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# The Many Faces of Misuse: An Inquiry into the Emerging Doctrine of Comparative Causation

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A revolution is afoot in the law of torts. The all-or-nothing principle which has reigned supreme for almost two centuries is in retreat. Spurred by the doctrine of comparative fault which brought sense and balance to the problem of apportioning loss between parties who are at fault in bringing about harm,[1] the courts have now begun to apply apportionment formulae to such hitherto uncompromisable questions such as cause-in-fact and proximate cause.[2] Initially, the courts proceeded with halting steps without calling attention to their deviation from traditional learning. Yet, one must reckon with the genius of the common law to bring to the courts a case tailor-made for proclaiming the emergence of new doctrine. In *General Motors Corp. v. Hopkins,*[3] the Texas Supreme Court confronted the problem openly and opted for a doctrine of comparative causation. The law of torts will never be the same again.

## I. GENERAL MOTORS v. HOPKINS—THE SCENARIO

### A. *The Accident*

On June 11, 1971, Robert M. Hopkins, Jr., a 19 year old was rendered a

1. The shift to comparative negligence over the past decade has been dramatic. Prior to 1969 six states had adopted comparative negligence. Since that time 27 states have shifted to comparative negligence. Several courts have embraced comparative negligence by judicial opinion. Li v. Yellow Cab Co., 13 Cal. 3d 804, 532 P.2d 1226, 119 Cal. Rptr. 858 (1975). Hoffman v. Jones, 280 So. 2d 431 (Fla. 1973). For a comprehensive list of the statutes adopted as of 1976, see Fleming, *Forward: Comparative Negligence at Last—By Judicial Choice,* 64 CALIF. L. REV. 239 (1976). To that compilation should now be added Pennsylvania. 17 PA. CONS. STAT. §§2101, 2102 (Supp. 1977). For an incisive analysis of the comparative negligence doctrine see V. SCHWARTZ, COMPARATIVE NEGLIGENCE (1974).

In August, 1977, the National Conference of Commissioners on Uniform State Laws adopted the Uniform Comparative Fault Act. For a full discussion of the Act, *see* Wade, *A Uniform Comparative Fault Act—What Should it Provide?* 10 U. MICH. J. OF L. REF. 220 (1977) and Wade, *Products Liability and Plaintiff's Fault—The Uniform Comparative Fault Act,* 29 MERCER L. REV. 373 (1978).

2. *See, e.g.,* Sun Valley Airlines, Inc. v. Avco-Lycoming Corp., 411 F. Supp. 598 (D. Idaho 1976). For a full discussion of this phenomenon, *see* Twerski, *The Use and Abuse of Comparative Negligence in Products Liability,* 10 IND. L. REV. 797 (1977). The author argues that courts have indicated that causation problems are subject to either damages or fault apportionment. Thus, in the seat belt cases what some courts have considered to be damage apportionment problems have been dealt with by others as a matter of fault apportionment. *Cf.* Spier v. Barker, 35 N.Y.2d 444, 323 N.E.2d 164, 363 N.Y.S.2d 916 (1974) and Bentzler v. Braun, 34 Wis. 2d 362, 149 N.W.2d 626 (1967). Furthermore, other courts have suggested that difficult damage apportionment questions might be better resolved by assigning fault percentages to non-joint tortfeasors in second collision cases. *See* Huddell v. Levin, 537 F.2d 726 (3d Cir. 1976). There are also cases which indicate that courts are using fault apportionment to compromise difficult cause-in-fact problems. *See* Barry v. Manglass, 55 App. Div. 2d 1, 389 N.Y.S.2d 870 (1976).

3. 548 S.W.2d 344 (Tex. 1977). The Texas Supreme Court decision should be read together with the excellent decision by the Court of Civil Appeals which contains a much more complete recitation of the factual background to the *Hopkins* case, 535 S.W.2d 880 (Tex. Civ. App. 1976).

quadraplegic when the Chevrolet pick-up truck in which he was a passenger went out of control. Hopkins had purchased the truck some eleven months prior to the date of the accident. Although Robbie Hopkins was the owner of the truck, it was being driven by his friend James Averyt when the accident occurred. Hopkins' case against General Motors was premised on the contention that the Chevrolet truck was equipped with a defectively designed carburetor which caused the vehicle to accelerate in speed notwithstanding Averyt's release of the accelerator pedal.

According to the testimony of both Hopkins and Averyt, prior to coming into a turn, Averyt had accelerated slightly by pushing his foot on the accelerator pedal. When he let up on the accelerator, the truck "just jumped away." Averyt made an attempt to apply the brakes and clutch but was unable to control the vehicle. The truck proceeded on its straight path through the curve and after leaving the road turned over several times. Averyt said that when he depressed the clutch he heard a "loud roar of the engine." Hopkins described the sound "like an airplane taking off." Hopkins immediately dove across the seat and put his hand on the accelerator to try to "jiggle it," believing that it was stuck. It was all to no avail. Averyt was thrown from the truck and suffered a leg injury. Hopkins' neck was broken by the impact of the truck turning over and he had to be removed from the floor board of the vehicle.

### *B. The Defect*

The 1970 Chevrolet pick-up truck, which was the focus of the inquiry in this case had as original equipment a quadrajet carburetor whose function was to supply a proper mixture of air and gasoline into the engine's combustion chamber. In the Court of Civil Appeals, Justice Evans clearly set forth the operation of the quadrajet carburetor and the alleged design defect:

> The quadrajet carburetor is a complex assembly of related parts, the collective function of which is to supply a proper mixture of air and gasoline into the engine's combustion chamber. As the name "quadrajet" implies, there are four pasages or "barrels" through which the flow of air is directed. This air flow is controlled by certain "butterfly" type valves which are opened and closed according to varying engine conditions. Generally speaking, the greater the amount of air and gasoline which flow through this system and the greater the ratio of air-to-gasoline, the higher degree of efficiency and acceleration achieved. For cruising and lower driving speeds, only the two "primary" valves are activated. The driver may, however, obtain additional bursts of power, as when passing another vehicle, by sharply depressing the accelerator pedal and thus activating the two "secondary" valves. In order to prevent the "secondaries" from opening at unintended times, as when the engine is idling, the quadrajet carburetor utilizes an external "lock-out" system. Simply stated, the "secondaries" are "locked out" (i.e., maintained in a closed position) by a pivoting lock-out pin which is attached to the secondary valves. This pin

> rotates and except when driving conditions require opening of the secondary valves, the pin is positioned or "locked" under the "lock-out lever." Both the lock-out pin and the lock-out lever are located outside the carburetor housing and are not encased within the enclosure. Thus, these parts are not protected from the elements and may be seen by looking under the hood of the engine. It is essentially Hopkins' contention that by reason of the defective design of the carburetor assembly, the lock-out pin was permitted to "hang" on top of the lock-out lever with the secondaries open, instead of returning to its position below the lever, so that the secondaries became "locked open" and the vehicle continued to accelerate in speed notwithstanding Averyt's release of the accelerator pedal.[4]

The court reviewed the record and found that there was evidence that prior to the sale of the truck in question General Motors was aware of the problem, *i.e.*, that the lock-out pin could hang on top of the lock-out lever, thus causing uncontrollable acceleration. It was also clear that for a reasonable cost GM could have timely designed and manufactured a ramp-type lock-out lever which would not permit such accidents to occur. For all of General Motors' protestations to the contrary that such an accident was a "physical, mechanical and theoretical impossibility,"[5] the quantum of evidence in support of the claim of design defect was substantial.[6] The claim for an alternative design was supported by evidence that its cost would be approximately one cent per car and that the alternate design was in fact incorporated into a later model of the quadrajet carburetor.[7] In short, there was sufficient reason to support the jury finding that the quadrajet carburetor was defectively designed.[8]

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4. 535 S.W.2d at 882.

5. *Id.* at 884.

6. The seemingly incongruous position taken by General Motors, that the accident could not have taken place as a result of the design defect, even though in later models it took pains to alter the design, is readily explainable. GM's expert contended that it was virtually impossible for the lock-out pin to get on top of the lock-out lever during *driving conditions* even when the choke rod was not properly attached. He testified that such an occurrence might be conceivable in a "cold engine" but that under normal driving conditions it was contrary to the laws of physics for the pin to get on top of the lever. The thrust of the expert's testimony was that he did not believe that *this* accident could have occurred as a result of the inadequate design. Although GM contended that the design of the quadrajet was not unreasonably dangerous, they did admit that greater safety could however be accomplished by the redesign of the quadrajet.

7. Evidence of post-manufacture design modification was introduced in the litigation. The appropriateness of permitting this type of evidence into a product liability case has been a matter of considerable dispute. *See* Note, *Products Liability and Evidence of Subsequent Repairs*, 1972 DUKE L.J. 837, 845, 852. Several courts have found no objection to permitting this kind of evidence into the case. Ault v. International Harvester Co., 13 Cal.3d 113, 528 P.2d 1148, 117 Cal. Rptr. 812 (1974); Sutkowski v. Universal Marion Corp., 5 Ill. App. 3d 313, 281 N.E.2d 749 (1972). Chart v. General Motors Corp., 258 N.W.2d 680 (Wis. 1977). *Contra*, Cox v. General Elec. Co., 302 F.2d 389 (6th Cir. 1962); Price v. Buckingham Mfg. Co., 110 N.J. Super. 462, 266 A.2d 140 (1970) *and* Smyth v. Upjohn Co., 529 F.2d 803 (2d Cir. 1975).

8. In a perceptive footnote, the supreme court noted:

"The jury was instructed that 'defective design,' as used in the charge, 'meant a carburetor so designed . . . that it would create an "unreasonable risk of harm."' Then: 'You are instructed that by the term "unreasonable risk of harm" as applied to the design of a product is meant that the product, as manufactured according to such design, threatens harm to persons using the product to the extent that any product so designed would not be placed in the channels of commerce by a prudent manufacturer aware of the risks involved in its use, and to the extent that the product so manufactured would not meet the reasonable expectations of the ordinary consumer as to safety.' The use of 'and' here emphasized is of no consequence in the present case, but the proper definition would be disjunctive—using 'or' rather than 'and.' *Henderson v. Ford Motor Co.*, 519 S.W.2d 87, 92 (Tex. 1974). The objective of the alternative test of unreasonable danger, i.e., from the vantage of the prudent supplier, is to avoid completely foreclosing liability because of either the visibility or the complexity of the alleged defect from the vantage of the consumer." 548 S.W.2d 344, 347 n.1 (1977) (court's emphasis).

This author has advocated a two tiered test for defect. In an article examining the concept of defect the following argument was presented:

"Courts and commentators have perceived that there really are two separate questions in any product liability action: (1) Does the product meet consumer expectations and (2) Does the product meet the standards of safety which society demands from products by evaluating risk-utility considerations? The shortcoming of the consumer expectation test is not that it is irrelevant; it is that it is not ambitious enough. A product may well meet consumer expectations when a danger is obvious and/or well warned against. Nevertheless, the judgment of society may be that for a slight additional cost (in some instances at no cost) design modifications could eliminate obvious dangers which are both substantial and hazardous. This would then seem to force us back into a general risk-utility case when the product has failed to meet the common expectations of society for product performance.

"The answer to this dilemma is that a two-tiered test should be utilized. The consumer expectation test is an excellent *standard below which no product should be permitted to fall.* If plaintiff establishes that realistic consumer expectations with regard to the product have not been met then the product is defective—without further considering risk-utility principles. If society's views, as gauged through the eyes of the average consumer, are unrealistic then it is the function of the marketing system to bring them back into line. To hold a manufacturer to a standard which reflects normal expectations appears eminently fair. Thus, a plaintiff should be free to make out a case of defect based on the failure of the product to meet consumer expectations. If the finder of fact determines that the product has failed the consumer expectation test, a defect has been established. If that defect was causal of the plaintiff's harm a prima facie case has been established.

"The converse, however, is not true. A finding that the defendant has met the consumer expectation test will not necessarily absolve him of liability. It may still be possible that utilizing the second-tier test, that of 'unreasonable risk' based on risk-utility considerations, a court may find that a product which meets consumer expectations as to what the product *is* does not meet society's expectations as to what the product *should be.* To be sure, we ought not be prepared to go off the deep end and impose liability cavalierly on products that conform with consumer expectations. But, the underlying question is whether society will, through its judicial system, ever demand more than an *honest product* and will require a *safe product* as well. Although honesty and safety in a product often coincide, they are not matching ends of a bookcase. The safety standard may be more demanding than the honesty standard. The cases overruling the patent danger rule can be read in no other way." Twerski, *From Defect to Cause to Comparative Fault—Rethinking Some Product Liability Concepts,* 60 MARQ. L. REV. 296, 311-313 (1977).

In Barker v. Lull Eng'r Co., No. 627-755 (Sup. Ct. Cal. Jan. 16, 1978), the California Supreme Court has apparently adopted this approach to the defect problem substantially modifying Cronin v. J.B.E. Olson Corp., 8 Cal. 3d 121, 501 P.2d 1153, 104 Cal. Rptr. 433 (1972). The court in Barker held that:

"[A] trial judge may properly instruct the jury that a product is defective in design (1) if

*C. The Alteration*

**The Fulton Street Incident.** Several weeks prior to the accident, Hopkins, while driving his truck on Fulton Street in Houston, Texas, had an episode with his truck similar to the one that occurred on the date of the accident. He had pushed down on the accelerator to pick up speed and then released the pedal. Instead of the speed decreasing when he let up on the pedal, the truck took off "in a roar." Since he was on a straight stretch of road, Hopkins was able to bring the truck to a stop by applying his clutch and brake. Hopkins dismounted the truck to examine the engine, when a mechanic friend happened upon the scene. They discovered that the lock-out pin was positioned on top of the lock-out lever. The mechanic returned the lock-out pin to its proper position but noticed that before he had done so that the secondary valves were partially opened. The reader is asked to bear the "Fulton Street Incident" in mind. Its bearing on the pivotal legal issues in this case is significant.

**The Holly Carburetor and Back to the Quadrajet.** Subsequent to the incident on Fulton Street, but prior to the date of the accident Hopkins decided to remove the quadrajet carburetor from his truck and replaced it with a "Holly" carburetor. The reason for the replacement apparently had nothing to do with the Fulton Street Incident but rather stemmed from Hopkins' desire to increase the speed and efficiency of the truck. Hopkins removed the quadrajet from the truck manifold and, using an adaptor plate, installed the Holly in its place. One week later Hopkins found it necessary to remove the Holly carburetor because it was causing his engine to "flood out," and replaced it with the original quadrajet.

The replacement of the quadrajet was not accomplished with the deft skill of a surgeon. Indeed, General Motors contends that the reinstallation amounted to "butchery" of its quadrajet carburetor system, in that Hopkins altered the original design as follows:

> (1) by failing to connect the choke rod; (2) placing the thermostatic coil cover on backwards and in raised position; (3) "Burring" the end of the lock-out pin; (4) improperly connecting the distributor spark advance vacuum hoses; (5) using a nail instead of a cotter pin in the main accelerator rod linkage; (6) and (7) using improper gasket materials between the carburetor and the manifold; (8) using improper bolts and screws to mount the carburetor to the manifold; (9) using a rubber hose instead of

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the plaintiff demonstrates that the product failed to perform as safely as an ordinary consumer would expect when used in an intended or reasonably foreseeable manner, or (2) if the plaintiff proves that the product's design proximately caused his injury and the defendant fails to prove, in light of the relevant factors discussed above, that on balance the benefits of the challenged design outweigh the risk of danger inherent in such design."

It should be noted that the burden of proof shifts to the defendant when design defect is alleged if causation is established. The defendant must prove that a risk utility analysis would lead to the conclusion that the product is not unreasonably dangerous.

> a metal hose to connect the gasoline line; (10) using wire instead of clamps to attach gasoline line; and (11) stretching and reversing the accelerated return spring.[9]

In reviewing the evidence, the Court of Civil Appeals found evidence to support the causal connection between only one change made by Hopkins in and around the carburetor and the subsequent accident. The court noted the "testimony that when the choke rod was disconnected the choke could be 'blown open' under such circumstances that the lock-out pin could be positioned on top of the lock-out lever with the secondaries open." The court concluded that the jury could find that the disconnected choke rod contributed to the malfunction of the carburetor system. For reasons which we shall discuss at length at a later point,[10] the Texas Supreme Court found that the defendant had not supported its claim of a causal connection between the alteration and the accident through the failure of the plaintiff to connect the choke rod. Instead it focused on the testimony of one expert witness that the lock-out pin was caused to hang above the lock-out lever because Hopkins had improperly installed the thermostatic coil cover.

## II. CAUSATION

### A. *Cause-in-Fact*

It is axiomatic that products liability cases do not differ from ordinary negligence cases in the requirement that cause in fact must be established.[11] This means that it is necessary to prove not merely that the product caused the plaintiff's harm but that the *defect* was the causative agent. In the normal case this is done by applying the *sina qua non* or but-for test to the injury event.[12] But-for the defect would the injury have occurred? If the answer is in the affirmative, then the defect which inhered in the defendant's product is not deemed responsible for the injury. In testing the culpability of plaintiff's conduct, the selfsame test is to be applied. If the plaintiff's harm would have occurred even absent his faulty conduct, then it is not causal and he is not to be barred from recovery nor

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9. 535 S.W.2d at 887.

10. *See* text accompanying notes 19 and 20, *infra*.

11. W. PROSSER, THE LAW OF TORTS § 103, 672 (4th ed. 1971); Midwestern V.W.Corp. v. Ringley, 503 S.W.2d 745 (Ky. 1973); Long v. Winchester Repeating Arms Co., [June 1970-July 1973 Transfer Binder] PROD. LIAB. REP. (CCH) ¶ 6958 (Tenn. May 8, 1973); Technical Chem. Co. v. Jacobs, 480 S.W.2d 602 (Tex. 1972).

12. See Calabresi, *Concerning Cause and the Law of Torts: An Essay for Harry Kalven, Jr.*, 43 U. OF CHI. L. REV. 69 (1975) [hereinafter cited as *Concerning Cause and the Law of Torts*] for a comprehensive discussion of the role of the *sina qua non* test. It is clear that Dean Leon Green continues his strong opposition to an independent but-for test as an element of a torts-product liability cause of action. Green, *Strict Liability Under Sections 402A and 402B: A Decade of Litigation*, 54 TEX. L. REV. 1185, 1197-1199 (1976).

to have his recovery reduced by the doctrine of comparative fault.[13] Fault which has had no practical consequence has no juridical significance.

These statements of black-letter law are a convenient starting point for a discussion of causation problems. It has long been recognized that judicial behavior in tort cases does not conform to the standard that causation must be proved by the balance of probabilities.[14] Causation has an accordion-like quality which can be expanded or contracted to fit the case and the policy demands of the cause of action at hand. As an instrument in the hands of a sensitive trial judge it can be used to either choke off cases at their very inception or to allow them to go to the jury when the objective evidence at hand is slim at the very best. The evidence is substantial that appellate courts have encouraged a flexible causation standard and that, when the limits of flexibility are exceeded, they have been willing to tamper with traditional burden of proof principles to insure that liberal liability rules are not undone by rigid causation dogma.[15]

The *Hopkins* case itself provides good evidence that cause-in-fact will be tailored to meet the exigencies of the case. Early in the decision the court was required to evaluate whether the plaintiff's alteration was causal in bringing about the accident.[16] The jury had found that the alteration by Hopkins was "a producing cause" but not the "sole producing cause" of the accident. Given the nature of the defective design and the suggested alteration, which would have made it impossible for the lock-out pin to hang out on top of the lock-out lever, they could not have found otherwise. The defective design of the carburetor was a cause-in-fact in the "but-for" sense. A better design would have avoided the accident without regard to plaintiff's alteration. The question now turned to whether the Hopkins alteration had contributed to the accident. The Court of Civil Appeals found sufficient evidence to support a jury finding of a causal connection between the alteration and the resultant harm.

The Texas Supreme Court took a more critical view of the sufficiency of the defendant's proof on the causation issue. Although defendant had listed eleven different ways in which plaintiff's butchery of the carburetor could have contributed to mispositioning of the lock-out pin, the court was dissatisfied with the assertion that such alterations *could* have contributed to the accident.

> [A]t great length, GM experts testified about the changes made by Hopkins in the reinstallation of the carburetor and how these changes might

13. W. PROSSER, THE LAW OF TORTS, §65, 421 (4th ed. 1971).

14. Malone, *Ruminations on Cause-in-Fact*, 9 STAN. L. REV. 60 (1956) and, Calabresi, *Concerning Cause and the Law of Torts, supra*, note 12.

15. Haft v. Lone Palm Hotel, 3 Cal. 3d 756, 478 P.2d 465, 91 Cal. Rptr. 745 (1970); Summers v. Tice, 33 Cal. 2d 80, 199 P.2d 1 (1948); Stevens v. Parke, Davis & Co., 9 Cal. 3d 51, 507 P.2d 653, 107 Cal. Rptr. 45 (1973); Reyes v. Wyeth Laboratories, 498 F.2d 1264 (5th Cir. 1974) and Cunningham v. Charles Pfizer & Co., 532 P.2d 1377 (Okla. 1974).

16. 548 S.W.2d at 348.

> have been a factor in causing the accident. Almost all of this testimony tells of the possibilities of what *could* have happened. . . .
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> . . . The testimony in this record about possible causes, while relevant, is no more than speculation and conjecture as to what occurred at the time of the accident and cannot alone support a finding that there was a causal connection between the "misuse" and the accident. (citation omitted) If the manufacturer or supplier of a dangerously defective product is to relieve himself of all or part of the liability for damages caused by the defect, then he must prove cause-in-fact connection of any misuse or alteration by the same standard as the user faced in connecting the product defect and his damages.[17]

The court's treatment of the causation question is significant for several reasons. First, although the court talks about misuse or product alteration as a defense to a product's action, if we were to apply normal tort principles, it would be plaintiff's burden to establish that the alleged intervening cause should not be considered because it had no cause-in-fact effect. We must realize that in *Hopkins* the plaintiff clearly prevailed on the defect issue. And there was, as pointed out earlier, no question but that the defect was a cause in fact of plaintiff's harm. Hopkins' alteration of the carburetor could not turn the defective design into no defect. Nor could it accomplish the elimination of the causal relationship between the defect and the harm. There was only one argument left in denying the prima facie case. The defendant could challenge the plaintiff on the issue of intervening cause. By introducing the activity of Hopkins (or any other party for that matter) in altering the product, the defendant left the question of intervening cause for the plaintiff to establish.

If plaintiff is to carry his burden on proximate cause he must do so by either negating the practical or legal effect of the alleged intervening cause.[18] This can be done by demonstrating that the alteration was *not* the cause in fact of the harm. If that fails, plaintiff must establish that his intervening act was not so significant that it should supercede the act of the defendant in designing the defective product. By negating the argument that his own actions were so unforeseeable that defendant ought not to bear responsibility for them, the plaintiff completes his own prima facie case.

The Texas court did not follow this traditional line of thinking. It demanded that once defect is established by the plaintiff, any argument of misuse, even in the "proximate cause" sense, becomes a matter of defense with the burden on the defendant to establish the cause-in-fact connection between the alleged intervening cause and the injury. Thus, what had traditionally been an aspect of plaintiff's burden of proof now becomes a matter of affirmative defense.

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17. *Id.* at 348-349 (court's emphasis).

18. *See,* W. PROSSER, THE LAW OF TORTS §§44-45, 270-290 (4th ed. 1971).

There is a second point that merits serious attention. In determining whether the defendant had adequately established its burden, the court held that the defendant must prove cause in fact by the same standard that the user faces in connecting the product defect and his damages. It found that GM had not established such a connection by setting forth mere possible causes of the accident. This amounted to no more than speculation and conjecture. The Court of Civil Appeals, in evaluating the evidence, reached a different conclusion. They found that:

> [T]he jury could have determined that the choke rod was disconnected at the time of the accident and that this resulted from Hopkins' carelessness in reinstalling the quadrajet carburetor. It could also have determined from the testimony that this condition facilitated the lock-out pin becoming positioned on top of the lock-out lever with the secondaries open.[19]

It is not new to discover that what is speculation for one court is a jury issue for another. It is, of course, difficult to believe that the Texas court, faced with overwhelming evidence of defect and good causal possibilities which explain the occurrence of an accident in a most plausible fashion, would refuse to let the case go to a jury.[20] Faced, however, with the "misuse" defense, not only did the court shift the burden of proof but then went on to find that the standard for establishing causation was not met. The refusal to accept evidence that the carburetor alteration increased the probabilities that the lock-out pin would position itself on top of the lock-out lever indicates the degree of disfavor in which the "misuse" defense is held. Ultimately the court was able to point to unequivocal expert testimony to establish cause in fact arising from the alteration. One expert testified that it was the mispositioning of the thermocoil cover which contributed to the accident. Absent this testimony, the combination of ex-

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19. 535 S.W.2d at 888.

20. The statement in the text is not merely a matter of surmise. In *Hopkins* there is reason to conclude that experts merely testified to the possibility that the defective design of the carburetor caused the accident. The Court of Civil Appeals noted this aspect of the testimony. They said: "Despite testimony to the effect that the gravitational and mechanical forces upon the lock-out system usually returned the secondary pin to a position below the lever, there was also testimony that the secondary pin *could bypass the lever as a result of engine vibrations resulting from a rough and bumpy road.* Based upon Mr. LaRue's testimony and that of two other Hopkins witnesses, Mr. Lloyd Koenig and Dr. Douglas F. Muster, and upon evidence obtained from General Motors' own files and witnesses, the jury could have concluded that it *was possible to hang the lock-out pin on top of the lock-out lever during driving conditions* and while the secondary valves were in an open position." 535 S.W.2d at 884 (emphasis added).

It is interesting to note that the Texas Supreme Court was only upset by the testimony of causal possibilities with regard to the plaintiff's misuse. They did not express chagrin that the causal effect of the design defect was using the self same criteria. Hence the double standard referred to in the text finds support in *Hopkins* itself.

treme alteration and high causal probabilities would not have sufficed to raise the misuse defense.

### B. *Comparative Cause-in-Fact*

The Texas Supreme Court did not set forth a doctrine of comparative cause-in-fact. It did indicate that plaintiff's recovery would be limited "to that portion of his damages equal to the percentage of the cause contributed by the product defect."[21] The meaning of this statement will be the subject of later discussion. Whatever its meaning, it is clear that the Texas court is willing to accomplish damage apportionment based on the relative roles of the parties vis-a-vis the proximate cause issue.

It is time to consider the use of the comparative fault doctrine to include within its sweep not only fault and proximate cause but cause-in-fact as well. In my opinion, the inevitable effect of instructing a jury that proximate cause is an item for comparison will be that cause-in-fact will be factored into the jury's consideration. How can the doctrine of comparative fault cover cause-in-fact? If we rely on traditional thinking, it cannot. In the *Hopkins* case, either the alteration by Hopkins of the carburetor contributed to the accident, or it did not. If, as the court tells us, it is the defendant's burden to establish by the balance of probabilities that the alteration was causal, then if that burden is not met, the defendant fails in his proof. No one can really half cause an accident.

As a statement of fact and pure logic, it is clear that cause-in-fact is not subject to apportionment. But in our saner moments, we ought to be ready to admit that cause-in-fact is one of the most intractable items to prove in a law suit. How indeed are we to know whether Hopkins' failure to connect the choke rod when he reinstalled the original quadrajet carburetor did in fact contribute to the accident? The use of the hypothetical but-for to prove causation presumes that the process of mental "instant replay" of the accident is a valid fact-finding endeavor. More than one reputable scholar has taken issue with that thesis.[22]

It is, however, no longer necessary to torture ourselves with an all or nothing rule in causation. We need no longer declare that if it is more probable than not that a party caused harm then causation is established at 100%. Juries should be allowed to consider the *likelihood at a percentage basis* that a party's activities caused harm. Thus, in assessing the reduction of plaintiff's recovery in *Hopkins,* we ought to take into account the *possibilities* that his alteration contributed to the harm. In assessing this

21. 548 S.W.2d at 352.

22. Green, *The Causal Relation Issue in Negligence Law,* 60 MICH. L. REV. 543 (1962), *reprinted in* L. GREEN, THE LITIGATION PROCESS IN TORT LAW 249 (1965); Green, *Strict Liability Under Sections 402A and 402B: A Decade of Litigation,* 54 TEX. L. REV. 1185 (1976) and Thode, *Tort Analysis: Duty-Risk v. Proximate Cause and the Rational Allocation of Function Between Judge and Jury,* 1977 UTAH L. REV. 1.

we would take into account the aggregate of possibilities from all of the eleven items of butchery accomplished by Hopkins on the carburetor. To be sure, many of the eleven items if considered alone would deserve rejection when causation was considered. But in the aggregate there may be a significant chance that Hopkins' faulty installation connributed to his harm. On the other hand, the jury might consider the Fulton Street incident in which the carburetor demonstrated its runaway capabilities even prior to Hopkins' butchery. The question is a difficult one. But, we ought to permit the jury the luxury of considering causation as a function of likelihood of its occurrence.

In reality I believe that this will occur when cases are turned over to juries on a comparative fault instruction. Jurors, not being schooled in the separate pigeon holes created by tort teachers, are still naive enough to believe that an accident does not take place in five stages. Duty, standard of care, cause-in-fact, proximate cause and damages are supposed to be analytical aids. They are not descriptive of the process of accomplishing a tort. Thus, juries will have to be excused if they view the entire injury event as a unitary whole and factor the probability of causation together with fault in arriving at a percentage apportionment. It is inevitable that the issues will be merged in the minds of the jurors. It is not inevitable that judges will in the face of a mechanism which has the capability of apportioning damages continue to apply all or nothing causation principles on the cause-in-fact issue. The willingness of the Texas court to permit legal or proximate cause to be apportioned but to insist that cause-in-fact be established on balance of probabilities is indicative of how tenacious is the hold that traditional doctrines have on the court. But, there are indications from other cases that courts are willing to factor the uncertainty of the causal connection into fault apportionment.[23] The willingness of the court in *Hopkins* to recognize that proximate cause is subject to apportionment can only hasten the recognition that all or nothing options should be indulged in by courts only when there are strong policy grounds to support them.[24] In the absence of such grounds percentage comparisons are more honest and contribute to the fair administration of justice.

### C. *And a Time to Tell the Truth*

The role of the expert in technological litigation has come under heavy

23. *See* cases cited *supra*, note 2.

24. In some instances this author believes that comparative fault absolves the manufacturer of substantial responsibility for product defects which have as their intended purpose the prevention of plaintiff misconduct. In such instances the author would opt for an all or nothing rule. *See* Twerski, *The Use and Abuse of Comparative Negligence in Product Liability*, 10 IND. L. REV. 796 (1977). This position was specifically rejected by the drafters of the Uniform Comparative Fault Act. Wade, *Products Liability and Plaintiff's Fault—The Uniform Comparative Fault Act*, 29 MERCER L. REV. 373 at nn. 45 & 46 (1978).

scrutiny.[25] In no area is the role of the expert so uncomfortable as when the issue to be addressed is causation. In another forum the author has expressed the reason why this issue causes experts such consternation:

> The reason for this phenomenon is elementary. The plaintiff is always forced, after the fact, to establish that his harm resulted from the unreasonably dangerous characteristic of the product. Since instant replay of accidents is not available (they are not videotaped for posterity), the plaintiff must rely on expert testimony to establish causation. The standard test, which requires proof based on "reasonable scientific probability," is almost invariably tied to some form of the hypothetical question. This ploy requires the expert to hypothesize a set of events and conclude causation from them. In preparing the defense on this issue, the defendant's expert goes through the identical process. The standard technique of cross-examination involves changing the facts of the hypothetical to demonstrate that at some point the plaintiff's expert's opinion is no longer valid.
>
> It is a sad commentary on the litigation process that as of the last quarter of the twentieth century no one has yet raised the question of the integrity of this kind of evidence. To be sure, the hypothetical question has been challenged as a technique, but not because of the inherent unreliability of untested theoretical propositions.[26]

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25. Donaher, Piehler, Twerski and Weinstein, *The Technological Expert in Products Liability Litigation*, 52 TEX. L. REV. 1303 (1974) and Weinstein, Twerski, Piehler and Donaher, *Product Liability: An Interaction of Law and Technology*, 12 DUQ. L. REV. 425 (1974).

26. Twerski, Weinstein, Donaher, Piehler, *The Use and Abuse of Warnings in Products Liability—Design Defect Litigation Comes of Age*, 61 CORNELL L. REV. 495, 534 (1976). In a footnote to the quotation cited in the text, the authors discussed the hypothetical question. We said:

"Criticism of the hypothetical question has primarily centered around the following observations: (1) the hypothetical question usually is inordinately complex, convoluted, and highly confusing to the jury; (2) it provides an opportunity for highly partisan presentation of the facts, since counsel by careful selection of facts favorable to his client shapes a one-sided and often unrealistic hypothesis; (3) the question is often used by counsel as a summation or restatement of his case to the jury; and (4) the question is often used as an illegitimate tool to impeach the general credentials of the expert apart from his ability to speak to the issue at bar. *See* C. MCCORMICK, EVIDENCE §16, at 36-37 (2d ed. 1972). To respond to these criticisms several Model and Uniform Acts have been promulgated which provide that the hypothetical question should be eliminated as a necessary means of eliciting expert opinion evidence. *See* MODEL CODE OF EVIDENCE RULES 402-10 (1942); UNIFORM RULES OF EVIDENCE 56-61 (1953). Under these acts the expert is permitted to testify without stating the underlying facts of data upon which he bases his conclusion. *See* FED. R. EVID. 705; CAL. EVID. CODE §802 (1966); N.Y. CIV. PRAC. LAW §4515 (McKinney 1963). The cross-examiner must expose the weakness of the factual basis of the expert's opinion.

"It may well be that abolishing the long factual dissertation, which was the hallmark of the hypothetical question, is an adequate response to the criticism that it is too complex and unwieldy a method for eliciting an expert opinion. to the causation question. . . .On any score the hypothetical question is grounded in logical inductive reasoning of the first order. '[I]t is a strange irony that the hypothetical question, which is one of the few truly scientific features of the rules of Evidence, should have become that feature which does most to disgust men of science with the law of Evidence.' 2 J. WIGMORE, [Evidence] . . . §686, at 812, (3d

The net effect of utilizing a standard which requires proof of causation by the balance of probabilities is to force experts into unconscionable all-or-nothing positions. If one must testify as to reasonable scientific probability, then the admission by the expert that other hypotheses may be supportable as well has a tendency to weaken the expert's legitimate opinion. As a result, experts feel compelled to take hard-line positions at either extreme rather than thoughtful intermediate positions which reflect their true opinions on the matter. The experts in the *Hopkins* case exemplify the problem. The General Motors expert took one extreme position. He concluded that it was a "physical, mechanical and theoretical impossibility" for the lock-out pin to hang on top of the lock-out lever during warm engine operation if the choke rod were attached. Plaintiff's expert differed sharply and testified that the accident could have happened as a result of the lock-out pin causing the secondary valves to remain open. Similarly, when the question was the role of the plaintiff's alteration of the carburetor, the witness whose testimony was given credence was the one who testified with a firm opinion that it was the mispositioning of the thermo-coil cover that contributed to the accident. The testimony of the General Motors witness who testified that the disconnected choke rod *could* have contributed to the lock-out pin riding up was dismissed as too speculative.

The lesson for experts is clear. Their testimony will be given more credence and will at least present a triable issue of fact when they exaggerate and overstate their case. If they testify to significant possibilities and to what could have happened, they may be within the realm of speculation.

It is one thing for an attorney to suborn perjury. It is quite another for the litigation system as a whole to invite it. If the nature of the causation inquiry as part of the entirety of a torts case would be to include the likelihood of occurrence as one of the factors in the fault apportionment, we would go a long way to insuring that expert testimony would reflect honest probabilities rather than the gross exaggerations which are presently in vogue. Thus, in addition to the fairness to the parties we may add the gloss of improving the climate of expert litigation. It may actually bring to the courtroom theater, experts who have heretofore shunned exposure to cruel cross examination which exposes the excesses in which they never should have indulged in the first place.[27]

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ed. 1970). For an empirical and philosophical look at causation and hypothetical questions, see D. HUME, AN ENQUIRY CONCERNING HUMAN UNDERSTANDING §V, pt. 1 (1907).

"Nevertheless, the basic problem remains. Counsel for either side is permitted to establish or destroy an opinion by presenting highly theoretical and untested propositions."

27. It should be noted that for those who follow the analysis of Dean Leon Green on cause-in-fact, the issue presented herein is one of law for the court as part of its duty risk analysis. *See* authorities cited *supra* note 22. Whether Professors Green and Thode would be willing to permit either proximate cause or cause-in-fact to become part of fault apportionment is doubtful.

## III. THE MANY FACES OF MISUSE

> It is often said that misuse is a defense in product liability suits. Generally speaking, this is true, because there are a variety of points upon which the unintended or reasonably unforeseeable use or alteration of a product may be relevant to the liability of the supplier of a product. *The misuse may bear upon the issue of whether the product was defective when it left the hands of the supplier or the misuse may bear on the issue of what caused the harm.*[28]

For the purposes of this discussion it will be helpful to work with one basic fact pattern so that we can indicate how the plaintiff's misuse can affect each of the major elements of a cause of action in products liability. Consider the following example:

The Wonderful Kitchen Blender, Inc., manufactures a kitchen blender for home use. It utilizes⅛" glass for the blender container. The purpose of the blender is to reduce soft foods, such as chicken, turkey, etc. to liquid form and to grind vegetables together with liquid to coarse liquid substance. It is plaintiff's contention that the glass container is defectively designed and hence unreasonably dangerous. The contention is that ¼" glass should have been utilized and that the glass should have been shatterproof.

> Case No. 1 — Mrs. Jones placed a rib steak with the bone attached into the blender. After gyrating for sixty seconds, the glass container broke, shattering into pieces, and blinded Mrs. Jones.
>
> Case No. 2 — Mrs. Jones placed some vegetables in the blender and turned the blender on. She turned her back and just then Jack, her precocious five-year-old son, uncovered the glass container and placed a spoon into the blender. The glass shattered immediately, blinding little Jack in one eye.

### A. *No Defect — Product Not Unreasonably Dangerous*

The statement is often made that misuse negates plaintiff's prima facie case since it may go to disprove the allegation that the product was defective. The court in *Hopkins* set forth this aspect of the "misuse" defense, indicating that when misuse is used in this manner it is not really a matter of defense. If a user utilizes a product in a totally unforeseeable fashion, then the product simply may not be defective:

> We cannot charge the manufacturer of a knife when it is used as a toothpick and user complains because the sharp edge cuts. A harness hook is not necessarily defective simply because it breaks while being used to hold up a 1700-pound weight. . . .There are a number of cases where the

28. 548 S.W.2d at 349 (emphasis added).

> manufacturer installed or supplied a safety guard or shield but injury occurs after the purchaser of the machine removes or casts aside the safety device. The foreseeability of that deviation in the manufacturer's intended use of the product is relevant to the basic question of whether the product was unreasonably dangerous when and as it was marketed.[29]

Undeniably the misuse of the product by the plaintiff may be a factor in determining whether the product was unreasonably dangerous but it does not tell the whole story. Consider Case No. 1

> Mrs. Jones placed a rib steak with the bone attached into the blender. After gyrating for sixty seconds the glass container broke shattering into pieces and blinded Mrs. Jones.

The contention of the plaintiff was that the blender should have been designed with thicker, shatterproof glass. One factor to be considered in establishing whether the glass was unreasonably dangerous is whether normal consumer use patterns include permitting a rib steak with a bone attached to gyrate for sixty seconds in the blender. The probability of such occurrences may be so rare and the cost of preventing against such hazards so expensive that we may decide that the blender is dangerous but *not unreasonably dangerous.* Note that the foreseeability of the particular misuse is only one factor in the overall risk-utility calculus in deciding whether the product is unreasonably dangerous. It is possible that a court might conclude that a thicker, shatterproof glass is an important feature to prevent against shattering due to normal breakage. We would then have to face the question of whether this particular misuse (*i.e.,* rib steak in the blender) should be included with the calculus of the risk (proximate cause) before imposing liability.

The reality of a product liability case is that the immediate injury triggers an inquiry as to whether the product is "unreasonably dangerous." That inquiry, although focused to the particular injury, may legitimately encompass the total design of the product and other risks as well. These risks must then be weighed against the cost of taking precautionary measures to prevent the product from causing injury.[30]

In the blender case we might conclude that the cost of making the blender container both stronger and shatterproof is prohibitive. We would then conclude that the blender is not unreasonably dangerous. We might decide that the only reasonable preventive is a warning attached to the

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29. *Id.*

30. *See* Wade, *Strict Tort Liability of Manufacturers,* 19 S.W.L.J. 5, 17 (1965); Wade, *On the Nature of Strict Tort Liability for Products,* 44 Miss. L.J. 825 (1973); Keeton, *Product Liability and the Meaning of Defect,* 5 St. Mary's L.J. 30 (1973); Fischer, *Products Liability—The Meaning of Defect,* 39 Mo. L. Rev. 339 (1974); Hoppe v. Midwest Conveyor Co., 485 F.2d 1196, 1202 (8th Cir. 1973); Borel v. Fibreboard Paper Prods. Corp., 493 F.2d 1076 (5th Cir. 1973); Dreisonstok v. Volkswagenwerk, A.G., 489 F.2d 1066 (4th Cir. 1974) and Bowman v. General Motors Corp., 427 F. Supp. 234 (E.D. Pa. 1977).

product at the time of original sale, although we are cognizant that warnings have limitations and may often not be read or be forgotten after they are read. It may be the best we can do. The misuse which caused injury forced us to examine the risk level of the product. If we find that the misuse is a rather isolated event and that to prevent its reoccurrence would impose either high costs or affect the utility of the product, then the product will be exonerated and labeled non-defective.

It is important to note that the court in *Hopkins* made such an inquiry with regard to the quadrajet carburetor and concluded that there was ample evidence to support the jury finding that the quadrajet was defectively designed. For one cent per car it was possible to design a lock-out lever which could not ride up and cause the secondaries to open. The butchery of the carburetor by Hopkins, *although unforeseeable, did not make the carburetor design safe.* There was sufficient evidence that the cost of redesigning the carburetor was so minimal that it should have been accomplished in order to prevent even the very remote possibility that the lock-out pin would position itself on top of the lock-out lever.

*B. No Cause-in-Fact*

A product may be defective and unreasonably dangerous and an accident may have followed its use. This does not mean that the defect caused the harm. There may have been conduct on the part of plaintiff or third persons that was solely responsible for the harm. Thus, the product defect may not have been causally related to the injury.

Let us assume that a jury were to find that the Wonder Kitchen Blender was defectively designed in that the glass container should have had ¼" shatterproof glass; it is not certain that if the glass shattered during use, that a plaintiff will recover. Case No. 2 illustrates the problem.

> Mrs. Jones placed some vegetables in the blender and turned the blender on. She turned her back and just then, Jack, her precocious five-year-old son uncovered the blender and placed a metal spoon into the blender. The glass shattered immediately, blinding little Jack in one eye.

Even if the blender is defectively designed, it will be necessary to determine whether the defective design was the cause of plaintiff's harm. If it is determined that a well designed ¼" shatterproof glass blender would crack and toss forth glass under the impact of a metal object, then the defect (the inadequate design) may not be the cause in fact of the injury. If the injury would have happened even with the better design, then causation has not been established.

It should be noted that in this instance the misuse forces us to focus in on the defect to determine whether the defect was operative in causing the injury. It introduces an alternative explanation for the injury which may lead us to the conclusion that the defect was not implicated in this injury. Such non-defect alternatives are not limited to misuse by either the plain-

tiff or third persons. They may be acts of nature such as a car with defective brakes failing to stop after hitting an icy patch on the road. The icy patch may have been the sole cause of an accident if it is determined that, even had the car been equipped with good brakes, it could not have stopped.

In an earlier section it was suggested that cause-in-fact should be a subject of fault apportionment. Where the plaintiff is a possible alternate cause and it is his conduct that is under examination, there is a mechanism (comparative fault) which permits the issue of the possible effect (*i.e.*, the likelihood of its causal relationship) of the plaintiff's behavior to go to the jury. Where, however, the plaintiff is not at fault and the only question before the court is whether the defect was the cause-in-fact of the plaintiff's harm, there is no readily available mechanism to reduce the defendant's liability taking into account the problem of the doubtfulness of the causation issue. This problem will receive more direct attention in a later section.[31]

### C. *Foreseeable Misuse*

In attempting to establish a prima facie case, plaintiff may be able to establish both defect and cause in fact but still be faced with the question as to whether the plaintiff's injury is properly assignable to the product defect. Is the injury within the scope of the risk created by the design defect? Whether the question is posed as a scope of risk question or as a duty question is irrelevant at this stage of our discussion. Whatever the modality for accomplishing a limitation on liability, it is clear that the law of torts must find some way to accomplish this task. For most courts "proximate cause" has been the analytical tool which they utilize to inquire as to whether liability should attach to the particular injury under the facts peculiar to the case before them.

In some intances the question of the foreseeability of the misuse may go to the question of defect itself. Indeed, sometimes the only reason for declaring a product defective is that a foreseeable misuse may occur. Thus, for example, those courts which follow *Larsen v. General Motors*[32] and

31. *See* text accompanying notes 65 and 66, *infra.*

32. 391 F.2d 495 (8th Cir 1968). The *Larsen* position now represents the overwhelming majority opinion. *See* Knippen v. Ford Motor Co., 546 F.2d 993 (D.C.Cir. 1976); Ford Motor Co. v. Evancho, 327 So.2d 201 (Fla. 1976); Passwaters v. General Motors Corp., 454 F.2d 1270 (8th Cir. 1972) (applying Iowa law); Garst v. General Motors Corp., 207 Kan. 2, 484 P.2d 47 (1971); Volkswagen of America, Inc. v. Young, 272 Md. 201, 321 A.2d 737 (1974); Frericks v. General Motors Corp., 278 Md. 304, 363 A.2d 460 (1976) (applying North Carolina law); Rutherford v. Chrysler Motors Corp., 60 Mich. App. 392, 231 N.W.2d 413 (1975); Perez v. Ford Motor Co., 497 F.2d 82 (5th Cir. 1974) (applying Louisiana Law); Polk v. Ford Motor Corp., 529 F.2d 259 (8th Cir. 1976) (applying Missouri law); Brandenburger v. Toyota Motor Sales, U.S.A., Inc., 162 Mont. 506, 513 P.2d 268 (1973); Friedrich v. Anderson, 191 Neb. 724, 217 N.W.2d 831 (1974); Bolm v. Triumph Corp., 33 N.Y.2d 151, 305 N.E.2d 769, 350 N.Y.S.

permit a cause of action against an automobile manufacturer for not designing a car so that it will reduce or prevent injury upon collision, impose liability solely because of a possible misuse. These cases have properly taken the position that, although a collision is a misuse of an automobile, it is foreseeable. Manufacturers should then be required to provide safety features which will minimize the injuries caused by such foreseeable misuses. It is important to note that in these instances the defect (*i.e.*, lack of second collision safety devices) arises *only because of the misuse problem.* If a court determines that a design defect exists because the manufacturer has failed to include such safety devices, there is no proximate cause question of any moment left to consider. The very reason for declaring the design defective was to prevent this kind of foreseeable misuse. Proximate cause could not, in such a case, present an obstacle on the grounds of misuse. To do so would negate the very reason for declaring the design defective in the first instance.

This kind of case should be contrasted with the more common proximate cause case where the product is declared defective for reasons not solely dependent on possible misuse. The question before the courts in this class of cases is whether the misuse is within the scope of the risk of the product defect. *Ritter v. Narrangansett Electric Co.*[33] is illustrative. In *Ritter,* suit was brought against both the retailer and manufacturer of a stove for injuries sustained by minors while playing in the kitchen of their home. Brenda, age four, attempted to look into a pot atop the stove in which water was boiling in order to discover what mother was cooking for supper. She opened the oven door, which was a drop-type door, and placed her foot on the edge of the door with the intention of standing on it to look into the pot. As she put her weight upon the door, the range toppled over, trapping Brenda and her sister Norma beneath it. At the same time the pot of boiling water scalded the two children.

The evidence against the manufacturer of the stove, American Motors, revealed that when weights of approximately thirty pounds or more were placed upon the door, the range was so designed that it would tip forward. The court decided that a jury could conclude that as a result of the design of the range the danger in the use of the oven door as a shelf was foreseeable. The defendant could thus be negligent in either failing to warn about the danger or in not designing the stove with a better center of gravity.

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2d 644 (1973); Johnson v. American Motors Corp., 225 N.W.2d 57 (N.D. 1974); McMullen v. Volkswagen of America, 274 Or. 83, 545 P.2d 117 (1976); Dyson v. General Motors Corp., 298 F. Supp. 1064 (E.D. Pa. 1969) (applying Pennsylvania law); Mickle v. Blackmon, 252 S.C. 202, 166 S.E.2d 173 (1969); Engberg v. Ford Motor Co., 87 S.D. 196, 205 N.W.2d 104 (1973); Dreisonstok v. Volkswagenwerk, A.G., 489 F.2d 1066 (4th Cir. 1974) (applying Virginia law); Baumgardner v. American Motors Corp., 83 Wash. 2d 751, 522 P.2d 829 (1974); Arbet v. Gussarson, 66 Wis. 2d 551, 225 N.W.2d 431 (1975); Lewis v. Stran Steel Corp., 57 Ill. 2d 94, 311 N.E.2d 128 (1974).

33. 283 A.2d 255 (R.I. 1971).

Having decided the defect question, the court still had to face the question of abnormal use or misuse. To be sure, if Mrs. Ritter had placed a thirty-pound turkey on the oven door and the stove had tipped, there would be little question that injury was within the scope of the risk created by the defect. But the injury did not occur in that manner. Instead, Brenda decided to use the oven door as a step-stool to peer onto the top of the range. This raises questions akin to the classic proximate cause cases. Is the plaintiff a modern-day Mrs. Palsgraf? Is the manner of the occurrence so unforeseeable that it is not fair to assign this harm to the product defect? Is this injury less a result of product defect and more a result of children who are not being properly supervised? No one has yet devised a perfect formula to resolve this kind of proximate cause question and probably no one ever will. In this instance the court sent the issue of abnormal use back to the trial court for a jury determination as to whether the injury had been the product of an abnormal or improper use of the range.

The problem of whether a particular use is or is not foreseeable raises some very special problems when the theory of the case is strict liability. When a case proceeds along negligence grounds proximate cause can raise the question as to whether the particular injury was foreseeable. The gravamen of the tort of negligence is the failure of the defendant to act reasonably under the circumstances. What he knew or should have known is relevant to the decision of whether liability should be imposed. If the resultant harm was so unforeseeable that it could not properly be considered a consequence of defendant's negligence, liability will not be imposed.[34] In strict liability, however, the issue is not whether defendant knew or should have known of the risk. Strict liability has properly been described as negligence with the scienter requirement removed. It would thus appear improper to base a proximate cause instruction on foreseeability criteria. In *Berkebile v. Brantly Helicopter Corp.*[35] the Pennsylvania Supreme Court noted the problem. They said:

> The trial court further confused the standards of strict liability in its charge on proximate cause. The court charged that, in order for it to be said that a defect caused plaintiff's injury "such a consequence, under all the surrounding circumstances of the case, *must have been foreseeable by the seller.*" To require foreseeability is to require the manufacturer to use due care in preparing his product. In strict liability, the manufacturer is liable even if he has exercised all due care. Foreseeability is not a test of proximate cause; it is a test of negligence. Because the seller is liable in strict liability regardless of any negligence, whether he could have foreseen a particular injury is irrelevant in a strict liability case.[36]

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34. This phrasing of the issue is similar to that suggested in R. KEETON, LEGAL CAUSE IN THE LAW OF TORTS 9 (1963).

35. 337 A.2d 893 (Pa. 1975).

36. *Id.* at 900 (citations omitted) (emphasis in original).

This aspect of the misuse problem arose in the *Hopkins* case. The jury was asked to determine not only whether the quadrajet carburetor was defective, but whether the alteration by Hopkins constituted a misuse. The trial court instructed the jury that misuse meant "a use of the vehicle in which it is mishandled in a way which the *manufacturer could not have reasonably foreseen or expected in the normal and intended use of such vehicle.*"[37]

There has been real disagreement as to whether the limitation on liability (legal cause) should be accomplished through a duty-risk analysis or the proximate cause rubric. Dean Leon Green has long championed the duty-risk approach to this question.[38] Under this approach, a court should focus on the specific risk that gave rise to plaintiff's harm and question whether, given the circumstances of the case before the court, the legal system's protection extends to the plaintiff or the class of which he is a member? Dean Green has argued that a judge must consider a broad range of factors in deciding whether the legal system's protection extends to the particular case:

> The determination of the issue of duty and whether it includes the particular risk imposed on the victim ultimately rests upon broad policies which underlie the law. These policies may be characterized generally as morality, the economic good of the group, practical administration of the law, justice as between the parties and other considerations relative to the environment out of which the case arose. They are found in all decisions whether based on former decisions of the court or on a fresh consideration of the factors found in the current environment. It need not be added that the scope or extent of duty in any case can only be resolved by the learning, experience, good sense and judgment of the judge—the molding of law in response to the needs of the environment.[39]

Under Dean Green's duty-risk analysis, foreseeability plays a role in determining whether a duty exists but not a dominant role. He has specifically addressed the question:

> Foreseeability may be a relevant factor for the judge to consider; other factors may and are usually more important in the determination of the defendant's duty; *the fact of risk in the particular case is what actually took place as a result of defendant's conduct, not what was foreseen by the actor as likely to take place,* and it is this risk that must be brought into focus by the court's judgment on the duty issue.[40]

This analysis is in a sense tailor-made for strict liability in which negligence need not be proven.[41] In determining whether a specific risk is within

37. 548 S.W.2d at 348 n.2 (emphasis added).
38. *See* authorities, cited in note 22, *supra.*
39. Green, *Duties, Risks, Causation, Doctrines*, 41 TEX. L. REV. 42, 45 (1962).
40. *Id.* at 58 (emphasis in original).
41. Dean Green has discussed the operation of his duty-risk analysis as it affects strict

the scope of the legal system's protection, a judge will have to consider the entire panoply of social, moral, and economic factors. It is really not terribly important whether foreseeability is or is not a factor in the judge's determination. Even in a negligence case when dealing with the legal cause question, foreseeability only addressed itself to the moral aspect or the justice of holding a defendant for an unforeseeable event. This is one but only one consideration. If foreseeability is removed as an element of liability, the judge will still have to grapple with the other social, economic, and administrative factors which Dean Green believes are crucial to the determination of legal cause. Furthermore, since the issue of legal cause is a judicial determination rather than a jury question, there is no great harm in the judge including foreseeability as a mitigating factor in determining the scope of the defendant's liability.[42] Under a duty-risk analysis, the issue of the scope of the legal system's protection never goes to a jury. It would never be the subject of a jury instruction. The only question would be for the court; and it could or could not factor in foreseeability in its determination of the duty-risk issue.

A somewhat more difficult problem is presented to those courts and scholars who favor the proximate cause approach.[43] Under this analysis the question that is central to the legal cause inquiry is whether the risk which resulted is properly attributable to the defendant's negligence. Since negligence is the creation of unreasonable risks, it must be determined after negligence has been established that the particular risk comes within the scope of the risks created by the original negligence. If one pays more than lip service to this kind of analysis then it is clear that foreseeability is an important consideration in determining whether a particular risk comes within the scope of the original negligence. Since the legal cause issue is for the jury, the phraseology of the jury instruction becomes a matter of some moment.

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product liability in Green, *Strict Liability Under Sections 402A and 402B: A Decade of Litigation*, 54 TEX. L. REV. 1185, 1201 (1976). He notes that foreseeability-expectancy concerns are only one aspect of the duty question which must be decided by the court.

42. *But cf.* Green, *id.* at 1201-1202, 1219. Dean Green states that if the judge is in doubt about the risk of injury or any of its facets, the trial judge will frequently submit the violation of duty issue to the jury and await its verdict before making a final determination on whether the risk of injury falls within the scope of the seller's duty. This view seems strangely out of line with other writings by Dean Green. *See* authorities cited *supra* note 22. It does appear that the jury's role even in this new version of Green's formulation of the duty question is only advisory. The final duty decision belongs to the judge.

43. Keeton, *Legal Cause in the Law of Torts, Prosser, Palsgraf Revisited*, 52 MICH. L. REV. 1 (1953) and Seavey, *Mr. Justice Cardozo and the Law of Torts*, 39 COLUM. L. REV. 20 (1939). For a recent discussion of the proximate cause approach from a severe critic see Thode, *Tort Analysis: Duty-Risk v. Proximate Cause and the Rational Allocation of Functions Between Judge and Jury*, 1977 UTAH L. REV. 1 [hereinafter cited as *Tort Analysis: Duty-Risk v. Proximate Cause*].

If we posit a theory of strict liability, then foreseeability or scienter is eliminated as a factor in establishing liability. How, then, is the legal cause issue to be framed? How will the law account for those unusual, unlikely, or unforeseeable injuries once the foreseeability factor is shorn away from the legal cause analysis? There are several answers to the question. First, jury instructions even under the regime of negligence did not always advert to the foreseeability factor. Ofttimes the jury instructions use such words as "substantial factor," "natural and probable," or "direct causation" to describe the legal cause requirement to the jury. That these instructions masked the true issue from the jury who were charged with deciding the issue has been noted by Professor Thode, a long-time foe of the proximate cause approach.[44] Nonetheless, if courts are willing to live with a vague instruction in negligence cases, there is no reason to become squeamish merely because the issue is strict liability. What is, after all, sought after is a visceral reaction by the jury as to whether the harm which resulted is too attenuated and remote from the original harm to impose liability. The question in products liability is really the same. Is the injury so unusual and so unlikely that it is no longer just to attribute it to the defective product?

A second and better approach would be to frame the legal cause instruction in such a way that it focuses on the abnormality of the use, thus avoiding the foreseeability language entirely. The New York pattern jury instructions accomplish the task in an effective manner. They provide:

> Defendant claims that the [product] was reasonably safe but that injury occurred because the product was not used for the purpose and in the manner normally intended. If you find that the [product] was used for a purpose and in a manner not unlike that which could be expected from the average consumer then you will find that the product was used for the purpose and in the manner normally intended. If, however, you find that the product was subject to use which in purpose or in manner was unexpected and abnormal, you will find for the defendant.[45]

A third approach is to do just what the court did in *Hopkins* and phrase the instructions in terms of foreseeability. If that offends our sense of symmetry, in that basic liability is defined absent foreseeability, and legal cause returns to foreseeability as an operative term, one can respond that even in the negligence context foreseeability did not really mean foreseeability. Dean Prosser has pointed out that within the context of proximate cause foreseeability is an inaccurate and overworked word. What is often really at work is not *foreseeability* but hindsight. Dean Prosser notes that:

> The Restatement of Torts has offered much the same approach by saying that the defendant is not to be liable for consequences which, looking

44. Thode, *Tort Analysis: Duty Risk v. Proximate Cause*, *supra* note 43, at 15.
45. NEW YORK PATTERN JURY INSTRUCTIONS - CIVIL §2:141 (Vol. 1 1974).

> backward after the event with full knowledge of all that has occurred, would appear to be "highly extraordinary." The language may be unfortunate; to one gifted with omniscience as to all existing circumstances, no result could appear remarkable, or indeed anything but inevitable, as a matter of hindsight. . . .Perhaps the Restatement has come close to expressing the underlying idea of a limitation of liability short of the remarkable, the preposterous, the highly unlikely, in the language of the street the cock-eyed and far-fetched, even when we look at the event, as we must, after it has occurred.[46]

It is not crucial that this concept be transmitted to juries. It is the standard for the judge in determining whether to direct a verdict. Even if there is something lost in the translation by sending the jury an instruction based on foreseeability, the harm done is not significant. The juries face this question together with the issue of standard care and damages. It is their task to bring common sense to the torts process. The harsh judgments are to be made by the courts. As noted earlier, jury instructions in the proximate cause area rarely reflect the considerations which the trial judge or the appellate courts must undertake in deciding whether legal cause is made out. I do not excuse the situation. I only note that the proximate cause instruction in product liability cases need not have greater integrity than the instructions which are standard fare in negligence cases.

### *D. Foreseeable Misuse and Contributory Fault—Examining the Interplay*

If it is determined that the misuse of the product by the plaintiff or third party is within the range of foreseeability and that the defect is responsible for the plaintiff's harm, the prima facie case is complete. It still remains necessary to examine plaintiff's conduct to determine whether a plaintiff whose conduct was foreseeable should have his recovery barred or reduced because of his contributory fault.

The *Hopkins* court took the position that plaintiff's contributory fault should not bar nor reduce recovery so long as the plaintiff's conduct was foreseeable. The court said: "We reject misuse as a defense where the product is dangerous for its *foreseeable use* and that danger is a producing cause of the injury of a bystander or a user who has not himself made some unforeseeable use of the product."[47] The only defense to a strict products liability case in Texas appears to be voluntary and unreasonable assumption of a known risk.[48] In *Hopkins* the court added a new defense. Plaintiff's verdict would be reduced by the percentage of his contribution to harm if his misuse were unforeseeable. In the next section we shall examine this aspect of comparative causation. Before we enter that morass it is worth-

46. W. PROSSER, THE LAW OF TORTS §43, 268 (4th ed. 1971).
47. 548 S.W.2d at 351 (emphasis added).
48. Henderson v. Ford Motor Co., 519 S.W.2d 87 (Tex. 1974).

while examining the position of the Texas court that absolves the plaintiff from contributory fault if his conduct falls short of voluntary assumption of a known risk. In essence, this is the position adopted by the majority of American courts which have faced the problem. It is endorsed by the *Restatement of Torts (Second)*, §402A, comment *n:*

> Since the liability with which this Section deals is not based upon negligence of the seller, but is strict liability, the rule applied to strict liability cases (see § 524) applies. Contributory negligence of the plaintiff is not a defense when such negligence consists merely in a failure to discover the defect in the product, or to guard against the possibility of its existence. On the other hand the form of contributory negligence which consists in voluntarily and unreasonably proceeding to encounter a known danger, and commonly passes under the name of assumption of risk, is a defense under this Section as in other cases of strict liability. If the user or consumer discovers the defect and is aware of the danger, and nevertheless proceeds unreasonably to make use of the product and is injured by it, he is barred from recovery.

There is substantial question whether the substance of the comment will withstand the onslaught of the comparative negligence doctrine. Professor Schwartz has argued that the *Restatement* position was justified only so long as contributory negligence or assumption of the risk were a complete bar to plaintiff's recovery.[49] However, now that courts have available to them the doctrine of comparative negligence in which both contributory negligence and assumption of the risk go only to reduce the plaintiff's recovery, it is unfair to saddle the defendant manufacturer with the entire loss.[50] It is only fair to make the plaintiff bear that portion of the

49. V. SCHWARTZ, COMPARATIVE NEGLIGENCE 204-207 (1974) and Schwartz, *Strict Liability and Comparative Negligence*, 42 TENN. L. REV. 171, 177 (1974).

50. A number of courts have supported the use of comparative negligence: West v. Caterpillar Tractor Co., 336 So.2d 80 (Fla. 1976) (the *West* court apparently would not apply comparative fault when the fault is in failing to discover a defect or to guard against the possibility of its existence); West v. Caterpillar Tractor Co., 547 F.2d 885 (5th Cir. 1977); Edwards v. Sears & Roebuck, 512 F.2d 276, 290 (5th Cir. 1975); Hagenbuch v. Snap-On Tools Corp., 339 F. Supp. 676 (D.N.H.1972); Dippel v. Sciano, 37 Wis. 2d 443, 155 N.W.2d 55 (1967); Butaud v. Suburban Marine & Sporting Goods, Inc., 555 P.2d 42 (Alas. 1976), *modifying* the court's earlier decision in the same case reported at 543 P.2d 209 (Alas. 1975); Sun Valley Airlines, Inc. v. Avco-Lycoming Corp. 411 F.Supp. 598 (D. Idaho 1976); Stannard v. Harris, 380 A.2d 101 (Vt. 1977) (the court applied comparative negligence even though the plaintiff alleged both negligence and breach of implied warranties of merchantability and fitness). The New York Comparative Fault Statute applies to strict tort liability. *See* discussion *infra* note 55 and 56. *Contra,* Kinard v. The Coats Co., Inc., 553 P.2d 835 (Colo. App. 1976); Melina v. Ford Motor Co., 534 F.2d 795 (8th Cir. 1976) (holding that applying Nebraska slight-gross comparison statute, NEB. REV. STAT. §25-1151 (1964), would be confusing in a strict liability case); Buccery v. General Motors Corp., 60 Cal. App. 3d 533, 132 Cal. Rptr. 605 (1976); Horn v. General Motors Corp., 17 Cal.3d 359, 551 P.2d 398, 131 Cal. Rptr. 78 (1976); Hoelter v. Mohawk, 170 Conn. 495, 365 A.2d 1064 (1976) (dissent chastising majority for not applying comparative fault). In Tolbert v. Gerber Industries, Inc., 255 N.W.2d 362

loss which represents his fault contribution to the injury event. This author has taken sharp issue with this position. It has been my position that indiscriminate use of the comparative fault doctrine will partially negate the imposition of duties which the law sought to place on manufacturing defendants.[51]

It is well beyond the pale of this article to undertake a full examination of the role of comparative fault in products liability. I have focused on that subject in another forum.[52] It is important, however, to demonstrate that neither "foreseeable misuse" nor "voluntary and unreasonable assumption of a known risk" are categories of plaintiff's conduct which either should be automatically exculpated or included in recovery. Consider, for example, the important court of appeals decision of *Micallef v. Miehle Co.*[53] in which the New York court overruled the patent-danger rule which absolved a manufacturer for all design defects which were patent or obvious.

Plaintiff, Paul Micallef, was employed as an operator on a huge photo-offset printing press. One day while working on the press plaintiff discovered that a foreign object had made its way onto the plate of the unit. Such a substance, known to the printing trade as a "hickie," causes a blemish or imperfection on the printing page. In order to correct this situation plaintiff informed his superior that it was his intention to "chase the hickie." The process of "chasing hickies" consists of applying, very lightly, a piece of plastic about eight inches wide to the printing page, which is wrapped around a circular plate cylinder that spins at high speed. The rvolving action of the plate against the plastic removes the "hickie." While

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(Minn. 1977), the Minnesota Supreme Court applied comparative negligence principles in a products liability case among joint tortfeasors. The language of the decision would lead one to believe that it would apply comparative negligence between plaintiff and a product liability defendant as well. In the dissenting opinion Justice Rogosheske notes that the comparison was accomplished between two *negligent* tortfeasors. Although there was a strict liability count as well, the majority did not focus on that aspect of the case. The dissent argues that:

"If my assumption is incorrect and apportionment of fault is to be extended to defective product cases where liability is based on breach of warranty or strict liability, apportionment of fault would require a wholly different comparison of the fault-producing relationship between the parties. Factors such as size and technical expertise surely would be important considerations in assessing relative culpability between, for example, a large manufacturer and a small neighborhood variety store or one-man installer. I doubt that an intelligible rule or jury instruction could be fashioned which would permit a jury to apply equitable principles necessarily required to justly apportion liability." 255 N.W.2d at 372.

In light of the fact that Justice Rogosheske was joined by three other members of the court in his dissent, it would appear that the outcome of the comparative fault question as between plaintiff and a product liability defendant is in doubt. The arguments made by the dissent with regard to fault apportionment between joint tortfeasors would apply a fortiori to the plaintiff and a product liability defendant.

51. Twerski, *From Defect to Cause to Comparative Fault—Rethinking Some Product Liability Concepts*, 60 MARQ. L. REV. 297, 339 (1977) and Twerski, *The Use and Abuse of Comparative Negligence in Product Liability*, 10 IND. L. REV. 797 (1977).

52. *Id.*

53. 39 N.Y.2d 376, 348 N.E.2d 571, 384 N.Y.S.2d 115 (1976).

plaintiff was engaged in this maneuver the plastic was drawn into the nip point, grabbing his hand between the plate cylinder and an ink-form roller. The photo-offset machine had no safety guards to prevent such an occurrence and plaintiff was unable to quickly stop the machine because the shut-off button was distant from the point of operation of the machine.

The plaintiff, Micallef, was fully aware of the danger of getting his hand caught in the press while "chasing hickies." It was, however, the custom of the industry to "chase hickies on the run," because once the machine was stopped, it required at least three hours to resume printing. An expert witness testified that good engineering practice would dictate that a safety guard be placed near the rollers since the danger of human contact at the point of operation was well known. The court realized that even though this design modification was both reasonable and feasible, the patent-danger rule would demand that recovery be denied. In rejecting its long held position that the obviousness of the danger is to be the only criterion for judging the safety of a product the court relied on the astute observations of Professors Harper and James. They contend:

> [T]he bottom does not logically drop out of a negligence case against the maker when it is shown that the purchaser knew of the dangerous condition. Thus if the product is a carrot-topping machine with exposed moving parts, or an electric clothes wringer dangerous to the limbs of the operator, and if it would be feasible for the maker of the product to install a guard or safety release, it should be a question for the jury whether reasonable care demanded such a precaution, though its absence is obvious. Surely reasonable men might find here a great danger, even to one who knew the condition; and since it was to so readily avoidable they might find the maker negligent.[54]

The New York court having decided that liability exists even for a patent defect must now face the question whether the plaintiff's contributory fault should be a defense to a strict liability action.[55] This question is now complicated by the fact that New York has enacted a comparative fault statute which is intended to apply to strict products liability cases as well

54. 2 F. HARPER & F. JAMES, THE LAW OF TORTS, §28.5, at 1543 (1956). For a further expansion of this thesis *see* James, *Assumption of Risk: Unhappy Reincarnation*, 78 YALE L.J. 185 (1968); Twerski, *Old Wine in a New Flask—Restructuring Assumption of Risk in the Products Liability Era*, 60 IOWA L. REV. 1 (1974).

55. Since the injury occurred prior to the effective date of the New York comparative fault statute (Sept. 1, 1975), it is possible that the plaintiff could be barred by either contributory negligence or assumption of the risk. In *Micallef* the court reaffirmed the position it took in Codling v. Paglia, 32 N.Y.2d 330, 298 N.E.2d 622, 345 N.Y.S.2d 461 (1973), recognizing contributory negligence as a defense. It was plaintiff's contention that since he was performing his duties at the place and in the manner dictated by his superiors that he cannot be guilty of contributory negligence as a matter of law. Verduce v. Board of Higher Education, 8 N.Y.2d 928, 168 N.E.2d 838, 204 N.Y.S.2d 168 (1960). This issue was not resolved in *Micallef* since the case was remanded to try the issue of defect absent the impediment of the patent-danger rule.

as negligence.[56] The statute notwithstanding, it would appear that it would make little sense to reduce the plaintiff's verdict based on comparative fault. The design defect in the printing machine was the failure to place a guard at the point of operation to prevent employees who "chase hickies on the run" from getting their hands severed. If an employee, who suffers the very injury to be guarded against, is to be barred or to have his recovery reduced, then the manufacturer has been absolved from all or part of the responsibility which the law sought to impose on him in the first instance. Thus, even if the plaintiff knew the risk and voluntarily decided to encounter it, he should be permitted to recover. Merely denoting behavior as voluntary assumption of the risk does not mean that it makes sense in every instance to reduce recovery.

On the other hand, merely because a misuse was foreseeable does not mean that defendant should necessarily carry the full responsibility for plaintiff's conduct. There are instances where the plaintiff's misuse goes to the issue of product integrity in which both manufacturers and consumers may justly be called upon to share responsibility. It will be recalled that in *Hopkins* the plaintiff was made aware after the Fulton Street Incident that the truck accelerated on its own and could not be brought to a stop. Did not some duty devolve on the plaintiff (consumer) to bring this matter to the attention of a mechanic? Admittedly, the truck had a defective carburetor, but when such problems surface should a plaintiff be entirely free from seeking corrective action? This problem would be serious enough without plaintiff's incompetent tinkering with the truck. If then in response to the problem he decides to first replace the carburetor on his own and then reinstall the first carburetor in a sloppy fashion, it is hard to see why plaintiff should not share in the responsibility for the injury. It should be noted that this hypothetical differs from the actual case in *Hopkins,* in that plaintiff replaced the carburetor because the truck self-accelerated rather than because of his desire to increase the speed and efficiency of the truck. This slight change in facts might well lead a jury to conclude that the misuse was foreseeable. Nonetheless, it is hard to see why the foreseeability of such an occurrence is sufficient to foist the entire liability on the defendant.

It would seem that a court must first decide whether the basic purposes of product liability law will be furthered by permitting the affirmative defense. This is a duty question which cannot be avoided by asserting that in all product cases assumption of the risk is a defense or that foreseeable misuse is not a defense. These blunderbuss statements cover too much territory with too broad a brush.

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56. New York adopted the "pure" form of comparative negligence for causes of action accruing on or after September 1, 1975, N.Y. CIV. PRAC. LAW §1411-1413 (McKinney 1976). The legislative intent in New York was to have the comparative-fault statute apply in strict liability actions, 1975 N.Y. Laws 1485-86 (McKinney).

*E. Unforeseeable Misuse—The Doctrine of Comparative Proximate Cause*

We turn now to the most interesting and novel aspect of *General Motors v. Hopkins*. It will be recalled that the Texas Supreme Court found that there was ample evidence to support the following findings of fact:

(1) The quadrajet carburetor was defectively designed; and
(2) The plaintiff, Robbie Hopkins, had "misused" the carburetor in that he had mishandled it in a way which the manufacturer could not have reasonably foreseen. The misuse was thus unforeseeable.

Given a defective product and unforeseeable misuse, how should the parties be treated by the court? The court recognized that this was the problem it was facing. It said so clearly.

> This brings us to our case: where an unreasonably dangerous defect of the product and its unforeseeable misuse are concurring causes of the damaging event. Does the injured user recover all or none or a portion of his damages? We do not find the answer in precedents in Texas or elsewhere. Nor does the Restatement give us any guidance; section 402A comment h, quoted above, applies only where the product "is safe for normal handling and consumption." That is not the case where the facts are that the product was defective—because of an unreasonably dangerous design, for example—and the defect is a producing cause of the injury.[57]

Before turning to the Texas court's resolution to this problem, it is necessary to examine the rather startling statement by the court that it could find no answer to this question in precedents anywhere. Perhaps they did not look very hard. The issue of a defective product which was subject to unforeseeable misuse has been litigated many times.[58] The courts have treated the question as one of intervening cause. The issue has usually been submitted to juries to determine whether the plaintiff (or a third party) has subjected the product to "substantial change," "misuse," or "abnormal use." In rather extreme cases courts have directed verdicts when they have believed that the misuse was so significant that the defen-

57. 548 S.W.2d 344, 351 (Tex. 1977).

58. Kerns v. Engelke, ___ Ill. App. 3d ___, 369 N.E.2d 1284 (1977); Sun Valley Airlines, Inc. v. Avco-Lycoming Corp., 411 F. Supp. 598 (D. Idaho 1976); Mico Mobil Sales & Leasing, Inc. v. Skyline Corp., 97 Idaho 408, 546 P.2d 54 (1975); Olson v. Village of Babbitt, 291 Minn. 105, 189 N.W.2d 701 (1971); Mieher v. Brown, 54 Ill.2d 539, 301 N.E.2d 307 (1973); Finnegan v. Havir Mfg. Corp., 60 N.J. 413, 290 A.2d 286 (1972); Leistra v. Bucyrus-Erie Co., 443 F.2d 157 (8th Cir. 1971); Ritter v. Narrangansett Elec. Co., 109 R.I. 176, 283 A.2d 255 (1971); Berkebile v. Brantly Helicopter Corp., 462 Pa. 83, 337 A.2d 893 (1975); Ford Motor Co. v. Matthews, 291 So.2d 169 (Miss. 1974); Haumersen v. Ford Motor Co., 257 N.W.2d 7 (Iowa 1977); Doran v. Pullman Standard Car Mfg. Co., 45 Ill. App. 3d 981, 360 N.E. 2d 440 (1977).

dant's defect was no longer the proximate cause of the harm.[59] In *Hopkins*, the jury found that the misuse was unforeseeable. Unless the court was mistaken in sending the proximate cause issue to the jury, then this was a classic proximate cause case in which the jury made a finding of fact in favor of defendant.

The Texas court was well aware of the implications of such a finding on intervening cause. It would have meant that the plaintiff would be defeated in his prima facie case. The all-or-nothing principle would have meant that plaintiff would in this instance recover nothing. The doctrine of comparative fault would not accomplish a recovery for plaintiff so long as the issue of "misuse" would be submitted to the jury.[60] If indeed the misuse was unforeseeable then the product defect was not the proximate cause, and if proximate cause could not be established, the prima facie case could not be made out for the plaintiff.

The court's solution to the problem was to recognize that proximate cause need not be an all-or-nothing issue. They held that:

> [I]f the product is found to have been unreasonably dangerous when the defendant placed it in the stream of commerce, and if that defect is found to have been a producing cause of the damaging event, and if the plaintiff has misused the product in the sense as defined by the trial court in its charge in the present case, and if that misuse is a proximate cause of the damaging event, the trier of fact must then determine the respective percentages (totalling 100%) by which these two concurring causes contributed to bring about the event. . . . *The defense in a product liability case where both defect and misuse contribute to cause the damaging event will limit the plaintiff's recovery to that portion of his damages equal to the percentage of the cause contributed by the product defect.*[61]

Traditionalists will not understand. The defect was a cause of the injury and the misuse was a cause. Cause cannot be apportioned, only fault. But proximate cause is after all a legal fiction. It is an analytical tool which helps us decide whether the harm is to be placed at the defendant's doorstep. There is no good reason why the issue raised by proximate or intervening cause should not be factored into the apportionment between the parties. The relative accountability for the end result is something which can be taken into account in a fault apportionment. The newly drafted Uniform Comparative Fault Act expresses this approach to the proximate cause problem. It provides: "In determining the percentages of fault, the trier of fact shall consider both the nature of the conduct of each party at

59. Ford Motor Co. v. Wagoner, 183 Tenn. 392, 192 S.W.2d 840 (1946); Rogers v. Unimac Co., 115 Ariz. 304, 565 P.2d 181 (1977); Ford Motor Co. v. Eads, 224 Tenn. 473, 457 S.W.2d 28 (1970).

60. *But cf.* Sun Valley Airlines, Inc. v. Avco-Lycoming Corp., 411 F.Supp. 598 (D. Idaho 1976). The court submitted the misuse issue to the jury who found the misuse unforeseeable. Nonetheless, the court applied the doctrine of comparative causation.

61. 548 S.W.2d 344, 352 (Tex. 1977) (emphasis added).

fault and the extent of the causal relation between the conduct and the damages claimed."[62] The drafters of the Uniform Act have indicated in their comments that the policy factors embodied in the proximate cause concept are subject to apportionment. They say:

> In determining the relative fault of the parties, the fact-finder will also give consideration to the relative closeness of the causal relationship of the negligent conduct of the defendants and the harm to the plaintiff. Degrees of fault and proximity of causation are inextricably mixed, as a study of last clear chance indicates, and that common law doctrine has been absorbed in this Act. This position has been followed under statutes making no specific provision for it.[63]

It remains to be seen why the *Hopkins* court did not simply apply the doctrine of comparative fault and set forth their view that in determining the relative degree of fault the proximate cause question would be factored in. Why did they opt for an explicit separate doctrine of comparative causation? The reasons are several:

(1) The court had already stated that it did not believe that plaintiff's fault should reduce his recovery if his injury was forseeable. In an earlier section I analyzed this problem and indicated that the decision as to whether to reduce plaintiff's verdict under a comparative fault doctrine should depend on a broad range of factors, not only the foreseeability of the plaintiff's behavior. Nonetheless, having committed itself to the position that contributory fault would not work against the plaintiff, the court was unwilling to unleash its comparative negligence statute on products liability. It limited the reduction of plaintiff's verdict only to those cases where plaintiff's actions were unforeseeable.

(2) The Texas comparative negligence statute is not a *pure* comparative negligence statute but rather one of modified comparative negligence.[64] Under such a modified scheme, plaintiff's negligence will be a complete bar if his negligence is greater than the negligence of the parties against whom recovery is sought. The court might have sought to accomplish an end run around the statute and permit the plaintiff to recover even though his conduct constituted a greater percentage of fault than that of the defendant. Hence, the court adopted *comparative cause* rather than *comparative fault.*

(3) The Texas comparative negligence statute speaks only to comparative negligence and as such is not directly applicable to strict products liability. The court may have been reluctant to apply a comparative fault doctrine to strict torts liability which is not based on fault.[65] By adopting

62. UNIFORM COMPARATIVE FAULT ACT §2(b) (1977).

63. UNIFORM COMPARATIVE FAULT ACT §2, comment (1977).

64. TEX. REV. CIV. STAT. ANN. art. 2212a, §1 (Supp. 1978 Vernon).

65. There is some evidence from a recently decided case that the Texas court is reluctant to apply the comparative negligence statute to a strict liability situation. In General Motors

a doctrine of comparative causation it sidestepped this problem. I have argued at length elsewhere that a court ought not to feel constrained by negligence language in the comparison statutes when it comes to applying the comparative principle to strict products liability. This view has been endorsed by the drafters of the Uniform Comparative Fault Act. In their comments to Section 1 they state:

> Although strict liability is sometimes called absolute liability or liability without fault, it is still included. Strict liability for both abnormally dangerous activities and for products bears a strong similarity to negligence as a matter of law (negligence per se), and the fact-finder should have no real difficulty in setting percentages of fault. Putting out a product that is dangerous to the user or the public or engaging in an activity that is dangerous to those in the vicinity involves a measure of fault that can be weighed and compared, even though it is not characterized as negligence.[66]

It is my belief that all of the above stated factors probably had some impact on the court's decision to opt for a distinct doctrine of comparative causation in products liability cases. This is, however, a temporary way station. When the courts come to realize that contributory fault in products cases is a complex matter which must be decided on clear policy grounds they will gradually become more comfortable in utilizing their comparative fault statutes in a discriminating fashion. It will not be every case that is subject to apportionment, only those in which the role of plaintiff's conduct with regard to maintaining product integrity is significant or those in which the plaintiff has pushed the product beyond the limits of its capacities. These situations will not be easily categorized. The common law must do its job. Individual fact patterns will carry the day and ultimately define the parameters of the comparative fault doctrine.

### *F. Some Unanswered Questions—The Role of Third Party Intervening Cause*

The discussion heretofore has focused on the use of the comparative fault

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Corp. v. Simmons, 558 S.W.2d 855 (Tex. 1977), a question arose as to the rights of joint tortfeasors *inter se*, when one defendant was liable for negligence and the other for strict products liability. The court held that the modified comparative negligence statute, which was passed in 1973 (article 2212a), and which contains provisions dealing with contribution among negligent tortfeasors, does not apply to instances where one defendant is liable for strict liability. The court stated:"The present state of the statutory law permits apportioning contribution upon comparisons of negligent conduct among negligent tortfeasors. It does not provide any mechanism for comparing causative fault or percentage causation of a strictly liable manufacturer with the negligent conduct of a negligent co-defendant." 558 S.W.2d at 862.

It thus appears that the Texas court felt restricted by the language of the comparative negligence statute.

66. UNIFORM COMPARATIVE FAULT ACT §1, comment (1977).

model to reduce a plaintiff's recovery when plaintiff's conduct was a contributing factor in bringing about the harm. It has been argued that the principle of comparative fault should be utilized to take into account cause-in-fact and proximate cause. We now must face a more difficult question. Given the premise that the law of torts need no longer operate on an all-or-nothing principle, what should be the response to those cases in which plaintiff has not been at all in fault in misusing the product, but the misuse came about through a non-culpable third party. Will we now revert to the all-or-nothing principle in which plaintiff will be entirely barred if the misuse is unforeseeable, or will plaintiff be awarded a percentage based not on the reduction of plaintiff's participation but on an assessment of defendant's fault. It should be noted that we are now considering the kind of case where defect is established and the question is whether the harm which resulted should be considered to be within the scope of the product defect. Without an apportionment principle the question could be decided either way by a jury. But, having taken the position that relative degrees of proximity (legal cause) is a properly apportionable item, should we now abandon the all-or-nothing principle?

A similar question can arise with regard to cause-in-fact. In a case where there is a real question as to whether the product defect was a cause-in-fact, should we permit the plaintiff a percentage recovery based on the possible likelihood that it was causal? Can we utilize an apportionment formula in a case where there has been no plaintiff fault to permit a recovery where, absent apportionment, plaintiff would fail to make out causation? If in fact a fair allocation of the costs would not load onto the defendant the total cost of relatively unforeseeable uses of its product, is it fair to do so when a non-culpable third party has contributed to the harm? And if it is considered wise to take into account the likelihood on a percentage basis that the defendant's conduct was a cause-in-fact, should that factor be eliminated merely because there is no culpable plaintiff whose conduct was a possible contributing factor?

Traditional thinking has always opted in favor of the totally innocent plaintiff when faced with a defendant whose fault was the proximate cause of the harm. But our question is now somewhat different. In the absence of utilizing an apportionment formula, plaintiff may recover nothing because he will be unable to establish cause-in-fact or proximate cause. Can apportionment be utilized to grant a partial recovery? And if that question is answered in the affirmative, should the spigot be turned off in those cases where the traditional elements of causation can be established, or should the defendant now receive the reduction in recovery presented by the relative unforeseeability of the misuse or the weakness in the cause-in-fact case?

These are difficult questions that cannot be answered glibly. Professor Calabresi has demonstrated that causation principles can have significant impact in fostering the identification of the proper parties upon whom the

law of torts ought to visit liability.[67] Whether these goals are best accomplished by a percentage apportionment will require serious study. It would seem, however, that ultimately the manufacturing community will refuse to pay costs that are more properly assignable elsewhere. Conversely, plaintiffs will legitimately argue that the percentage allocation formula should be used to their advantage to permit recovery where defect has been established and apportionment principles can be utilized to permit less than total recovery when causation is doubtful.

## IV. CONCLUSION

*General Motors v. Hopkins* brought some new thinking to the law of torts. As I have indicated, I believe that the court did not fully capitalize on the opportunity provided it. Nonetheless, the court honestly confronted the problem of the relative unforeseeability of the plaintiff's conduct and factored it into a fault apportionment. There can be no other reading of the case. New developments in the law do not come tied in nice neat packages. *General Motors v. Hopkins* is no exception. But, it is a significant beginning to resolving a long overdue problem. After two centuries of viewing a torts case as made up of separate and discrete elements of the cause of action, we are witnessing the move to the resolution of the torts action by examining it as a unitary whole. That seems to make uncommon good sense.

67. Calabresi, *Concerning Cause and the Law of Torts: An Essay for Harry Kalven, Jr.*, 43 U. CHI. L.R. 69 (1975).