what I have been calling "resource allocation" or "general deterrence" was suggested by Professor Alfred Conard of the Michigan Law School.

ultimately the cost will affect the behavior of both. In theory, these are all the situations in which the two or more possible accident-causing activities are related by bargaining.<sup>19</sup>

Thus, in theory, and to use an example from most basic torts books, it ultimately makes no difference whether the dock owner or the shipowner in *Vincent v. Lake Erie Transp. Co.*<sup>20</sup> is held liable for damage to the dock caused by an unexpected storm. If the shipowner is liable, dockage fees will be less; if the dock owner is liable, dockage fees will be more. In either case the extent to which each activity ultimately bears the loss depends on its bargaining power with the other—essentially on how easily the other can find a cheaper, because less accident-prone, substitute. If the loss is put on ships, the ships will tend to minimize their losses by going to safer docks, until unsafe dock owners have cut their prices sufficiently to make using them and bearing accident costs as cheap as using safer docks. If the dock owners bear the loss they will minimize it by installing safety devices until it becomes cheaper to pay for the accidents rather than installing more safety devices. The same will apply in reverse if the cheapest way to avoid the loss is to make safer ships. In any event, the least expensive way to minimize the loss will be sought out and used whichever of the two is initially liable.

This kind of argument can be made with varying degrees of realism in any bargaining situation. Should the cost of industrial accidents be put on workers or on their employers? Should the cost of rotary as against reel lawn mowers be borne by the manufacturers or the users? Theoreticians will insist that in terms of “general” deterrence of accident-prone activities it makes no difference either way.<sup>21</sup> In fact, of course, it can make a great deal of difference, but for reasons that do not require us to answer the broader question of “what costs belong to what activities.”

The first reason for the difference is that one of the two actors may, in practice, be far better able than the other to evaluate the accident risk, that is, the expected accident costs. And if this is the case, his activity is the more suitable one, in terms of deterrence of accident-prone activities, to bear the initial loss. If individual purchasers are made to bear the cost of rotary mower

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<sup>19</sup> See Blum & Kalven, *Public Law Perspectives on a Private Law Problem—Auto Compensation Plans*, 31 U. CHI. L. REV. 641, 695-97 (1964).

<sup>20</sup> 109 Minn. 456, 124 N.W. 221 (1910).

<sup>21</sup> Cf. Blum & Kalven, *supra* note 19, at 696-97.

accidents and invariably underestimate their likelihood, they will not purchase a substitute mower that seems more expensive. Presumably, the rotary mower industry, on the other hand, knows pretty clearly the expected cost of using mowers in any given year; and by putting the cost directly on the industry, individuals are made aware of these costs and are better able to make the appropriate choice for or against accidents. To the extent that they choose against accidents (against the higher-priced mowers, reflecting the accidents), pressure will then exist on the mower companies to develop safety devices.

The second reason is that it may not cost the two parties the same amount to insure against the loss. If the loss is placed on the party for whom insurance is less available or more expensive, a false cost — the excess cost of his insuring — will be made a part of the price of the goods. Self-insurance does not modify this; it only suggests that occasionally one of the parties is sufficiently large so that noninsurance is the cheapest alternative. Once again the choice of loss bearers depends on which of the two parties to the bargain can inject the cost into the price of the goods or service most cheaply.

The third reason is somewhat more complex. If placing the loss on one of the two parties to the bargain results in all or part of the loss being removed from both of the parties and placed on totally unrelated parties, then such placing of loss is undesirable. For example, if placing the cost of a rotary mower accident on the user resulted, for political or social reasons based on a desire to compensate, in the loss being paid for by the government out of general social insurance, such loss allocation would tend to frustrate the proper choice for or against rotary mowers. If placing the loss on the mower company instead did not result in such an externalization, there would be a clear reason for placing the loss on the mower company.

The classic example of all this is, of course, industrial accidents. It did make a difference in terms of accident deterrence (despite the theoreticians of the time) whether industrial accidents were charged first to workers or to industry. This was not because “metaphysically” industry always was more the *cause* of the accidents than workers, but because industry could insure more cheaply than the workers and was better informed on what the costs of accidents would be, and because placing the loss on the workers would most likely have resulted in externalizing part of it from both workers and industry. Placing the loss on industry

therefore better enabled us to minimize accident losses by an appropriate choice for or against accidents.<sup>22</sup>

The theoretician will object that the placing of such costs arising from a bargaining situation on anyone but the ultimately injured party is in fact compelling the ultimately injured party to insure himself against that accident. He will argue that the user of rotary mowers might find it cheaper not to have the company that manufactures such mowers pay for any accident costs to him, because he is a careful user and therefore the accident risk to him would be less than the average accident costs reflected in the price. Or he might assert that he is a user to whom a toe means less than to most, and that therefore, when the price of mowers to him reflects the average cost of the average toe, he is overpaying.<sup>23</sup>

To some extent this is of course true. The choice to self-insure, or to insure in other ways, is removed from the ultimately injured party when in a bargaining situation the original cost is put on the other party. But the reverse is equally true, because there is nothing "ultimate" about who is the ultimately injured party. Thus, if the initial cost of mower accidents is put on the users, the manufacturers of mowers are as forced to insure with the users as the users would be forced to insure with the manufacturers if the cost were put on the manufacturers. And the same problems of overcharging the more "careful" manufacturer through such compulsory insurance exist as did in the reverse situations. In fact, if there is a significant difference in the accident potential of one user from another, the cost of the product to him will reflect that difference, even if the original cost is not put on him.<sup>24</sup>

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<sup>22</sup> It is interesting to speculate on the effect that unionization may have had on this "classic" example. It may well be that with the existence of highly organized unions, there would now be no difference in many industrial contexts if the worker initially bore the cost of industrial accidents instead of the employer. There might even be some situations, involving many small employers and one strong union, in which the best initial loss bearer would be the employee.

<sup>23</sup> Compare Blum & Kalven, *supra* note 19, at 697-98.

<sup>24</sup> In theory — the same theory, indeed, that suggests that it makes no difference which of two bargaining parties initially bears the loss — this would *always* happen. And this is one reason why it does not matter in theory who initially bears the loss.

In practice, of course, this will only happen in cases where there is a very important difference in the actual accident potential of users (assuming sellers are made to bear the initial loss). If it is cheaper for users to evaluate the different accident potential of sellers than for sellers to evaluate the user's accident potential, this might be a reason for placing the cost initially on the user rather than the seller. But it is a reason of the same order and type as those previously discussed



The best we can do, then, in a bargaining situation is to place the original cost on the party to the bargain whose actuarial class can best evaluate the risk of such costs in the future.<sup>25</sup> There will be many situations in which it will not matter because both sides of the bargain are equally informed. There will be others in which it is very hard to say which side is better informed and other considerations such as specific deterrence, or compensation, will rule because general deterrence gives no guide or does not make sufficient difference. But there are many situations in which it seems that a difference does exist, and here we can expect liability to be placed on the better informed party. Workmen's compensation and, to a lesser extent, the dichotomy between respondeat superior and the independent contractor rule are examples of this choice.

Recently, it has been ably argued that the same reasoning may apply in a great variety of situations in which a bargaining or contractual relationship does not exist between the potential original bearers of the accident cost.<sup>26</sup> The argument runs that if the cost of a factory-smoke nuisance, for instance, is put on the homeowner rather than on the factory, and the cheapest way to avoid this cost is not for the homeowner to move or wear a gas-mask but is for the factory to install a smoke-clearing device or cut down production, the homeowner will pay the factory to do this. On the other hand, if the cost is originally put on the factory, and the best way to minimize the loss is to get the homeowners to move, the factory will find it cheaper to pay for such a move rather than to cut down production. Either way, it is argued, the market will find the cheapest way to deter or minimize the loss. And while there may be some difference in the end as to who is richer and who is poorer, in terms of general cost deterrence the same results will be achieved whoever bears the initial loss.<sup>27</sup>

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reasons that determine which of two parties to a bargain we want to bear the loss initially. As such it must be considered together with them.

What cannot be done is what Blum and Kalven appear to do — ignore the other reasons because “in theory” they do not matter, and nevertheless place great weight on *this* single reason for choosing a loss bearer. See Blum & Kalven, *supra* note 19, at 696–98.

<sup>25</sup> This is in the broad sense defined above. See pp. 726–28 *supra*.

<sup>26</sup> Coase, *The Problem of Social Cost*, 3 J.L. & ECONOMICS 1 (1960).

<sup>27</sup> A difference in who is richer or poorer may, however, mean an undesirable compensation effect with concomitant secondary losses. Should this be so and should such secondary losses result in a desire to remove the cost from either party and pay it, for example, out of a general social insurance fund then a crucial and probably undesirable effect in terms of general cost deterrence is likely.

The argument is essentially that a bargaining relationship can always be established between the original loss bearer and the party best able to minimize the loss. In a perfect world such a bargaining relationship will always result in the appropriate minimization of the loss.<sup>28</sup>

The first problem with this view, and one fully recognized by its author,<sup>29</sup> is that it costs money to enter into such a bargaining relationship. Thus, while it might be cheaper to install a smoke-clearing device than to have the neighboring homeowners move, if the damage is originally put on the homeowners it may be more expensive to get them together to bargain with the company and then to pay the company to install the smoke clearer than it would be to move. In such a case placing the loss on the factory initially would, in fact, minimize losses whereas placing it on the

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<sup>28</sup> It is not clear to me, however, despite the examples in the article by Professor Coase, *supra* note 26, at 5-8, that no difference will exist in the really long run. Let us assume, as I take it Coase does, perfect competition and also a liability system in which Coase's cows pay damages. Let us assume further that an equilibrium is arrived at, through bargaining, in which each cattle raiser keeps three cows and pays the neighboring farmer \$4.00 to avoid the \$6.00 crop loss Coase posits by planting a crop cows do not like and that the \$4.00 bribe plus the market price of the new crop yields the farmer as much as the previous crop did. In a perfectly competitive world just enough cattle raisers and enough farmers will engage in each business at this equilibrium so that the marginal farmer and the marginal cattle raiser will each earn the same return on his investment—the same return in fact available in any other nonmonopolistic activity. Let us now alter the liability system: cows no longer pay for crop damage. It is true, as Coase suggests, that the cattle raiser will still keep his "optimal" three cows and the farmer will plant the same crop that cows do not like. Nothing has happened to change that. But now farmers who plant this crop are \$4.00 poorer than they were previously and cattle raisers \$4.00 richer. The rate of return on the investment of even the marginal cattle raisers will now be higher than in other industries, the rate of return of marginal farmers will be lower. Assuming, as Coase must in his perfect world, free entry and exit, people will move into cattle raising from neutral occupations, and people will leave farming to enter these same neutral occupations. A new equilibrium will be established, and perhaps each cattle raiser will still keep three cows and each farmer raise the same crops, but there will nevertheless be more three-cow cattle raisers, and hence more cows, and fewer farmers and fewer crops.

The short of the matter is, liability rules do affect the amount of money people make—in the short run; and in the long run people will enter those activities where they make more money. Thus, although each individual may, through bargaining, minimize the effect of a liability rule by paying the person he injured to do his best to avoid the injury, this can only reduce the misallocation effect of originally putting the loss on the wrong party. It cannot eliminate it. Mitigation is good enough for me and the analysis in this article; whether it suits Professor Coase as well, I do not know. See also note 30 *infra*.

<sup>29</sup> Coase, *supra* note 26, at 15.

homeowners would not. The difference between this situation and the situation in which the two potential loss bearers are already bargaining (for example, *Vincent v. Lake Erie*) is that there is no added cost of bargaining caused by placing the loss on one party rather than the other.

The second problem with the view is that apart from costs there are many situations in which artificial bargaining is even theoretically impossible because one group of "bargainers" cannot be organized without some degree of outside coercion. Suppose that the cheapest way to reduce automobile-pedestrian accidents were to have fewer cars on the road. If the cost of accidents were originally placed on cars, the desired effect to the extent desired would be achieved. If the cost of accidents were placed on pedestrians, however, quite apart from the cost of finding and paying some auto users not to drive, the desired effect would never come about. This is because, absent some coercion, some pedestrians would decline to pay their share of the cost of bribing the drivers to drive less. They would seek a free ride on those pedestrians who sought to lessen driving by paying for the diminution. The situation seems analogous to that in a "perfectly competitive" market where despite the fact that higher returns could be achieved by sellers if they could all join to raise their prices, no such price rise occurs because each individual seller seems to have an advantage in selling for less.

For both theoretical and practical reasons, therefore, there are many situations in which we cannot assume that it makes no difference, in terms of accident deterrence, who is saddled with the original liability.<sup>30</sup> Nor can we assume that in these cases we

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<sup>30</sup> If in addition my doubts about the long-run situation are true, see note 28 *supra*, than all Coase proves is that no matter how we may misallocate resources in the first instance, the market will operate through artificial bargains to mitigate the effect of the misallocation but not to correct it altogether. The same would be true if we were dealing with costs that could not conceivably be taken to belong to the party originally burdened, as it would if the costs might seem properly to belong to that party. Thus, if for no good reason the government chose to put the cost of smoke pollution on television manufacturers, television manufacturers would bribe people to wear gas masks, or factories to reduce smoke, or both, to whatever degree would most cheaply reduce the cost. The resulting allocation would be better than if television manufacturers could do nothing to reduce the cost of smoke pollution. It would not, however, be as good an allocation as would have come about if the cost had been allocated originally to the factory or to the homeowner. For the result would be, despite the mitigation, that some marginal television producers would drop out, and fewer TV sets would be made

need only look to the party who can minimize the cost of accidents most easily and put the cost on him. First, we may not know who he is. Second, we cannot assume that any single party is in such a position. For instance, to return to automobiles and pedestrians, it may well be that the best way to reduce accidents is to have both less driving and less walking. If this is so, given the limitations of "artificial bargaining," we cannot simply put all the cost on one or the other. Third, and perhaps most important, the world is infinitely more complex than the example. The choice is not between fewer pedestrians or fewer cars. It is among fewer old cars, new cars, cars driven by teenagers and aged ladies, fewer old pedestrians and crippled pedestrians, and all of these in relation to fewer buses and trains and better streets, better street lighting, and so on forever.

In other words, we cannot begin by determining the combination of activities that, given what we consider to be real costs of accidents, brings about the degree of reduction of accidents that we want in the cheapest possible way.<sup>31</sup> Nor can we count on the market to accomplish the same thing through artificial bargains between parties who originally bear the accident costs and parties who by their activities can reduce accident costs. The result is that although there are situations in which the choice of an original loss bearer is relatively easy because it either makes no difference or because the choice depends on an estimate of relative abilities to value properly the risks involved, there are other situations in which the choice of the original loss bearer or, if you wish, the question of what loss belongs to what activity, is not only important, but hard!

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than would optimally be desired. The same would be true if the cheapest way of avoiding smoke damage was by having factories install a smoke-clearing device, and the original cost of smoke pollution was put on neighboring homeowners. Once again the homeowners would bribe the factories to install the device and the loss would be mitigated—but some marginal homeowners would find the extra tax too much and would move in with their mothers-in-law. This too would not be the optimal arrangement.

<sup>31</sup> It is ironic that this seems to be the suggestion of as devoted a "free market" economist as Professor Coase, *supra* note 26, at 15-28. For (quite apart from the problem of accidents and like costs) the major reason for having the market usually decide how much of what we want produced and how, rather than deciding the matter "administratively" or "collectively," is the very same difficulty of deciding what combination of goods yields the highest value of production at the lowest cost. *Id.* at 40. So it seems strange to assume that in the case of accidents we can first decide how much of what activities we want and then arrange damage and cost allocations to bring this combination about.

### *B. Categories and Subcategories*

This difficulty, though, is not grounds for abandoning an otherwise valuable approach if partial answers may be discovered and if the partial resolution is better than none at all. In many situations in which it is difficult to determine whether an accident is a cost of one activity or another, it is still sensible not to attribute it to a third activity. The cost of a pedestrian-auto accident may not easily be divided between driving and walking, but in terms of general accident deterrence it is better to allocate it to one or the other or both rather than to "externalize" it. The reason should be clear. If the costs of automobile-pedestrian accidents are externalized and treated as part of the cost of a "social insurance scheme" financed out of general taxes, the only decision that this might, in theory, affect is whether to live in America or Argentina; once people have decided to live in America, it will not affect their decision to drive cars or to walk. They will not be in a position to make the proper choice for or against accidents, and no "general deterrence pressure" will exist.

This is not to argue that auto-pedestrian accidents are not also general costs of living in America. They are, of course. But putting the cost on autos or pedestrians will affect not only the decision to drive or walk, but if the cost is significant enough, the decision to move to Argentina as well.

This process of allocation can go significantly further. It is better to apportion the accident costs among subcategories of drivers on the basis of the accident proneness of the category rather than to charge the accident costs equally to all drivers. If driving's share of auto-pedestrian accidents is paid by a set tax on driver's licenses, some desired deterrence on driving would be achieved. This allocation of costs, however, fails to distinguish between driving old cars and new cars, and the best way of reducing accidents (the cheapest way in terms of the choice for accidents) might be to reduce driving somewhat but to shift most driving to newer cars.

I shall not discuss now how far we can go in subdividing activities in allocating accident costs. Suffice it to say that there comes a point where the cost of further subclassification is greater than the worth of the choice offered, and that in practice it is possible to find that point. Indeed, in the context of subclassification for fault proneness, insurance companies make exactly such a decision every day when they charge higher rates for unmarried male

drivers under twenty-five but do not break this down into unmarried male drivers of twenty-two and seven months as against unmarried male drivers of twenty-two and eight months.

The point is simply this: were there no costs involved in subclassifying activities, it would always be best to put the accident cost of an activity on its smallest subcategory. To the extent that the subcategory has the same accident proneness as another subcategory, no choice between these subcategories would be affected nor would one be desired. To the extent that subcategories were differently accident prone, some movement to the safer ones would result because the greater real cost of the more dangerous one would be reflected in its price. In either case, the activity of which both were subcategories would automatically also reflect its own accident proneness relative to other safer activities. Instead, if the costs were allocated solely to the larger category or activity, any possible "general deterrence" at the "subactivity" level would be lost.

Thus, although it is unclear whether an accident cost is attributable to driving or walking, in terms of general accident deterrence it is better to allocate it to one or the other or both than to pay it out of general taxes.<sup>32</sup> And to the extent that the cost is put on these activities, further subclassification by drivers, type of cars, and the like, causing people to shift from the more accident-prone subclassification to the safer one, will bring about minimization of accident costs.

In this sense, then, the problem of "what is a cost of what" is further diminished. For even in a nonbargaining situation where accident costs are not readily divisible between the activities involved, it is clear that placing the costs on them is better than externalizing the costs.

### *C. Where Certain Comparisons Are More Important Than Others*

The lack of a simple theory for apportioning costs is no obstacle in a bargaining situation where the parties are able to work out the proper allocation of burdens. Nor is it a bar when there is no hope of influencing one of the activities involved in an acci-

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<sup>32</sup> If subclassification is in fact too expensive, then social insurance paid out of general taxes is the best solution; for, as we have indicated before, social insurance places the cost on the category—living in a given country—of which all other classifications are subcategories. It seems unlikely, however, in view of insurance company actuarial practices, that no subclassification would be worthwhile.

dent. Thus, if it is clear that pedestrianism is ineluctably here and nothing much can be done about it or its habits, and our concern is whether it is better to have driving or busing or how much of each and what kind of each, then it is proper to consider as part of the costs of cars and buses the added accidents they each bring to a pedestrian's world.<sup>33</sup>

The same would be true if placing part of the cost on pedestrians would result, for political, social, or compensation motives, not in pedestrians bearing this cost at all but in having the cost removed and externalized both from pedestrians and automobiles, through state compensation out of general taxes. In that case we might just as well let cars pay for all joint car-pedestrian accident costs, as the social insurance would prevent the placing of costs on pedestrians from leading to any accident-detering choices between pedestrianism and, for example, cycling. This being true, we might as well get the maximum of potential "general accident deterrence" between cars and buses by placing full pedestrian-car accident costs on cars and full pedestrian-bus accident costs on buses.<sup>34</sup>

This would also be the case if the pedestrians' share of the costs was generally not paid out of "walking accidents" insurance, or its equivalent, but was, because pedestrianism is not an organized activity like driving, insured against as part of a generalized "harms-that-can-befall-one" insurance. In that case by actuarial necessity the cost is externalized from pedestrianism and made a general cost of living. Here also the placing of part of auto-pedestrian costs on pedestrians would fail to affect the degree of

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<sup>33</sup> And this is so whatever the reason why "pedestrianism" is taken as fixed. For whether pedestrianism is fixed because there are no substitutes for it, or because we want it fixed for political or other nonmarket reasons, the situation remains the same. We do not care about comparing *its* costs with other things and we may as well get the best comparison possible between cars and planes. We should be careful, however, about what we mean by "fixed." "Fixed" implies the absence of possible significant changes in the manner in which an activity is carried on as well as the absence of realistic substitutes for the activity. Thus, if pedestrianism could be made significantly safer by having pedestrians carry a widget (a costly safety device), and if putting part or even all of pedestrian-car accident costs on pedestrians would lead to a cost pressure for widgets, we could by no means consider pedestrianism as "fixed."

<sup>34</sup> If the car driver were uninsured and judgment proof, of course, no general deterrent effect would be achieved by putting the cost on driving. Further, should such a driver hit a pedestrian who as a result goes on relief, at least part of the cost of the accident would be externalized from both driving and walking. It should not be surprising that precisely such situations give rise to demands for compulsory insurance.

pedestrianism.<sup>35</sup> Therefore, putting the full cost of pedestrian-car accidents on cars and of pedestrian-bus accidents on buses, for a more complete comparison, is the best we could do.

Furthermore, if we are concerned with driving and walking as compared to television viewing — if the choice is between taking a stroll or a drive as a form of amusement, as against staying home and glaring at the TV set as a form of amusement — then it does not matter how much of the cost of driving and walking accidents is borne by either so long as together they bear it all. And finally, when concern centers on the problem of determining whether activities should be kept apart in order to limit costs, it would seem best to place the costs on the party who can most cheaply undertake the task of separation. The assumption underlying these propositions is that our society is interested in a limited number of comparisons and treats a wide range of potentially changeable things as given. While fuller comparisons might be desirable, the limited ones may well be the best that can be done.<sup>36</sup>

In addition, the problem is somewhat mitigated by the theoretical possibility of what I have called artificial bargaining. Thus, suppose that the costs of vehicle-pedestrian accidents are placed entirely on cars and buses because concern was focused on adjusting cars relative to buses and types of cars relative to each other. Assume also that the concern was misplaced, that we should have been concerned with pedestrians as against cyclists or transferring pedestrians to other areas, because those would have been cheaper ways to avoid these accidents. This mistake, if sufficiently gross, might be corrected by artificial bargaining. Drivers, or auto makers worried about the high cost of using their products, might find it worthwhile to build pedestrian malls

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<sup>35</sup> If pedestrians were perfectly aware of the risks involved in walking and carried no general accident insurance, then putting part of the cost of car-pedestrian accidents on them would be as effective as if "walking-accident" insurance actually existed. For then, the risk awareness would accomplish the same function as the "walking-accident" insurance premium would. But such an assumption is as unrealistic as the assumption discussed earlier, see pp. 727-28 *supra*, that industrial workers were individually as aware of the risks of industrial accidents before workmen's compensation was developed as their employers were after it was instituted. Indeed, those few pedestrians who might be aware of the risk would probably be those who are so conscious of all accident risks that they would carry general accident insurance. For them, however, as we have just seen, the cost would be made a general cost of living and not affect walking at all.

<sup>36</sup> Often the search for such limited comparisons results in putting the full costs on the newer of the activities that combine to cause the costs, and only shifting things around if, despite bearing these costs, the new activity gains some dominance. See, e.g., *Fletcher v. Rylands*, L.R. 1 Ex. 265 (1866), *aff'd*, L.R. 3 H.L. 330 (1868).



away from busy streets or to bribe walkers to take up cycling. Although artificial bargaining has its limitations both in cost and feasibility, it may help to mitigate errors that are sufficiently egregious. Attempting to decide what comparisons are most important, together with the safety valve of artificial bargaining to cure the worst mistakes, may be quite good enough,<sup>37</sup> or at least better than any alternative method of allocating costs.

And this is a very important point, because ultimately such costs will be allocated for better or worse, and someone will have to bear their burden. Allocation based on an inexact but rational guess as to what is an important comparison is likely to be more helpful in leading to a sensible choice "for or against accidents" than an allocation based on specifically irrelevant factors like fault or social insurance, which remove costs from the arena of most relevant comparisons.

#### *D. Where All Comparisons Seem Equally Important*

We should realize that in a great many situations, the important comparison will not be readily apparent. Where *A* and *B*, a set of substitute activities, are involved in accidents with *C* and *D*, a set of activities that compete with each other and that do not compete with *A* and *B*, and where, moreover, we are concerned with the relationship within each set, we face the most difficult problem in allocating costs. The same is true when concern focuses on the comparative worth of substitute activities that are involved in accidents with each other.

Were all the costs of mailman-dog accidents and mailman-cat accidents placed on the Post Office Department, an important element in a choice whether to own a cat or a dog would be removed. The Post Office might still find it worthwhile to bribe people to trade in dogs for cats, but the costs of striking an artificial bargain are high. Thus, if the choice between dogs and cats might be important in reducing the seriousness of postman-animal mishaps, *some part* of the postman-dog and postman-cat costs should be placed on owning dogs and cats. Not all should, though, as that would prejudice the decision of whether to give mailmen animal repellents or to deliver mail by car.

The question then is how much to allocate to each activity.

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<sup>37</sup> This is especially true because when the aim is allocation of resources, too much exactness is both useless and self-defeating for more reasons than are worthwhile listing. A fair collection of them can be found in Calabresi, *supra* note 1, at 503-05, 507-14 & nn.17 & 41.

I would suggest that: (1) unless there is reason to suspect that the choice of one set — for example, cats and dogs — is more likely to minimize accident costs than the other set, or (2) unless it is clear that one of the two is in a much better position to undertake artificial bargaining to correct an error, or (3) unless other motives, such as compensation, suggest a division, it does not make much difference how the costs are divided so long as all members of the same set bear the same proportion. The best that can be done is to put a cost pressure on owning dogs as against cats proportionate to the costs each have in common with mailmen. Thus, the price of owning dogs or cats will at least show the relative danger each bears of injuring postmen even if it does not show the absolute value of that danger.

This leaves the problem of allocating costs in instances where the activities involved are substantially substitutes, and it is important to compare them in order to determine the best mix — dogs against cats. A more significant example might be a comparison between large cars and small cars. The cost of having both may be significantly greater than the cost of either alone, since, when a large car and a small car collide, the damage is usually greater than if two small or two large cars had been involved.<sup>38</sup>

In many situations where having two activities results in greater costs than having either one alone, it is simply not worthwhile working out an allocation of these costs other than by a simple division. This will be clearly true if having both activities does not add a great deal to the cost of having either alone. It will also be true if the diversity involved in having both activities seems to be significantly desired by society collectively, regardless of how much particular individuals wish to have the diversity.<sup>39</sup> Only when these two conditions are absent and in addition the activities are close substitutes will it be realistic to think that the degree of diversity will be affected by placing the added cost of having both activities on one or the other of them.

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<sup>38</sup> N.Y. Times, June 2, 1964, p. 39, col. 2. Compare *id.*, June 3, 1964, p. 45, col. 1, with *id.*, June 5, 1964, p. 30, col. 5.

<sup>39</sup> Thus, a foolish society may feel there is special merit in having both large and small cars. The variety might seem to be a symbol of wealth which the society wished perpetuated. If this symbolic value were insufficiently appreciated by individual buyers, such a society might not want the added costs of diversity to be placed totally on either large or small cars. For that allocation might result in one type of car becoming dominant. In the extreme case, the foolish society might even remove all diversity costs from both. Of course, wiser reasons for collectively desiring certain diversity costs are not hard to think of.

Some analytical tools can be brought to bear on this perhaps not overly significant aspect of the problem, but for the most part they are somewhat impracticable. First, when one of the activities can be thought of as being added to a "preexisting situation" it might be proper to allocate the entire diversity cost — the difference between the cost of the accidents involving *A-B* and the estimated cost if *A-A* had been involved — to the new activity. Thus, if we lived in a world of large cars, small cars would only be worthwhile if their drivers were able to meet the costs they would add. This would be true even if total costs would be lower in an all small-car world than in an all large-car world if the cost of changing entirely to small cars is greater than the savings such a change would bring. Second, when neither activity can be thought of as dominant, then the costs of diversity should be borne by the activity that is otherwise socially more expensive. If social costs would be minimized by having only small cars, then the difference between the costs if only small cars were involved in accidents and the costs when large cars and small cars are involved should be placed on those drivers who choose the socially more expensive large cars.<sup>40</sup>

Though the practical problem of knowing which of the substitutes taken alone would have the lowest social cost cuts deeply against the usefulness of this type of analysis, to some extent an *ad hoc* guess as to which activity would have been more desirable as an original matter can perhaps be made. When this sort of guess seems too hard, the best that can be done is to forget about "diversity costs" and divide accident costs so that a choice between the competing activities can be based on other costs of each.

#### *E. A Practical Approach to Multilateral Comparisons — "Involvement"*

Despite the lack of any inclusive theoretical basis for apportioning the cost of an accident among the activities involved, substantial guides to the allocation of costs in a nonfault system of accident law have been shown to exist in many situations. Yet a great many cases remain in which there are no rational criteria

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<sup>40</sup> To say that large cars are "socially more expensive" than small cars means that they would be less desired at the price they would cost if they were the only kind of car and bore all their accident costs, than would small cars in a similar situation. Obviously, it is more than difficult to know whether this would be so. And, indeed, even to suggest it makes one subject to exactly the same comments made about Professor Coase in note 31 *supra*.

for dividing the accident costs among the activities involved. A straightforward, if rough, solution for these cases is possible. The cost of each accident might be divided pro rata among the activities involved and then cumulated for each activity.

For example, if a car and a pedestrian are involved, the cost will be split between driving and walking. If a car, a pedestrian, and a cyclist are involved, then the cost will be divided three ways. If a cost can be allocated between two of the three according to any of the previously derived criteria, then this will be done for two-thirds of the cost and the third activity will bear the remainder. At the end of any given period of time, those activities that are involved in more accidents or in more expensive accidents will bear the greater proportion of all costs. According to theory, safer but formerly more expensive substitutes will replace more dangerous activities as these are made to bear their costs.<sup>41</sup> Even if categories are initially defined in terms of factors that are not related to accident proneness, this defect will eventually work itself out of the system.

Thus, if everyone drove blue cars and cars were involved in all accidents, then driving would bear a large part of all accident costs. Walking, cycling, and the like would bear the rest. If somehow "blueness" were thought significant, a shift from blue to red cars would occur; but since it would not help to reduce

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<sup>41</sup> "Involvement," however, since it divides the costs, is not as good as allocation to one of the parties on the basis of the factors previously discussed—if such allocation can be made. Assume, for example, that an accident involving two activities costs \$80 each time it occurs; assume also that such an accident could always be avoided by either activity through the installation of a safety device costing \$60 per accident prevented. An involvement test would charge each of the parties \$40. At first glance neither activity would install the safety device. Either might do so, subsequently, as a result of "artificial bargaining." But if the cost of entering into an "artificial bargain" was more than \$20, no such bargain could be struck and the accident would not be avoided even though if *either* party were originally charged with the full cost of the accident, the safety device would readily be installed, as it should be. Lest this horrible situation seem worse than it is, the exactly opposite conclusion would be reached if instead of the situation posited, we posit the case where the only way to avoid the accident is if both activities modify their behavior somewhat, for instance by each installing a \$30 safety device.

Leaving aside these extremes, the examples suggest that there are situations where, on the whole, having one bearer of the whole loss is desirable. Usually these will be cases where, on the basis of the factors discussed before, we will deem one of the parties the best loss bearer. There will also be many cases where no such assessment can be made, but these will usually be cases where some accident-reducing action on the part of all the activities involved seems desirable. And in these cases the kind of division that involvement makes is probably the best available.

accident costs, the mistake would not persist. If a shift from big cars to small cars would reduce costs, then such a shift would be forthcoming to the extent that the cost differential between small cars and large cars was magnified by the previous year's cost allocation.

This method allows for special treatment in cases where the more exact criteria for allocating costs exist, while dealing with all other situations in terms of the preponderance of involvements. Its basis is the assumption that although criteria for allocating costs cannot always be found, criteria for determining involvement can. Again, it is necessary to warn that activities are not treated as "involved" in order to round out metaphysical notions of causation, but rather to make comparisons between potential substitutes more meaningful. It does not further this purpose to treat each *sine qua non* cause as involved in an accident. For while in most accidents there will be among the *sine qua non* causes some activities that may profitably be compared with substitute activities, there will also be other such *sine qua non* causes not worth comparing. This may be because: (1) there are virtually no substitutes with less accident-causing potential; (2) the activity and its substitutes will appear so infrequently in such accidents that any cost allocation to them could have no significant effect on choice; or (3) placing the cost on them initially would result in having the cost removed and externalized from all the causes.<sup>42</sup>

Determining which causes are to be excluded as coincidental will not always be a simple proposition. For example, suppose a car and a pedestrian collide, and the driver notes that he was distracted by a low-flying plane. In the normal course of things, planes will not be a sufficiently significant cause of car-pedestrian accidents to be worth bothering about. If, however, a fair number of accidents were to occur near airports, and enough of them involved distraction by a plane, then it might be worthwhile considering planes as involved. In that case, the accumulation of these costs and other costs caused in part by airport noise might

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<sup>42</sup> This elimination of unimportant *sine qua non* causes is really no more than a somewhat generalized application of the criteria derived in our earlier discussion of "Where Certain Comparisons Are More Important Than Others," pp. 734-37 *supra*, to a multilateral situation. In our earlier discussion we used the criteria to identify the best cost bearer in an accident involving several potential joint causes. Here we use them for the easier task of excluding some potentially involved activities and leaving all those about which we feel sufficiently doubtful so that an "involvement" type of division seems desirable.

induce installation of noise-diminishing devices or relocation of airports. The point is that often it will not be enough to look at the immediate case, but instead it will be necessary to discover whether an apparent coincidental cause is similarly involved in other types of accidents.

In other words, "involvement" is a term of art designed to include all those factors that are part of an accident and that may be replaced by substitutes with a substantially different accident potential.<sup>43</sup> It includes those factors that are "typical" of an accident while ruling out those that are "incidental." Although the example shows that typicalness and incidentality are not altogether easy notions, they are probably workable.<sup>44</sup>

## V. CONCLUSION

Where, then, does all this bring us? It should be clear that in this analysis, I have made no attempt to set up a "system" for dealing with accident costs in any or all given areas. I have made no attempt even in the automobile-pedestrian area to specify whether accident costs ought to be divided between pedestrians and cars or put solely on one party, and if they ought to be divided, whether the best way is by excluding certain damage items from allowable recovery or by a computation of all damages followed by a division. I have not done these things because such specific policy decisions depend only in part on the analysis of the "general deterrence" factor that I have centered on. In addition, even if they were solely dependent on that factor, quite a lot of empirical information on the administrative expense of various systems, as well as on the importance of various "comparisons," would be essential.

What I have tried to do is clarify one part of the theoretical basis for such practical judgments. In doing this, I have suggested that usually in our society, decisions on how much we want to deter accidents are made in a way that combines market

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<sup>43</sup> I do not mean that such decisions should be made on a case-by-case basis. That question is entirely a matter of the costs involved. There might be some contexts in which a case-by-case determination of what activities are involved and what are not may be worth the extreme cost of such determinations. In other areas guidelines of general applicability as to involvement might do nearly as good a job of excluding irrelevant activities and the fact that they do it much more cheaply than the case-by-case approach would be conclusive.

<sup>44</sup> The words "typical" and "incidental" in themselves are meaningless; they are only meant to be suggestive of the discussion that preceded them.

choice and collective political judgments. My feeling is that this choice can be made more effectively through a system of accident liability based on accident "involvement" instead of fault, combined with a system of criminal and semicriminal penalties for specific behavior, and overseen by collective political judgments on the desirability or undesirability of certain activities regardless of the market.

When we are dealing with deterrence of activities that have some social usefulness but that cause accidents, the first step toward deciding how much of these activities is wanted can still, in a substantially free enterprise society, be best determined by the market. There are simply too many such decisions to be made collectively in any intelligent fashion. However, in a wide and perhaps growing area, we are dissatisfied with letting a purely market determination of social usefulness rule. This is because of the inherent inexactness of both the market mechanism and of any estimate of accident costs and to whom they belong. It is also because in a growing area we are becoming convinced, whether rightly or wrongly, that individuals do *not* know what is best for themselves.<sup>45</sup> For both these reasons, some degree of subsidization or deterrence of activities based on collective decisions overruling the market is inevitable and probably desirable. Such decisions — like that to subsidize drivers over seventy, or to bar drunken driving — are, however, best made openly and in the face of the market decision, so that it is clear to us when we make such decisions that what we are really saying is, "In this case considerations *other* than individual choice among alternatives are paramount and supersede individual choice."

I do not, with all this emphasis on "general deterrence" of accident-causing activities, foreclose the specific deterrence that, it is often asserted, fault liability brings about. I simply believe that the best way to bar groups of acts that we feel politically are sufficiently bad that they should be barred regardless of their market usefulness is not through a "fault" system connected

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<sup>45</sup> The importance of this trend can easily be exaggerated by looking at those areas of the economy where advertising plays its most significant role. There it is easy, though certainly not always correct, to assume that the choices made by individuals are irrational and, more important, that the individuals will all too soon regret having made them. But the area of final consumer choices, even if it were as irrational as we sometimes think, is only a small part of the picture. If we consider all the decisions at the production level which are made by individuals operating through the market mechanism, it is much easier to conclude that individual choosers can still do better for themselves than anyone else.

with insurance devices that remove most of the desired specific deterrence. Instead, the way to effect such a political judgment is through criminal or semicriminal penalties.

In elaborating such a "general deterrence" approach I have spent a great deal of time on the very difficult problems of what the costs of accidents are and to whom they belong. I have done this from the point of view of general deterrence and not at all from the point of view of compensation. This is simply for clarity and not because I would slight compensation as a goal of accident law. I will readily admit, however, that if compensation were the only goal, then by far the most effective and efficient method of accomplishing it would be through a system of general social insurance, which would externalize the costs of accidents from any market decisions.

Social insurance, however, is not likely to be the solution if we are interested in the "savings" brought about by general deterrence, as well as the savings brought about by compensation. In fact, if it can be shown that a system is available that combines a substantial amount of general deterrence with an adequate degree of compensation, that system may be far better than either social insurance or an optimal general deterrence scheme.

The result is that we may very well be influenced in the division of accident costs, between autos and pedestrians say, by compensation motives. If we are in doubt about the proper division of costs, or which are the important comparisons from a general deterrence standpoint, it may well be proper to make the division in a way that accomplishes compensation (risk spreading) best. For in such a case little general deterrence savings would be lost through such a move, and substantial compensation savings gained.

Indeed, it would be the height of foolishness to establish a system — even a perfect system — for market general deterrence if this system were so unpalatable on compensation grounds that it would soon be replaced by social insurance in order to accomplish compensation. And this, of course, is another problem with fault liability. For even if it accomplished general deterrence as well and as cheaply as an "involvement" system (which I believe it does not), it is — apparently — so undesirable from a compensation point of view that it is constantly under attack.

This attack leads too often to the simple alternative of social insurance. Such a result would eliminate even the attenuated general deterrence that the fault system accomplishes, and there-



fore would substantially decrease the range of informed individual market choices with respect to activities and accidents in our society. In other words, if we stick too obstinately to a system that gives us some but not very effective general deterrence but very poor compensation, we may find that we end up with a system that gives us no general deterrence, or market choice on accidents, in exchange for a perfection in compensation we may neither want nor need. This would be so despite the fact that a little work can develop a modified enterprise liability approach that would give us better general deterrence than fault and as much compensation as we want.

Ultimately, of course, the problem of what we will do in this area reflects a much broader problem. For here, as so often, we are faced with the fact that a time-honored system (fault) fails to satisfy a modern demand (compensation). We can react to this by dividing into hostile "conservative" and "radical" camps with the result that either nothing gets done or we abolish everything about our previous system, and set up one that meets the demand regardless of its other consequences (social insurance). Alternatively, we can work to see if there are other ways to retain what we believe is fundamental in the old, and yet adequately meet the demands it failed to satisfy. I believe that somewhere in a nonfault enterprise-liability approach, combined with tort or criminal fines for some specific acts, such a satisfactory middle ground exists. I also believe that the finding of such middle ground is the mark of a legal-political system that works.