ARTICLE

What Must Cause Injury in Products Liability?

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INTRODUCTION

Section 402A of the *Restatement (Second) of Torts* provides that "[o]ne who sells any product in a defective condition unreasonably dangerous . . . is subject to [strict] liability for physical harm thereby caused . . . ."[1] What does the word "thereby" refer to? Is it the product, the sale of the product, the defective condition of the product or the unreasonable danger? Comment c to section 402A suggests that the product must cause the injury.[2] Most courts, however, seem to have assumed that the defective condition of the product must cause the injury.[3] This Article will examine the methods by which courts have attcmpted to answer the question of what must cause injury[4] and will suggest that they must broaden the scope of their inquiry. Objects are generally static. They usually need the active participation of a person to cause injury. In most products liability cases, there are two active

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1. RESTATEMENT (SECOND) OF TORTS § 402A (1965).

2. RESTATEMENT (SECOND) OF TORTS § 402A comment c (1965). The comment discusses "the justification for the strict liability" and refers to "injuries caused by products," indicating that the "thereby" in the text of 402A may refer to the product.

3. *See, e.g.,* Escola v. Coca Cola Bottling Co., 24 Cal. 2d 453, 461, 150 P.2d 436, 440 (1944) (Traynor, J., concurring) ("[I]t should now be recognized that a manufacturer incurs an absolute liability when an article that he has placed on the market . . . proves to have a *defect that causes* injury to human beings.") (emphasis added); Greiner v. Volkswagonwerk Aktiengesellschaft, 429 F. Supp. 495 (E.D. Pa. 1977) (plaintiff proved that the product was defective, but judgment for plaintiff was vacated because plaintiff failed to show that the defect caused the injury); Nelson v. Brunswick Corp., 503 F.2d 376 (9th Cir. 1974) (judgment for defendant because, although the product was defective, the defect did not cause the injury).

4. The vast literature on causation in tort law has caused one commentator to suggest that new works on the subject may be superfluous. Calabresi, *Concerning Causes and the Law of Torts,* 43 U. CHI. L. REV. 69 (1975). Almost all of this vast literature has treated causation in strict liability as though it was identical to eausation in negligence. *See, e.g.,* A. BECHT & F. MILLER, THE TEST OF FACTUAL CAUSATION IN NEGLIGENCE AND STRICT LIABILITY CASES (1961); H.L.A. HART & A. HONORE, CAUSATION IN THE LAW (1959); Epstein, *A Theory of Strict Liability,* 2 J. LEGAL STUD. 151 (1967); Wright, *Causation in Tort Law,* 73 CAL. L. REV. 1737 (1985).

This Article will suggest a number of ways that causation in strict products liability differs from eausation in negligence.

parties—one who made or sold the product and one who bought or used it. Because product related injuries usually result from the interaction of these two parties, it is impossible to determine the cause of an injury without examining the risks created by both the seller and the user of the product.

In recent years, a number of courts have moved away from the position that the defective condition must be the cause of the injury. Some courts have made causation a part of the definition of defect, holding that a product is defective if it causes injury.[5] Some courts have attempted to merge causation with established defenses by suggesting that damages should be apportioned by comparative causation instead of using the defenses of comparative or contributory negligence.[6] Other courts have used a presumption of causation in "failure to warn" cases because it is often difficult for the plaintiff to prove that the "failure to warn" caused the injury.[7] This Article will examine each of these attempts to grapple with the issue of what must cause injury and will argue that the best rule is one that apportions damages by comparative causation and uses injuries caused by the product to determine the defendant's share.

The ambiguity concerning what must cause injury probably results from strict products liability's roots in the law of negligence. Prior to the adoption of section 402A, persons suing in tort for product-related injuries usually had to prove that the manufacturer or seller was negligent.[8] One of the primary reasons for the adoption of section 402A was the perceived need to relieve plaintiffs of some of the burdens of proving negligence.[9] The problem of "what must cause injury" does not arise in negligence cases. Thus,

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5. *See, e.g.,* Barker v. Lull Engineering Co., 20 Cal. 3d 413, 573 P.2d 443, 143 Cal. Rptr. 225 (1978) (holding that a product is defective "if the plaintiff proves that the product's design proximately caused his injury and the defendant fails to prove . . . that on balance the benefits of the challenged design outweigh the risk inherent in such design"); Caterpillar Tractor Co. v. Beck., 593 P.2d 871 (Alaska 1979) (adopting the *Barker v. Lull* rule); and Azarello v. Black Brothers, Co., 480 Pa. 547, 391 A.2d 1020 (1978) (manufacturer is guarantor of product safety; thus if any aspect of the product causes injury, the product is defective).

6. *See, e.g.,* Murray v. Fairbanks Morse, 610 F.2d 149, 159 (3d Cir. 1979) (applying Virgin Islands law); Sun Valley Airlines, Inc. v. Avco-Lycoming Corp., 411 F. Supp. 598, 603 (D. Idaho 1976); Duncan v. Cessna Aircraft Co. 665 S.W.2d 414, 424 (Tex. 1984); Thibault v. Scars, Roebuck and Co. 118 N.H. 802, 810, 395 A.2d 843, 850 (1978); Butaud v. Suburban Marine & Sporting Goods, Inc., 555 P.2d 42, 47 (Alaska 1976) (Rabinowitz, J., concurring).

7. *See, e.g.,* Reyes v. Wyeth Laboratories, Inc., 498 F.2d 1264 (5th Cir. 1974), *cert. denied,* 419 U.S. 1096 (1974) (basing the presumption on comment j to RESTATEMENT (SECOND) OF TORTS § 402A (1965), which states "where warning is given, the seller may reasonably assume that it will be read and heeded"); Davis v. Wyeth Laboratories, Inc., 399 F.2d 121 (9th Cir. 1968); Nissen Trampoline Co. v. Terre Haute First Nat'l Bank, 332 N.E.2d 820 (1975), *rev'd on other grounds,* 265 Ind. 457, 358 N.E.2d 974 (1976).

8. *See generally* Prosser, *The Assault Upon The Citadel,* 69 YALE L.J. 1099 (1960); Prosser, *The Fall of The Citadel,* 50 MINN. L. REV. 791 (1966); Traynor, *The Ways and Means of Defective Products and Strict Liability,* 32 TENN. L. REV. 363 (1965); and Wade, *Strict Tort Liability of Manufacturers,* 19 SW. L.J. 5 (1965).

9. *See, e.g., Escola,* 24 Cal. 2d at 463, 150 P.2d at 441 (Traynor, J., concurring) ("An injured person, however, is not ordinarily in a position to refute such evidence [of proper care] or identify the cause of the defect, for he can hardly be familiar with the manufacturing process . . . ."); Phipps v. General Motors Corp., 363 A.2d 955, 963 (Md. App. 1976) (reasoning that strict liability is needed to relieve plaintiffs of "the proof requirements of negligence actions.").

if section 402A is viewed as an attempt to deal with some problems plaintiffs were having with proving negligence, it is easy to see why the drafters of the *Restatement* did not directly address the issue of what must cause injury.

The problem of "what must cause injury" does not arise in negligence because the negligent act cannot be separated from the risk created by the act. An act is negligent only if it creates an unreasonable risk of harm that causes harm to one who is part of a group to whom harm was reasonably foreseeable.[10] Since a finding of negligence requires each of these factors, one cannot separate them and say, for example, that the negligent act caused the injury, but the risk of harm created by the negligent act did not. If the risk of harm created by the act did not cause injury, the negligent act could not have, because the act is negligent only if it creates an unreasonable risk of harm that causes injury. In strict products liability, however, the factors are separable. Cases exist in which the sale of a defective product creates a risk of harm that causes injury, but the seller is not liable because the defect did not cause the injury.

Cunningham v. Charles Pfizer & Co.,[11] may be such a case. In *Cunningham,* the plaintiff alleged that he contracted polio as a result of ingesting oral polio vaccine manufactured by the defendant. The plaintiff further alleged that the vaccine was defective because the defendant failed to adequately warn of the danger.[12] A jury verdict for the plaintiff was reversed because the plaintiff had failed to provide evidence that the failure to warn (the defect) caused the injury.[13] The court reasoned that in order to prove that the failure to warn caused the injury, the plaintiff must prove that if an adequate warning was given, the plaintiff would not have used the product. Thus, the product was found to be defective and the injury resulted from the risk of harm created by the product, but the defect did not cause the injury.[14]

Similar results may be reached in negligent "failure to warn" cases, but most often on the grounds that the risk was not reasonably foreseeable. In *McLaughlin v. Mine Safety Appliance Co.*,[15] for example, the court used that reasoning to reach a result similar to *Cunningham.* The plaintiff, a six-year-old girl, nearly drowned and was assisted by a nurse and a fire department rescue crew. A fireman gave the nurse some "MSA Redi-Heat

10. *See* PROSSER & KEETON §§ 30-31 (W. Keeton 5th ed. 1984).

11. 532 P.2d 1377 (Okla. 1975).

12. *Id.* at 1379. The local health department sponsored a mass polio immunization clinic using Sabin oral polio vaccine manufactured by defendant. The sponsors of the clinic were aware of the risks but defendant made no effort to warn the participants in the immunization program. *Id.*

13. *Id.* at 1382. Plaintiff did not offer any evidence concerning what he would have done if adequate warning had been given. Moreover, the court noted that there was evidence that plaintiff would have used the product even if warned. *Id.*

14. *Id.*

15. 11 N.Y.2d 62, 181 N.E.2d 430, 226 N.Y.S.2d 407 (1962).

Blocks" to help keep the child warm. The nurse applied the heat blocks directly to the child's body and the heat blocks caused severe burns. The fireman had been warned not to use the heat blocks without additional insulation, but he failed to pass the warning on to the nurse.[16] The court of appeals, in reversing a jury verdict for the plaintiff, recognized that the jury could have found that the warning to the fireman was inadequate, that the sale of the product with an inadequate warning created an unreasonable risk that users would be injured and that the injury resulted from that unreasonable risk. The court concluded, however, that the risk of harm to the plaintiff was not reasonably foreseeable.[17] The negligence was consequently not the proximate cause of the plaintiff's injury.[18]

The difference between what must cause injury in negligence and what must cause injury in strict products liability led the *Cunningham* and *McLaughlin* courts to reach different conclusions on cause-in-fact. The *Cunningham* court found that the failnre to warn (the defect) was not a cause-in-fact of the injury because the plaintiff could not show that an adequate warning would have prevented the injury. The *McLaughlin* court did not question cause-in-fact because the defendant's sale of the product without an adequate warning created an unreasonable risk that users would suffer burn injuries, and burn injuries resulted. In negligence, the negligent act cannot be separated from the risk created by the act in order to determine which one caused the injury. In strict products liability, however, the defective product, the defect and the risk created are separable. A difficult cause-in-fact question therefore remains: what must cause injury in strict products liability?

I. SALE OF THE PRODUCT AS CAUSE

One might read section 402A as providing for strict products liability whenever the sale of a defective product causes injury.[19] Common usage of the word "cause" makes it difficult to visualize how anything but an action can be a cause.[20] Objects are generally static and need someone or something

16. *Id.* at 65-67, 181 N.E.2d at 431-32, 226 N.Y.S.2d at 408-10. The fireman was instructed about the need for added insulation. The containers in which the blocks were packed also instructed users to insulate the blocks. The fireman removed the blocks from the containers and handed them to the nurse, thus depriving her of the opportunity to read the instructions. *Id.* at 70, 181 N.E.2d at 434, 226 N.Y.S.2d at 413.

17. *Id.* at 72, 181 N.E.2d at 435, 226 N.Y.S.2d at 414. The court concluded that the jury could have found that defendant should have made the warnings available to the nurse, but the defendant's action was unforeseeable. *Id.*

18. *Id.*

19. *See* RESTATEMENT (SECOND) OF TORTS § 402A (1965), "One who sells . . . is subject to liability . . . ."

20. *Webster's New College Dictionary* defines causation as "the act or agency by which an affect is produced." WEBSTER'S NEW COLLEGE DICTIONARY 177 (1976). *Black's Law Dictonary* provides basically the same definition. BLACK'S LAW DICTIONARY 200 (5th ed. 1979).

to act on them to cause injury. Because the only action section 402A requires of the defendant is the sale of a product, section 402A could mean that the sale of the product must cause injury.

Requiring the causal link between the sale and the injury would avoid the cause-in-fact problem presented in *Cunningham.*[21] In *Cunningham,* the sale of a defective product created a foreseeable risk of harm and the court found that although the harm resulted from the risk created by the sale, the plaintiff had failed to prove that the "failure to warn" (the defect) caused the injury.[22] A change from "defect must cause injury" to "sale must cause injury" should lead to a different result because "but for" the sale, the plaintiff would not have been injured. A rule that requires the sale to cause the injury would thus help the plaintiff avoid the cause-in-fact problem he faced in *Cunningham.*

A rule that requires the sale of the product to cause injury is likely to be overbroad. The rule will result in liability in many cases in which the defendant is obviously not responsible for the injury. The facts of *Price v. Ashby's, Inc.,*[23] illustrate this overbreadth.

In *Price,* the plaintiff purchased a car from the defendant. The car had a defect that caused one side of the car to dip. The plaintiff was injured when he drove off the road while trying to make a turn at fifty to sixty miles per hour. The court upheld a directed verdict for the defendant because the plaintiff was unable to show any connection between the defect and the failure to negotiate the turn.[24] The plaintiff could not, the court concluded, show that the defect caused the injury. Indeed, the court indicated that inattentive driving may have caused the injury.[25] If one applies a "sale must cause injury" rule, the plaintiff may beat the directed verdict because "but for" the sale of the car, this injury may not have occurred. Yet it is quite unfair to make a seller pay for injuries that resulted from inattentive driving.

Several commentators suggest that in strict products liability, it is the sale of the product that must cause injury.[26] They avoid the overbreadth problem

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21. Cunningham v. Charles Pfizer & Co., 532 P.2d 1377 (Okla. 1975). If not for the sale of the product, the injury would not have occurred.

22. *Id.* As the court explained, to prove that "failure to warn" was a cause of injury, a plaintiff must establish that if adequately warned, plaintiff would not have used the product. *Id.* at 1382.

23. 11 Utah 2d 54, 354 P.2d 1064 (1960).

24. *Id.* at 57, 354 P.2d at 1066. The defect consisted of a hole in the line between the tank and the airlift mechanism that led to the right front wheel. The escape of air apparently caused the settling of the car when the car was not running. When the motor was started, the front portion would regain its prior level. Thus, the court held that the defect was not a possible cause of the accident. *Id.* at 55, 354 P.2d at 1064.

25. *Id.* at 56, 354 P.2d at 1065. Plaintiff's own testimony indicated that he was inattentive at the time of the accident. *Id.*

26. *See, e.g.,* Green, *Strict Liability Under Sections 402A and 402B: A Decade of Litigation,* 54 TEX. L. REV. 1185 (1976); Owen, *The Highly Blameworthy Manufacturer: Implications on the Rules of Liability and Defense in Products Liability Actions,* 10 IND. L. REV. 769, 783-84 (1977); Phillips, *Product Misrepresentation and the Doctrine of Causation,* 2 HOFSTRA L. REV. 561 (1974).

by examining the plaintiff's use of the product as part of the causation issue. Their argument is that sellers, through the marketing process, lead consumers to behave in certain ways. If consumers are injured as a result of using the product in a manner that the sellers' advertising indicated was expected, then the sale of the product has caused the injury.[27]

This theory works well when the seller has used the marketing process to mislead users and when someone is injured while using the product in its normal manner. The theory, however, implies that the sale did not cause the injury when the marketing material was silent on use of the product[28] and when the user has misused or negligently used the product. A rule that permits sellers to avoid liability whenever the plaintiff was negligent in the use of the product would mean that contributory negligence is a complete defense; a position which is rejected by all courts.[29] Some commentators avoid this problem by eliminating cause-in-fact from the inquiry.[30] Professor Green, for example, calls arguments based on "but for," "take your eye off the ball" arguments.[31] His point appears to be that "but for" is a worthless exercise because it forces the court to focus on something that did not happen, rather than on something that did happen.[32]

By removing "but for" from the inquiry, Professor Green appears to make causation purely a matter of policy. Causation is usually proved by a two-part analysis.[33] First, courts determine whether there is a factual

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27. Green, *supra* note 26, at 1190-91 (discussing the representational theory of products liability); Phillips, *supra* note 26, at 562-63 (explaining that the marketing of the product creates the expectations of the ordinary consumer and such expectations determine the relevance of plaintiff's action). Both professors agree with the representational theory first propounded by Professor Shapo. *See* Shapo, *A Representational Theory of Consumer Protection: Doctrine, Function and Legal Liability for Product Disappointment,* 60 VA. L. REV. 1109 (1974).

28. Those who favor the representational theory would probably dispute this idea, based on the notion that all products come with an implied representation that they are safe for all reasonable uses. The reasoning would be that the marketing is never silent.

29. Comment n to RESTATEMENT (SECOND) OF TORTS § 402A (1965) states that contributory negligence is not a defense to strict liability, but assumption of the risk is. For a general description of how courts have applied comment n, see Epstein, *Products Liability: Defenses Based on Plaintiff's Conduct,* 1968 UTAH L. REV. 267 (1968); Noel, *Defective Products: Abnormal Use, Contributory Negligence and Assumption of the Risk,* 25 VAND. L. REV. 93 (1972).

The recent trend has been to apply comparative fault instead of comment n. *See, e.g.*, Daly v. General Motors Corp., 20 Cal. 3d 725, 740-41, 575 P.2d 1162, 1171, 144 Cal. Rptr. 380, 389 (1978) (the *Daly* court cited sixteen law review articles that favor the use of comparative negligence in strict liability).

30. *See, e.g.*, Green, *Duties, Risks, Causation Doctrines,* 41 TEX. L. REV. 42, 68 (1962) (describing cause-in-fact arguments as "take your eye off the ball" arguments); Phillips, *supra* note 26, at 571; Thode, *The Indefensible Use of the Hypothetical Case to Determine Cause in Fact,* 46 TEX. L. REV. 423-35 (describing the "but for" test as misleading).

31. Green, *supra* note 30, at 68.

32. Professor Phillips explained Professor Green's reasoning as use of a situation that did not occur to obscure the issue of causation. Phillips, *supra* note 26, at 571.

33. *See* PROSSER & KEETON, *supra* note 10, § 41, at 263-65. Professor Owen, *supra* note 26, at 777-78 stated:

> In any discussion of the role of causation in tort law, it is helpful to isolate the

relationship between the alleged cause and the result. This is usually done by applying the "but for" test. If "but for" the alleged cause the injury would not have occurred, then the alleged cause is a cause-in-fact of the injury.[34] If a cause-in-fact relationship exists, courts look to policy to determine whether a particular factual cause should bear responsibility for the injury, that is, whether it is the proximate cause.[35] Professor Green's theory, by eliminating "but for" from the inquiry, would thus make causation purely a matter of policy.[36]

Professor Phillips agrees with Professor Green's reasoning on causation[37] and makes clear that he views causation as purely a matter of policy by stating that one should find causation whenever the reasonable consumer would have been injured.[38] By focusing on whether a reasonable person in the position of the plaintiff would have been injured, Professor Phillips' approach stretches causation well beyond its normal meaning.[39] In a "failure to warn" case, a plaintiff who was fully aware of the danger and intentionally ignored it, may collect if a reasonable person aware of the danger would not have used the product. Professor Phillips would seem to hold that the injury was caused by the sale of the product, just as the injury to an innocent, unknowing consumer. One has to ignore what really happened to conclude that the sale *caused* the injury, especially where the purchaser intended to use the product to injure and the seller had no reason to know that the purchaser intended to cause injury. The intentional wrongdoer is *a* cause, if not *the* cause, of the injury and therefore the wrongdoer's role should not be ignored when trying to determine what caused the injury.

Professor Phillips suggests that defenses such as unforeseeable misuse and assumption of the risk can prevent the intentional wrongdoer from collecting.[40] This may be true, but it seems rather circuitous to create a problem

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issue of cause in fact from that of proximate causation. While the two concepts frequently overlap and are often treated indiscriminately by the courts, precise analysis requires that they be examined separately.

34. PROSSER & KEETON, *supra* note 10, § 41, at 266. *See also* A. BECHT & F. MILLER, THE TEST OF FACTUAL CAUSATION (1969); H.L.A. HART & A. HONORE, CAUSATION IN THE LAW (1959); Malone, *Ruminations on Cause-In-Fact*, 9 STAN. L. REV. 60 (1956).

35. *See* PROSSER & KEETON, *supra* note 10, § 42, at 72.

36. For a good discussion of the relationship between cause-in-fact and proximate cause, see Wright, *Actual Causation v. Probabilistic Linkage: The Bane of Economic Analysis*, 14 J. LEGAL STUD. 435 (1985) (arguing that the chief problem with economic theories of causation is their omission of factual causation, leaving causation as purely a matter of policy).

Some courts and commentators have suggested a "substantial factor" test instead of the "but for" test. Prosser and Keeton describe this as a test "concerning legal significance rather than factual quantum." PROSSER & KEETON, *supra* note 10, § 41, at 267. This test is guided by policy much more than by the "but for" test.

37. Phillips, *supra* note 26, at 571 (quoting Professor Green's article).

38. *Id.* at 574 (reasoning that reliance on the reasonably prudent consumer keeps the court's focus appropriately on standards of conduct).

39. Professor Phillips is clearly aware that he is presenting a causation analysis that differs from the traditional analysis. He argues that this is appropriate as a matter of policy. *Id.* at 561.

40. *Id.* at 575-80.

by ignoring what actually happened and solve it later, when one could prevent the problem by beginning his analysis with what actually happened. Moreover, if multiple causes exist, it will be fairer to apportion damages according to how much each contributed to the injury rather than to focus on defenses.

Professor Phillips articulates a policy basis for focusing on what a reasonable person would do rather than on what happened in the case at hand.[41] He argues that the policies underlying products liability causes of action, especially the policy of providing the manufacturer with incentives to produce safer products, would be undermined if one focused on the plaintiff's conduct.[42] Tort law has always had two sets of goals: the societal goals of compensating injured parties and preventing injuries and the goals of fairness between parties. The substantive elements of the cause of action in products liability emphasize the societal goals.[43] Professor Phillips suggests that it would frustrate the goals of products liability law to permit the causation issue to focus on what happened in the case at hand.[44]

Professor Phillips argues that the causation analysis should focus on the societal rather than the individual level. In warning cases, this means that because the defective warning is likely to have induced some sales and thus increased the number of people injured by the product, the sale of the product with the defective warning has caused injury. Since it will be very difficult to determine which sales were induced by the defective warning, the goals of compensation and risk avoidance can be best furthered by providing a remedy to every purchaser whenever a reasonable purchaser would not have purchased the product. Professor Phillips concludes that one should not consider the individual case because to do so would require speculation by the jury and would probably result in manufacturers paying for fewer injuries than they caused.[45]

Professor Phillips' reasoning leads to the conclusion that some plaintiffs who ignored the warnings were injured because of an inadequate warning. The reason for this result, according to Professor Phillips, is that the product that lacks adequate warnings places all purchasers at greater risk, and therefore all who are injured by the product ought to be permitted to recover.[46]

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41. *Id.* at 578-80. His reasoning implies that if the warning is inadequate, defendant is a wrongdoer and it would be inappropriate to permit the wrongdoer to escape liability when so many are at risk.

42. *Id.* at 579.

43. *See, e.g.,* Bohlen, *Affirmative Obligations in the Law of Torts* (pts. 2 & 3), 53 U. PA. L. REV. 273 (1905) (discussing the two competing sets of goals).

Professor Phillips compares the refusal to look at causation in warning cases with the exclusionary rule used in criminal cases. Phillips, *supra* note 26, at 579 n.66 (citing Mapp v. Ohio, 367 U.S. 643, 658-60 (1961) (evidence acquired by unlawful search and seizure cannot be used in a criminal trial)).

44. Phillips, *supra* note 26, at 579.

45. *Id.* at 578.

46. *Id.* at 579 n.66 ("[t]he advantages of encouraging adequate warnings by holding the defendant liable may outweigh the issue of the plaintiff's lack of awareness . . .").

Similar reasoning has led many courts to adopt a "sale must cause injury" rule in the form of a presumption of causation.

II. THE PRESUMPTION OF CAUSATION

A number of courts hold that in "failure to warn" cases plaintiffs can take advantage of a presumption that the failure to warn caused the injury.[47] This presumption is a subcategory of the "sale must cause injury" group because it means that the plaintiff can prove causation by proving that the injury resulted from the defendants' sale of the product. The case of *Reyes v. Wyeth Laboratories*[48] illustrates this point.

In *Reyes,* plaintiff's daughter contracted polio shortly after receiving two drops of oral polio vaccine manufactured by the defendant. The plaintiff claimed that the vaccine was defective because it was not accompanied by any warnings regarding the potential dangers associated with it. The jury found for the plaintiff, and the defendant appealed, arguing that the plaintiff had failed to provide sufficient evidence that the failure to warn caused the injury.[49] The court of appeals affirmed the jury verdict, reasoning that in "failure to warn" cases, a presumption arises that an adequate warning would have been read and heeded.[50] The court interpreted "read and heeded" to mean that a person warned of the risk would not use the product.[51] The court reasoned that such a presumption was necessary because it would be unfair to deny recovery when the plaintiff was injured as a result of using a product marketed by the defendant in the manner suggested by the defendant.[52] Thus, although the court spoke in terms of the defect causing the injury, the presumption effectively meant that if the sale caused the injury, the court will find that the defect did cause the injury.

The *Reyes* court used the risk inherent in the product to establish the duty to warn and to raise the presumption that the failure to warn caused the injury. The court's conclusion on causation was thus based upon the product's propensity to injure some users. The court was correct in using the risk of injury to find a duty to warn. The gap in the court's reasoning, however, lies in its use of the risk that the product will injure some users

47. *See, e.g.,* Petty v. United States, 740 F.2d 1437 (8th Cir. 1983); Reyes v. Wyeth Laboratories, 498 F.2d 1264 (5th Cir. 1974), *cert. denied,* 419 U.S. 1096 (1974); Nissen Trampoline Co. v. Terre Haute First Nat'l Bank, 332 N.E.2d 820, 826 (1975), *rev'd on other grounds,* 265 Ind. 457, 358 N.E.2d 974 (1976).

48. 498 F.2d 1264 (5th Cir. 1974), *cert. denied,* 419 U.S. 1096 (1974).

49. *Id.* at 1270.

50. *Id.* at 1281-82. The court relied on the RESTATEMENT (SECOND) OF TORTS § 402A comment j (1965), which states that "where warning is given, the seller may reasonably assume that it will be read and heeded."

51. The court stated that one warned of the risk would "act to minimize the risks." 498 F.2d at 1281. With a product like this, the only way to reduce the risk is to avoid using the product.

52. *Id.* at 1274-75.

to establish that the failure to warn caused *this* injury. The court presumed that whenever a duty to warn exists, one who is warned of the product's propensity to injure will not use the product.[53] This presumption, however, is likely to reach the wrong result. There are many products that have a propensity to injure, and thus the manufacturers of these products have a duty to warn. Yet many consumers find that the value of the product exceeds those risks and purchase the product. The cancer warning on diet soft drinks and the warning on cigarettes are two examples of warnings that are frightening and yet have not impeded consumption. It is erroneous to use the likelihood that a product will cause some injury to presume that the failure to warn caused a particular injury.

This focus on the product's propensity to injure is also troubling because it makes every products liability case a warning case, thereby removing the causation element from all products liability cases. The *Reyes* court reasoned that any time a product has a propensity to injure, the manufacturer has a duty to warn.[54] Every product that is defectively designed or manufactured has a propensity to injure. The manufacturer, therefore, has a duty to warn in all such cases. Basing the presumption of causation on the product's propensity to injure could thus make every products liability case a warning case. Plaintiffs, consequently, would be wise to allege failure to warn along with design and manufacturing defects in order to avoid the burden of proving causation.

The presumption of causation effectively removes causation from the case because saying that a reasonable person who is aware of the dangers will not use the product is merely to say that the product is defective. The *Reyes* court said that in warning cases one should assume that an adequate warning would be read and heeded. The court interpreted this to mean that a reasonable person who is aware of the danger would not use the product. The *Restatement* states that a product is defective if it is more dangerous than the reasonable consumer would expect.[55] Many courts define "defective product" from the seller's perspective, namely, a product is defective if a reasonable seller aware of the danger will not sell it.[56] In either case, the finding of a defect often implies that a reasonable person who is aware of the defect will not use the product.[57] The presumption of causation is thus usually a repetition of the conclusion that the product is defective.

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53. *See supra* note 51 and accompanying text.

54. 498 F.2d at 1273.

55. RESTATEMENT (SECOND) OF TORTS § 402A comments g & i (1965).

56. *See, e.g.*, Phillips v. Kimwood Machine Co., 269 Or. 485, 525 P.2d 1033 n.5 (1974) (citing Wade, *On the Nature of Strict Tort Liability for Products*, 44 MISS. L.J. 825, 834-35 (1973)); Keeton, *Manufacturer's Liability: The Meaning of "Defect" in the Manufacture and Design of Products*, 20 SYRACUSE L. REV. 559, 568 (1969); Keeton, *Products Liability—Some Observations About Allocation of Risks*, 64 MICH. L. REV. 1329, 1335 (1966).

57. This is implicit in the risk/utility analysis. A reasonably prudent person would not use a product if the risks of use outweigh the benefits.

When the presumption of causation is not a repetition of the conclusion that the product is defective, its results are likely to be wrong. Some products create such a slight risk of harm that they are not likely to be defective in design. The vaccine in *Reyes,* for example, presented a risk of harm to fewer than one person per million users.[58] The plaintiff did not claim that this risk of harm constituted a design defect because the usefulness of the product greatly outweighed the risk of harm. The court used this non-defective propensity to harm to conclude that the product was defective because of the failure to warn, and that the failure to warn caused the injury. The court *presumed* that the propensity to harm, which did not constitute a design defect, would prevent the reasonable consumer who is aware of the danger from purchasing the product. The court therefore assumed that the propensity to harm, which the plaintiff did not claim to be a defect, nonetheless constituted a defect. The court, in other words, *presumed* that a risk that the plaintiff felt would not prevent people from purchasing the product would have prevented the plaintiff from doing so.

Presumptions are usually based on the great probability that one set of facts will follow from another.[59] A presumption is therefore stronger than a reasonable inference.[60] In the case of the non-defective propensity to injure, the risk is not likely to deter most users because if the risk were so great, it would not be non-defective. If the risk would not deter most users, it is not reasonable to infer that any individual would be deterred by knowledge of the risk. In such cases, a presumption that all would be deterred is extremely unfair.

If the warning is not likely to affect the plaintiff's action, and thus not likely to be a cause of the injury, why do courts such as the Fifth Circuit in *Reyes* use it? Three possible reasons come to mind. First, is the failure to distinguish among the different types of warnings. Second, is the failure to distinguish among different types of products liability cases. Third, is the policy argument made by Professor Phillips.

There are two types of "failure to warn" cases: "failure to warn" cases in which an adequate warning tells the user how to use the product safely (e.g., "Flammable - Do Not Use Near Fire"), and "failure to warn" cases in which the warning provides information about the risk but does not tell the reader how to use the product and avoid the risk (e.g., "Cigarette smoking may be hazardous to your health").[61] In the first type, the presumption that the warning would be heeded makes sense. Most people who

58. 498 F.2d at 1274.

59. *See* McCORMICK ON EVIDENCE 969 (Cleary 3d ed. 1984).

60. *Id.* at 965.

61. Twerski, *The Use and Abuse of Warnings in Products Liability-Design Defect Litigation Comes of Age,* 61 CORNELL L. REV. 495, 519 (1976). Finn v. G.D. Searle & Co., 35 Cal. 3d 691, 699, 677 P.2d 1140, 1152, 200 Cal. Rptr. 870, 875 (1984) is a case in which the court properly distinguished the two types of warning cases.

are aware of a risk and of a simple means of avoiding it will choose to avoid it. In the second type of warning case, that is not true. The sole purpose of such a warning is to permit the consumer to assess the risk and decide whether or not to use the product. The existence of a class of warning cases for which the presumption is reasonable, and a failure to recognize different classes of warning cases, could thus lead courts to apply the presumption in all warning cases.

The failure to distinguish among different types of products liability cases results from the fact that in most products liability cases causation is obvious. In *Greenman v. Yuba Power Products, Inc.*,[62] for example, the alleged defect was the wood lathe's propensity to shoot boards. When the plaintiff was struck by one of the boards, the causal link between the defect and the injury was not questioned. Indeed, whenever the risk created by the product and the risk created by the alleged defect are the same, the plaintiff's proof that the injury was caused by the risk of harm inherent in the product is sufficient to prove causation.[63] In "failure to warn" cases, when the risk created by the product and the risk created by the alleged defect are separable, one might view the plaintiff's requirement of proof that the warning caused the injury as a burden that the plaintiff should not have to carry because other products liability plaintiffs are not required to do so.[64] This failure to recognize that in some products liability cases the defect and the risk are separable could lead courts to conclude that it is unfair to permit a defendant whose product has caused injury to claim that the failure to warn did not.

The presumption of causation thus uses misconceptions regarding products liability law to, in effect, remove causation from the case. The presumption is often unfair because it will require manufacturers to pay for more injuries than they caused. Also, basing causation on the reasonable user ignores plaintiff's conduct, which is often an important factor in causing the injury.

Professor Phillips' presumption is less unfair than the presumption used by the *Reyes* court. He would presume causation only when a reasonable person aware of the danger would not use the product. He would not use a presumption, therefore, when it would likely reach the wrong result.[65] His theory, however, still requires some defendants to pay for injuries they did not cause. He justifies this unfairness by arguing that the societal danger created by hazardous products outweighs the unfairness to some individual defendants.

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62. 59 Cal. 2d 57, 377 P.2d 897, 27 Cal. Rptr. 697 (1962).

63. *Cf.* R. KEETON, LEGAL CAUSE IN THE LAW OF TORTS 3, 10 (1963) (suggesting that liability should result only when the injury is within the risk created by defendant's tortious conduct).

64. Professor Green certainly sees it as an additional burden. *See supra* note 30 and accompanying text; *see also* Green, *supra* note 26, at 1211.

65. *See supra* notes 38-42 and accompanying text. If the reasonable consumer would avoid use of the product, the presumption will reach the correct result in most cases, but clearly not in all cases.

Professor Phillips' reasoning is similar to the reasoning that Judge Weinstein rejected in *In re Agent Orange Product Liability Litigation.*[66] The plaintiffs in the *Agent Orange* case argued that the risk created by Agent Orange was sufficient proof of both the dangerousness of the product and the causal relationship between the product and the injuries. Judge Weinstein rejected this theory, claiming that it confused the tort system with government regulatory systems. Regulators, he noted, can take action based on a slight risk to the public. The tort system, however, requires greater risk and will not deem a product dangerous unless it is more likely than not that it causes injury. In addition, proof that a product causes injury is never sufficient to prove that the product caused injury to any particular individual.[67] As a result, the existence of risk to society in general is never sufficient to find tort liability. To find such liability, Judge Weinstein concluded, would violate the basic principle that "the law believes it unfair to require an individual to pay for another's tragedy unless it is shown that it is more likely than not that he caused it."[68]

Professor Phillips and Judge Weinstein are correct in recognizing that the question of what causes injury is difficult when several possible causes exist. Both err, however, in assuming that courts will reach the most equitable result by choosing from one of the several causes. The upcoming discussion of comparative causation will show that courts can reach more equitable results in cases with multiple causes by apportioning the damages according to the causal impact of each tortious cause.[69]

III. Defective Condition as Cause of Injury

Many courts hold that in strict products liability the defective condition

66. 597 F. Supp. 740, 781 (E.D.N.Y. 1984). *See also* Elliott, *Goal Analysis versus Institutional Analysis of Toxic Compensation Systems,* 73 Geo. L.J. 1357, 1374 (1985).

67. 597 F. Supp. at 780-83. Professor Elliott agrees with the above distinction, but sees three possible systems of recovery: the tort system, an administrative system and legislation. He sees the "evidentiary requirements" for case by case litigation as more demanding than the other two, but recognizes that the "evidentiary requirements" for administrative action can vary greatly. Elliott, *supra* note 66, at 1374.

68. 597 F. Supp. at 781. Judge Weinstein cited the following authorities for that proposition:

> *See, e.g., Ayers v. Jackson Tp.,* 189 N.J. Super. 561, 461 A.2d 184, 187 (N.J. Super. Ct. Law Div. 1983) (increased risk of exposure to contaminated water not enough for tort liability because of "speculative" nature of proof); *Pierce v. Johns-Manville Sales Corp.*, 296 Md. 656, 464 A.2d 1020, 1026 (1983) (applying 50% probability rule to asbestos exposure). *See generally* ALI-ABA, Symposium on Environmental Law sponsored by the Environmental Law Institute and the Smithsonian Institute, February 23-25, 1984, Washington, D.C.; Grad, Hazardous Waste Victim Compensation: The Report of the § 301(e) Superfund Study Group, 13 Envtl. L. Rep. 10234 (1983); Office of Science and Technology Policy, Chemical Carcinogens: Review of the Science and Its Associated Principles, 49 Fed. Reg. 21594, 21596 (1984); D.G. Barnes, Regulatory Actions in Dioxins and Related Compounds, *in* R.E. Tucker, A.L. Young & A.P. Gray, *Human and Environmental Risks of Chlorinated Dioxins and Related Compounds* 23-31 (1983).

Id.

69. *See infra* notes 150-60 and aecompanying text.

of the product must cause injury. This rule easily avoids the overbreadth problem illustrated by *Price v. Ashby's.*[70] This rule also fits in well with the move from negligence to strict products liability. Negligence cases focus on the defendant's action: did the defendant act negligently and, if so, did the negligent act cause the plaintiff's injury? The move from negligence to strict products liability shifts the focus from the defendant's action to the condition of the product:[71] was the product defective? When the focus of the case shifts from the defendant's action to the condition of the product, it seems logical to change what must cause injury from the defendant's action to the condition of the product.

The rule that the defective condition must cause injury also has an intuitive appeal. One would not complain about the condition of a product unless he felt that the problem with the product caused the injury. Moreover, in most products liability cases, the relationship between the alleged defect and the injury is obvious. The product is found to be defective because it has the propensity to cause the injury that occurred. In *Escola v. Coca Cola Bottling Co.,*[72] where the plaintiff was injured by an exploding Coke bottle, the defect was whatever made the bottle likely to explode. In *Greenman v. Yuba Power Products, Inc.,*[73] where the plaintiff was hit by boards shot out of a wood lathe, the defect was whatever made the lathe shoot out the boards. In such cases it is difficult to raise the question of what must cause injury.

The weakness in the "defective condition must cause injury" rule, however, is that it is underinclusive. There are cases in which the defect may not have caused the injury, but, because the defendant's product has caused injury, one may want to hold the defendant responsible for the injury. *Reyes*[74] and *Cunningham*[75] may be examples of this type of case. In these cases, both defendants manufactured products that contained a risk of injury

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70. 11 Utah 2d 54, 354 P.2d 1064 (1960).

71. The court in *Phillips v. Kimwood Machine Co.* stated: "In a strict liability case we are talking about the condition (dangerousness) of an article which is sold without any warning, while in negligence we are talking about the reasonableness of the manufacturer's actions in selling the article without a warning." 269 Or. 485, 498, 525 P.2d 1033, 1039 (1974).

Some commentators have argued that the shift in focus from the defendant's action to the condition of the product is the main reason for strict liability. Plaintiffs are often unable to prove acts of negligence, but proving a defect is possible and should be sufficient to find the manufacturer liable. *See, e.g.,* Calabresi, *Some Thoughts on Risk Distribution and the Law of Torts,* 70 YALE L.J. 499 (1961); Keeton, *Products Liability—Liability Without Fault and the Requirement of a Defect,* 41 TEX. L. REV. 855 (1963); Shapo, *supra* note 27.

72. 24 Cal. 2d 453, 150 P.2d 436 (1944). The court used res ipsa loquitur to find negligence on the part of the manufacturer. Justice Traynor, concurring, argued that the product was defective and that the defect ought to be a sufficient basis for liability. *Id.* at 461, 150 P.2d at 440.

73. 59 Cal. 2d 57, 377 P.2d 897, 27 Cal. Rptr. 697 (1962) (the court found that a defect in design caused the wood lathe to shoot boards).

74. Reyes v. Wyeth Laboratories, 498 F.2d 1264 (5th Cir. 1974), *cert. denied,* 419 U.S. 1096 (1974).

75. Cunningham v. Charles Pfizer & Co., 532 P.2d 1377 (Okla. 1975).

to some users. In each case the normal nse of the product resulted in injury to an innocent user, who subsequently sued the manufacturer of the product. It is difficult to see why the causation issue is any different here than in *Escola* and *Greenman.*

The causation issue in the warning cases is different because the alleged defect and the product's propensity to injure appear to be separate. The design of the product is what inakes the product likely to injure, while the alleged defect is the way the product is marketed.[76] This is true in all warning cases where the purpose of the warning is to permit consuiners to inake an informed choice about the use of the product. When the product's propensity to injure and the alleged defect are different, one might assuine that the plaintiff does not believe that the product's propensity to injure is a defect in the product. It may be, for exainple, that the risk of getting polio from the vaccine is so slight that the risk would not constitute a design defect in the vaccine. Those courts that find no causation when the product's propensity to injure caused the injury, but the defective warning did not, could be reasoning that if the propensity to injure is not a defect, it is not relevant in determining responsibility for the injury.

Because tort law requires more than a showing of causation to create liability,[77] innocent causes are not usually considered when one is trying to determine liability.[78] Refusing to consider the non-defective propensity to injure when determining the cause of injury in "failure to warn" cases, however, may be erroneous for two reasons. First, the plaintiff's description of the defect should not be permitted to control the determination of whether the propensity to injure is innocent. Second, the propensity to injure and the defect may not actually be separable.

If the plaintiff's description of tlie defect can determine whether the propensity to injure is innocent, the result will be an increase in the nuinber of types of defects alleged by plaintiffs. Section 402A of the *Restatement (Second) of Torts* speaks of defective conditions without ever describing types of defective conditions.[79] Since the adoption of section 402A, however, courts have recognized three distinct types of defects: manufacturing defects,

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76. In *Reyes,* for example, the product design that was likely to cause injury was the use of the live polio virus in the vaccine. The alleged defect was the failure to warn. The live polio virus unquestionably caused the injury; whether the failure to warn caused the injury was a difficult question. 498 F.2d at 1264.

77. In products liability, courts require sale of a defective product, or negligence, in addition to causation. One commentator has suggested that a rule of strict liability ought to be based solely on proof of causation. *See* Epstein, *supra* note 4.

78. *Cf.* Twerski, *The Many Faces of Misuse: An Inquiry Into the Emerging Doctrine of Comparative Causation,* 29 MERCER L. REV. 403, 435 (1978) (questioning whether a nonculpable cause can be considered in apportioning damages among causes). *See also* Wright, *supra* note 4 (arguing that only the tortious aspect of defendant's conduct ought to be considered).

79. *See generally* RESTATEMENT (SECOND) OF TORTS § 402A & official comments (1965). No mention is made of types of defects.

design defects and marketing or warning defects.[80] While courts have not yet gone beyond these three types of defects, nothing prevents them from doing so in the future.

If strict products liability is described as selling a product that contains an unreasonable risk, or selling a product that contains a greater risk than a reasonable consumer would expect, the development of a design/marketing defect seems reasonable. In some cases, the risk inherent in the design of a product is not great enough to constitute a defect. Yet the marketing scheme, while not creating a new risk of injury, enhances the existing risk either by not warning of, or by misrepresenting, the level of risk. As a result of the marketing scheme, then, the risk inherent in the product is unreasonable or greater than the reasonable consumer would expect.[81] In this case there may not be a design defect, but there is a marketing and a design/marketing defect; design/marketing, because the risk inherent in the design, while not sufficient to be called a defect, is a part of the marketing defect. It would seem, then that creative pleadings that add to the number of types of defects could overcome the problem created by the "defect must cause injury" rule.

The description of the design/marketing defect should make clear that the product's propensity to injure cannot always be separated from the marketing defect. The marketing defect could not exist without this propensity to injure, and a product with a marketing defect is dangerous only because of the combination of the propensity to injure and the marketing problem. It is thus erroneous to treat this propensity to injure that is not a defect as if it were irrelevant. The "defect must cause injury" rule leads courts to treat these non-defective, injury-causing factors as if they were irrelevant. This rule consequently leads courts to omit from the causation discussion that aspect of the product that had the most to do with causing injury.

The "defect must cause injury" rule will reach fair results in most cases. Some modification of the rule is needed, however, to avoid the unfairness that results from requiring courts to treat a product's inherent propensity to injure as irrelevant.

The design/marketing defect is not likely to remedy this problem because it will be viewed as problematic by both the plaintiffs' and defendants' bars, who would like to see the product's propensity to injure as irrelevant. The

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80. *See, e.g.*, PROSSER & KEETON, *supra* note 10, § 99, at 695 (listing the three types of defects). Dean Wade has suggested that the three types of defects corresponds to the three actions that the plaintiffs alleged to be the basis of the manufacturer's negligence—negligence in manufacture, negligence in design and negligence in failure to warn. Wade, *supra* note 56, at 836-37.

81. Leichtamer v. American Motors Corp., 67 Ohio St. 2d 456, 424 N.E.2d 568 (1981) illustrates this point. Plaintiffs sought reeovery for enhanced injuries sustained when the Jeep CJ-7 they were passengers in rolled over. The court used defendant's advertising to find that the design was unreasonably dangerous. The CJ-7 was advertised as a rugged vehicle, safe for off-road use. Television advertisements showed the CJ-7 being driven in a dangerous manner similar to the way that plaintiff drove it. The advertisements increased the risk of injury from the product. *Id.*

defendants' bar wants to view the propensity to injure as irrelevant because, as such, plaintiffs will have a great deal of difficulty proving causation in "failure to warn" cases. The plaintiffs' bar wants to view the propensity to injure as irrelevant because examination of the overall merits of the product is often likely to shed favorable light on the manufacturer.

The dispute regarding the relevance of the propensity to injure is a manifestation of the continuing debate over the scope of the manufacturer's duty in strict liability. The issue is whether the manufacturer has a duty to:

(1) make a defect-free product;

(2) make a defect-free product *or* warn of any factors that may be defective; or

(3) make a defect-free product *and* warn of any potential risks.

The plaintiffs' bar is likely to choose answer *3*. The defendants' bar is likely to choose answer *2*. The above analysis, by showing that the product and the warning cannot really be separated, leads to answer *1*.

IV. THE PRODUCT AS CAUSE OF INJURY

A rule that requires the product to be the cause of the injury[82] would avoid both the overbreadth of the "sale must cause injury" rule and the underinclusiveness of the "defect must cause injury" rule. The overbreadth problem would be avoided in the same way that the "defect must cause injury" rule avoided it, and the underinclusiveness problem would be avoided by using all the risks inherent in the product to determine whether the product caused the injury. The rule, however, has been criticized for not making clear what must cause injury and for being too pro-plaintiff. The most common criticism of the "product must cause injury" rule is that it does not appear to require that there be something wrong with the product.[83] And if it does require that something wrong with the product cause the injury, critics ask: how does this rule differ from a rule that requires that the defect (something wrong with the product) cause the injury? The rule also is seen as pro-plaintiff because if the plaintiff can prove causation without proving a defect, it will be very difficult for the defendants to show that this product that caused the injury is not somehow defective.[84]

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82. The California Supreme Court adopted such a rule in Cronin v. J.B.E. Olson Corp., 8 Cal. 3d 121, 133, 501 P.2d 1153, 1162, 104 Cal. Rptr. 433, 442 (1972) (stating that a seller "should be [held] liable for all injuries proximately caused by any of its products . . ."). The rule was modified in Barker v. Lull Engineering Co., 20 Cal. 3d 413, 573 P.2d 443, 143 Cal. Rptr. 225 (1978). Pennsylvania uses a similar rule. *See infra* notes 120-25 and accompanying text.

83. *See, e.g.*, Fischer, *Products Liability—The Meaning of Defect*, 39 MO. L. REV. 339 (1974); Keeton, *Product Liability and the Meaning of Defect*, 5 ST. MARY'S L.J. 30 (1973); Wade, *supra* note 56.

84. *See, e.g.*, R. EPSTEIN, MODERN PRODUCTS LIABILITY LAW 80-85 (1980) (arguing that *Barker v. Will Engineering* makes every product-related injury presumptively actionable). *Cf.* Schwartz, *Forward: Understanding Products Liability*, 67 CALIF. L. REV. 435, 469 (1979)

The California Supreme Court has made several attempts at fashioning a "product must cause injury" rule. In *Cronin v. J.B.E. Olson Corp.*,[85] the plaintiff objected to jury instructions that defined "defect" as anything that made the product "unreasonably dangerous." The court agreed, reasoning that "unreasonably dangerous" sounded like negligence and not strict liability. The court concluded that the rule in strict liability cases should be that a seller "should be liable for all injuries proximately caused by any of [his] products which are adjudged 'defective'."[86] The only attempt made by the *Cronin* court to define "defect" came in a footnote that stated that the "cluster of useful precedents" could provide a sufficient basis for deciding which products were defective.[87] The commentary on *Cronin* was mostly critical and generally complained that the court had failed to provide any definition of the term "defect."

In *Barker v. Lull Engineering Co.*,[88] the California Supreme Court again addressed the question of definition of "defect" and again included causation in its definition.[89] The court stated that "a product is defective . . . if the plaintiff proves that the product's design proximately caused injury and the defendant fails to prove . . . that on balance the benefits of the challenged design outweigh the risk inherent in such design."[90] The *Barker* rule thus provides that the first step in proving a defect is proof of causation, and proof of causation then shifts the burden to the defendant to prove that the benefits of the design outweigh the risks.

Most commentary on *Barker* focuses on the shifting of the burden of proof.[91] One commentator argues that the shift in the burden of proof is

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(arguing that because plaintiffs will generally be interested in getting their cases before the jury first, *Barker* may have given plaintiffs a right that most will decline to exercise).

85. 8 Cal. 3d 121, 501 P.2d 1153, 104 Cal. Rptr. 433 (1972).

86. *Id.* at 133-34, 501 P.2d at 1162, 104 Cal. Rptr. at 442. In addition to sounding too much like negligence, the court rejected "unreasonably dangerous" because it appears to place an extra burden on the plaintiff: the burden of proving unreasonable danger in addition to the burden of proving defect. *Id.* at 134, 501 P.2d at 1162, 104 Cal. Rptr. at 443.

87. *Id.* at 134, 501 P.2d at 1162, 104 Cal. Rptr. at 442. In footnote 16 the court stated:

> We recognize, of course, the difficulties inherent in giving content to the defectiveness standard. However, as Justice Traynor notes, "there is now a cluster of useful precedents to supersede the confusing decisions based on indiscriminate invocation of sales and warranty law." (Traynor, [*The Ways and Meanings of Defective Products and Strict Liability*], 32 TENN. L. REV. 363, 373 [(1965)].

Id.

88. 20 Cal. 3d 413, 573 P.2d 443, 143 Cal. Rptr. 225 (1978).

89. The trial court had instructed the jury that to be defective, a product must be "unreasonably dangerous" and the plaintiff appealed, claiming that the *Cronin* decision made clear that such an instruction was erroneous. *Id.* at 417, 573 P.2d at 446, 143 Cal. Rptr. at 228.

90. *Id.* at 435, 573 P.2d at 457-58, 143 Cal. Rptr. at 239-40. The court explained that *Cronin* had made clear that "defect" may be defined differently in different contexts and that "unreasonably dangerous" may be an appropriate instruction for a manufacturing flaw. *Id.* at 427, 573 P.2d at 452, 143 Cal. Rptr. at 234. The court then adopted a risk/utility based rule for design defects. *Id.* at 434, 573 P.2d at 457, 143 Cal. Rptr. at 239, relying on Wade, *supra* note 56, at 831.

91. *See, e.g.*, Epstein, *Products Liability: The Search for the Middle Ground*, 56 N.C.L. REV. 643 (1978); Schwartz, *supra* note 84.

grossly unfair because it makes every product presumptively defective.[92] Others argue that the defendant should have the burden of proof because the defendant usually has greater resources and greater access to the design evidence.[93] Although most commentators analyze this burden of proof issue without attempting to explain what "design proximately caused injury" means, it seems that whether the burden shifting is fair depends in large part on how one interprets "design proximately caused injury."

Those who find the *Barker* rule to be unfair to defendants invariably interpret "design proximately caused injury" to require a very slight showing of causation. One commentator suggests that under *Barker,* one who cuts himself with a bread knife could get to a jury by alleging that the knife was defectively designed because it was sharp.[94] Sharpness of the knife can be seen as the cause of the injury because "but for" the sharpness, the plaintiff would not have been injured. The defendant would thus have the burden of proving that its design of the knife was risk beneficial. This argument assumes that the plaintiff's burden of proving causation is very slight and that the plaintiff's burden does not include some showing that a feasible alternative exists.

The assumption that all plaintiffs can get to the jury without any showing of a feasible alternative design has some case support. A better reading of the cases that follow *Barker,* however, provides that plaintiffs who are attacking a product for which the jury is not likely to be aware of the existence of a feasible alternative must provide evidence of a feasible alternative or they will fail on the causation issue. A comparison of *Campbell v. General Motors Corp.,*[95] and *Garcia v. Joseph Vince Co.,*[96] reveals why some plaintiffs will fail to show causation if they cannot show a feasible alternative design.

Campbell is the leading case for the proposition that the plaintiff need not show a feasible alternative design. Ms. Campbell was injured when a

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92. Epstein, *supra* note 91, at 651. Professor Epstein states that:

> The careful division of burdens in the second portion of the [*Barker*] test says that plaintiff need only show design *features* that might be implicated in the accident, leaving it to the defendant, at great expense, *routinely* to justify each feature as best he can. With this distribution of burden, the plaintiff can always show some way in which the product might have been changed in order to avert the accident, as it is always possible to generate some improvement at some price. . . . Complicated products create the greatest concern, as multiple defects can easily be invented by a skillful lawyer. All product related accidents have become presumptively actionable.

Id.

93. The Alaska Supreme Court, in Caterpillar Tractor Co. v. Beck, 593 P.2d 871 (Alaska 1979), saw this as a form of res ipsa loquitur. The court reasoned that the burden of proof shifts whenever the defendant had control of it. In a design defect case, the defendant never gives up control of the design of the product, hence it is always appropriate to shift the burden of proof. *Id.* at 886. *See also supra* text accompanying note 56.

94. Epstein, *supra* note 91, at 651.

95. 32 Cal. 3d 112, 649 P.2d 224, 184 Cal. Rptr. 891 (1982).

96. 84 Cal. App. 3d 868, 148 Cal. Rptr. 843 (1978).

bus in which she was riding took a sharp turn at a high speed, throwing her to the floor. She claimed that the bus was defectively designed because it did not have a bar to grab when the vehicle was rounding sharp curves. The only evidence the plaintiff provided was her description of the event and pictures of the bus; the trial court granted the defendant's motion for a nonsuit.[97] The California Supreme Court reversed, holding that in order to shift the burden under *Barker,* the plaintiff need only provide facts from which the jury could infer that the design of the product caused the injury.[98]

In *Garcia,*[99] the trial court nonsuited a fencer who claimed that a defect in his fencing mask had caused him to be struck in the eye with a blade. The nonsuit was based in part on plaintiff's failure to provide any evidence that a different mask design would have prevented this injury.[100] The *Garcia* court's reasoning is not clear, however, and its decision to require the plaintiff to show a feasible alternative has been criticized for being inconsistent with *Barker.*[101] *Garcia,* however, could be consistent with *Barker* in requiring plaintiff to show a feasible alternative design, because without some evidence of a feasible alternative, the jury would be unable to infer that "but for" that design, the injury would not have occurred. *Garcia,* therefore, could mean that while *Barker* makes clear that a feasible alternative design is part of proving defectiveness and therefore not part of the plaintiff's prima facie case, some plaintiffs will have to show a feasible alternative, not as part of defectiveness, but in order to raise the inference of proximate cause.

The distinction between *Campbell* and *Garcia* rests on what a jury could infer from the plaintiff's evidence. In *Campbell,* the plaintiff showed pictures of the bus. Some seats had "grab bars" or "hand rails" while others did not. A person with no special knowledge of bus design could infer that providing "grab bars" or "hand rails" for all seats might have prevented the accident.[102] In *Garcia,* the plaintiff provided no evidence that a better mask could have prevented the injury and no evidence from which a jury could have inferred the possibility of making a better mask.[103] If the plaintiff provides no evidence that a feasible alternative is possible, the jury lacks

97. 32 Cal. 3d at 117, 649 P.2d at 228, 184 Cal. Rptr. at 893-94. General Motors contended that plaintiff had failed to introduce evidence sufficient to establish that the bus was defective in design or that the alleged defect was the proximate cause of her injuries. *Id.*

98. 32 Cal. 3d at 119, 649 P.2d at 228, 184 Cal. Rptr. at 895.

99. 84 Cal. App. 3d 868, 148 Cal. Rptr. 843 (1978).

100. *Id.* at 877-79, 148 Cal. Rptr. at 848-49. The court stated that plaintiff must prove defective design, proper use of the product, proximate cause and that reasonable alternative designs are available. *Id.*

101. The court's statement that plaintiff must prove defective design is clearly inconsistent with *Barker.* Moreover, *Barker* listed feasible alternative designs as an element to be considered in determining whether a product is defective. *See* Note, *Manufacturers' Strict Liability for Injuries from a Well-Made Handgun,* 24 WM. & MARY L. REV. 467, 488-90 (1983) (rejecting *Garcia* as totally inconsistent with *Barker*).

102. 32 Cal. 3d at 116, 649 P.2d at 226, 184 Cal. Rptr. at 893.

103. 84 Cal. App. 3d at 877-79, 148 Cal. Rptr. at 848-49 (defendant contended that no design of the mask could have prevented the illegal blade from causing the injury).

evidence from which it can infer that "but for" the design of the product, this injury would not have occurred.

The *Campbell* court made this distinction clear in its discussion of *Truman v. Vargas*[104] and *McNeil v. Yellow Cab Co.*[105] In *McNeil,* the court held that no expert testimony was required for the jury to find that failure to wear a seatbelt was a cause of the plaintiff's injuries.[106] The *Truman* court, in contrast, held that expert testimony was required to prove that failure to wear a seatbelt caused injury to one who was injured in a car that crashed while moving at approximately forty miles per hour.[107] The *Campbell* court found that its case was more like *McNeil* than *Truman* because a lay person could understand the need for a "grab bar" much more easily than that person could determine whether a seatbelt could have been helpful in a high speed crash.[108] Thus, whether a plaintiff needs evidence of a feasible alternative to prove causation is determined by whether a jury could infer causation without such evidence.

Another distinction between *Campbell* and *Garcia* could be based on the intended or reasonably foreseeable use of the product. The *Garcia* nonsuit was based in part on the use of a non-regulation blade.[109] The use of a blade that was sharp enough to pierce any mask constituted an unintended or unforeseeable use of the product. In *Campbell,* on the other hand, the court reasoned that the jury should be permitted to determine the facts because the plaintiff was injured while using the product in an intended or foreseeable manner.[110] *Garcia* and *Campbell* consequently indicate that use of the product in a manner that is unintended or unforesceable can provide another basis for finding that the plaintiff failed to provide sufficient evidence that the product caused the injury.

In *Korli v. Ford Motor Co.*,[111] misuse of the product prevented the plaintiff's allegation of design defect from going to the jury. In *Korli,* a child was injured when she opened a rear-hinged car door while the car was moving. The plaintiff claimed that the design of the car caused the injuries because the car's rear-hinged doors made the car doors more likely to fly open. The court of appeals affirmed the nonsuit, reasoning that the plaintiff's use of the product (opening the door), not any design feature of the door,

104. 275 Cal. App. 2d 976, 80 Cal. Rptr. 373 (1969).

105. 85 Cal. App. 3d 116, 147 Cal. Rptr. 733 (1978).

106. *Id.* at 118, 147 Cal. Rptr. at 735. The court said that proximate cause of plaintiff's claimed injuries in that case was a matter of "such common knowledge that persons of ordinary education could reach an intelligent answer." *Id.*

107. 275 Cal. App. 2d at 983, 80 Cal. Rptr. at 377 (stating that because of the great force of the collision "the nonexpert could only guess" at what would have happened).

108. 32 Cal. 3d at 125, 649 P.2d at 231-32, 124 Cal. Rptr. at 899.

109. 84 Cal. App. 3d at 878, 148 Cal. Rptr. at 848.

110. 32 Cal. 3d at 126, 649 P.2d at 232, 184 Cal. Rptr. at 899.

111. 84 Cal. App. 3d at 895; Prod. Liab. Rep. (CCH) § 8340 (1978-79). The full text of the opinion is available only in the CCH Products Liability Reporter because the California Supreme Court, in an order affirming the decision in *Korli,* ordered that the case be removed from the California Appellate Reports.

was the cause of the injury.[112] The plaintiff in *Korli* failed to show that the product caused the injury because she used the product in such a way that no design of the product could have prevented the injury. *Korli* thus illustrates a second means of preventing a case from going to the jury under *Barker*. If the plaintiff's use of the product would have caused the injury regardless of the design of the product, then the design of the product was not the proximate cause of the injury.

Campbell and *Korli* combine to show that the plaintiff's use of the product is an important consideration when trying to determine whether a product caused injury. If the plaintiff's use indicates that the product could not have prevented this injury, then the product was not a cause of the injury.

This rule seems to have guided the plaintiff's pleadings and the court's decision in *Bates v. John Deere Co.*[113] Mr. Bates was injured while operating a cotton picking machine. When a stone got caught in the spindles which remove the cotton from the stalks, Mr. Bates tried to remove it with his foot. His foot became caught in the spindles, causing him serious injury. Mr. Bates sued the manufacturer, claiming that the cotton picking machine should have had a cutoff switch at ground level to reduce the seriousness of the injuries of those who become caught in the spindles.[114] The key element of his claim was that the failure to include such a device exacerbated, but did not cause, the injuries.[115] Mr. Bates could not claim that the product caused the injury because he admitted that no design of the product could prevent people from getting their feet caught in the spindles. Thus, because use of the product is an important factor in determining whether the product caused the injury, the plaintiff could only claim that the design aggravated his injuries, not that it caused them. The court recognized this distinction when it concluded that the "evidence overwhelmingly establishes a causal relationship between the absence of a cutoff switch near the picking heads and the *seriousness* of the injury suffered by plaintiff."[116]

The "product must cause injury" rule must mean that before making the determination of whether the product is defective, the plaintiff must prove that some aspect of the product caused the injury. The plaintiff's use of the product is an important factor in determining what caused the injury. If the plaintiff's act would have caused the injury regardless of the condition of the product, the plaintiff could not show that the product caused the

112. *Id.* at § 8340. The court found that the doors performed exactly as intended and that the proximate cause of the injury was the opening of the door while the vehicle was moving. *Id.*

113. 148 Cal. App. 3d 40, 195 Cal. Rptr. 637 (1983).

114. *Id.* at 44-47, 195 Cal. Rptr. at 639-42. Plaintiff's doctor and numerous other witnesses testified that a cutoff switch would greatly reduce the injuries of people who get caught in the machine. *Id.* at 47, 195 Cal. Rptr. at 642.

115. *Id.* at 47, 195 Cal. Rptr. at 642.

116. *Id.* at 50, 195 Cal. Rptr. at 644 (emphasis added).

injury.[117] Plaintiffs who claim design defects will now have to provide expert testimony concerning a feasible alternative design, because without such testimony they will be unable to show that the design of the product caused the injury.

The California "product must cause injury" rule is coupled with a rule that requires defendants to prove that the product is not defective.[118] Pennsylvania, by contrast, uses a form of the "product must cause injury" rule that does not require defendants to prove non-defectiveness. Because the Pennsylvania Supreme Court defines "defect" as anything that causes injury,[119] the court must determine the cause of the injury before looking at whether the product is defective. Although Pennsylvania courts claim that the defect must cause the injury, their use of causation to define "defect" therefore makes their rule closer to the "product must cause injury" rule.

Pennsylvania's experience with the "product must cause injury" rule clarifies how focusing on what happened in this case can avoid the unfairness created by presumed causation rules, while permitting plaintiffs to take advantage of all risks created by the product. In *Dambacher v. Mallis,*[120] the plaintiff claimed that tires sold by the defendant were defective because the defendant failed to warn of the danger of using radial and non-radial tires at the same time. The court used both the danger created by mixing tires and the danger created by the failure to warn to determine whether the product caused injury.[121] The court then concluded that lack of causation made it unnecessary to determine whether there was a defect, because "in the absence of proof of causation, appellant's radial tire could not be found defective."[122] All the risks created by the product were thus used to determine what caused the injury, and the court viewed proof of causation as a prerequisite to proving defect.

In *Berkebile v. Brantly Helicopter Corp.,*[123] where the plaintiff claimed

117. The California Supreme Court made this clear in Finn v. G.D. Searle & Co., 35 Cal. 3d 691, 677 P.2d 1147, 200 Cal. Rptr. 870 (1984). In *Finn,* plaintiff claimed that failure to warn that a drug could cause blindness caused his eye injuries. The court looked to plaintiff's use of the product and concluded that because plaintiff continued to use the product after becoming aware of the potential eye problems, plaintiff could not prove causation. *Id.* at 702, 677 P.2d at 1155, 210 Cal. App. at 877.

118. *See supra* notes 87-95 and accompanying text.

119. Azzarello v. Black Brothers Co., 480 Pa. 547, 391 A.2d 1020 (1978) ("[T]he jury may find a defect where the product left the supplier's control lacking any element necessary to make it safe for its intended use or possessing any feature that renders it unsafe for the intended use."). *Id.* at 559, 391 A.2d at 1027. *See also* Berkebile v. Brantly Helicopter Corp., 462 Pa. 83, 100-01, 337 A.2d 893, 902 (1975).

120. 336 Pa. Super. 22, 485 A.2d 408 (1984).

121. *Id.* at 45, 485 A.2d at 420. The court first examined the extent of the danger created by mixing tires to see if mixing tires could have caused the injury. The court then looked to whether the failure to warn of this danger could have caused the injury. *Id.*

122. *Id.* The court reasoned that a danger that does not cause injury cannot make the product defective. This is true especially when the alleged defect is failure to warn. Courts do not want to impose a duty to warn when a warning would not help prevent injury. *Id. See also* Sherk v. Daisy-Heddon, 498 Pa. 594, 450 A.2d 615 (1982).

123. 462 Pa. 83, 337 A.2d 893 (1975).

that a helicopter autorotation system was defectively designed and that the manufacturer had failed to warn users about the system, all the product's risks were again used to determine what caused the injury.[124] The court also emphasized the importance of the plaintiff's conduct in causing the injury, stating that "[i]f the jury were to conclude, for example, that a non-defective system would allow two seconds for autorotation and that the decedent did not attempt autorotation for three seconds . . . it [the product] could not have been the proximate cause of the crash."[125] By focusing on causation before defectiveness, the court made clear that a plaintiff's actions can prevent a product from causing injury even if there is a failure to warn. Had the court focused on defectiveness first, and found a warning defect that increased the likelihood that this accident would occur, it is unlikely that any jury, even one not told to presume causation, could have focused sufficiently on what happened in *this* case to find that the defect did not cause *this* injury.

V. USE OF THE PRODUCT: CAUSE OR DEFENSE

The plaintiff's use of the product has traditionally been used as a defense in products liability actions.[126] Most jurisdictions provide some sort of defense based on misuse of the product. Most jurisdictions also recognize the plaintiff's negligence as either a defense or a reason for diminution of damages.[127] Treating use of the product as a part of the causation issue, however, has a number of advantages over these defenses.

The first advantage is simplicity. In the previous discussion of the "sale as cause" rule, it was noted that the rule tended to find causation regardless of how the product was used. Proponents of the rule defend it by claiming that the unfairness of finding causation when, for example, the plaintiff

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124. *Id.* at 100-01, 337 A.2d at 902. The court examined a number of possible causes and concluded that a product is defective if the manufacturer fails to "provide with the product *every element* necessary to make it safe for use." *Id.* (emphasis added).

125. *Id.* at 99, 337 A.2d at 901. The court did not require the plaintiff's use to be negligent or a knowing assumption of the risk before it could break the chain of causation. *Id.*

126. The RESTATEMENT (SECOND) OF TORTS § 402A comment n (1965) provides that contributory negligence is not a defense, but that knowing assumption of the risk is. Comment n indieates that a product is not defective if the danger results from abnormal use of the product. *See also* Epstein, *supra* note 29; Noel, *supra* note 29.

127. Even though the RESTATEMENT (SECOND) OF TORTS § 402A comment n (1965) states that contributory negligence should not be a defense, there is a strong trend toward the use of comparative negligence in strict liability cases. Daly v. General Motors Corp., 20 Cal. 3d 725, 740-42, 575 P.2d 1166, 1171, 144 Cal. Rptr. 380, 389 (1978), the case in which California adopted comparative negligence, cited 16 law review articles that favored the use of comparative negligence. Among the better articles on the use of comparative negligence in strict liability cases are: Fischer, *Products Liability—Applicability of Comparative Negligence,* 43 Mo. L. REV. 431 (1978); Schwartz, *Strict Liability and Comparative Negligence,* 42 TENN. L. REV. 171 (1974); Twerski, *The Use and Abuse of Comparative Negligence in Products Liability,* 10 IND. L. REV. 797 (1977); Wade, *Products Liability and Plaintiffs Fault—The Uniform Comparative Fault Act,* 29 MERCER L. REV. 373 (1978).

intentionally misused the product, is avoided by treating use of the product as a defense.[128] This, in effect, creates a two-step analysis when one would do. First, the court finds that there was causation. Then, the court looks at what happened and decides that the use of the product gives the plaintiff a defense. It would be much simpler to look at use of the product as part of causation and thus eliminate a step from the analysis.

Considering use of the product as part of causation is also conceptually more sound. A defense is normally something that negates the plaintiff's cause of action or justifies the defendant's action.[129] If the defendant proves the defense of consent, then a battery did not occur. If the defendant proves the truth of the statements, there was no libel.[130] Misuse of a product, however, does not prevent the product from being defective. Assume that the plaintiff, driving a car with defective brakes, fails to stop at a light and crashes at an intersection. Assume also that the manufacturer can show that the brakes had nothing to do with the accident because the plaintiff was driving at one hundred miles per hour and did not attempt to brake until ten feet before the intersection. In this case, the plaintiff's misuse of the product, not the bad brakes, caused the injury. The brakes, however, remain defective.[131] The claim of misuse, therefore, challenges the plaintiff's description of what caused the injury. It does not render the product non-defective.

Misuse of the product is only a defense if the misuse was unforeseeable.[132] The focus is on the defendant's state of mind. While the defendant's state of mind may be an important element in determining liability, there is no reason to permit the defendant's state of mind to control the nature and effect of the plaintiff's actions. In *Cepeda v. Cumberland Engineering Co.*,[133] the plaintiff claimed that the cause of his injury was the defendant's failure to provide a guard that could not be removed, and the manufacturer claimed that removal of the guard caused the injury. The court's decision therefore hinged on the manufacturer's state of mind. The court reasoned that if the removal of the guard was not foreseeable, then it was the cause of the injury; if the removal of the guard was foreseeable, it was not relevant to determine what caused this injury.[134] The defendant's state of mind was used

128. *See supra* notes 37-46 and accompanying text.

129. *See* PROSSER & KEETON, *supra* note 10, § 9, at 422.

130. *Id.* at § 116, at 839-41.

131. It is a basic principle of products liability law that defect is determined by examining the product. Plaintiff's use of the product cannot make the product safe. *But see* Schwartz, *supra* note 127, at 172 (suggesting that misuse of the product can be used to determine that the product was safe).

132. *See, e.g.*, Bryan v. John Bean Div. of FMC Corp., 566 F.2d 541 (5th Cir. 1978); Perfection Paint & Color Co. v. Konduris, 147 Ind. App. 106, 258 N.E.2d 681 (1970); General Motors Corp. v. Hopkins, 548 S.W.2d 344, 349 (Tex. 1977).

133. 76 N.J. 152, 386 A.2d 816 (1978).

134. *Id.* at 180-81, 386 A.2d at 830. The court concluded that a jury question existed because the manufacturer could have foreseen that the machine would be used without the guard. *Id.* at 182, 386 A.2d at 831.

to determine whether the misuse of the product had anything to do with this injury.

Permitting the defendant's state of mind to control the significance of use of the product is similar to presumed causation.[135] In presumed causation the danger inherent in the product is used to decide both defect and causation, and what actually happened is not examined. The unforeseeable misuse rule also permits the danger caused by the defendant to control the issues of defect and causation. As in presumed causation, a major part of what happened—how the product was used—is ignored.

This argument does not suggest that the defendant's state of mind is irrelevant. What the defendant should foresee is crucial to the duty issue. Whether the defendant's action is tortious and whether it is a cause for concern is, in part, determined by that state of mind.[136] What the defendant should foresee, however, has nothing to do with whether the plaintiff's use of the product was also a cause. The rule of unforeseeable misuse confuses these two uses of the defendant's state of mind because the rule uses foreseeability to determine whether the plaintiff's use of the product was a cause.

The facts of *Ellis v. K-Lan Co.*,[137] can illustrate how foreseeability of misuse is used. In *Ellis,* a child was injured by a drain declogger that his mother had left within his reach. The suit on behalf of the child claimed that the drain declogger was defective because it should have had a child proof cap. Leaving the declogger within the child's reach was certainly foreseeable. Thus, the misuse of the product did not provide a defense. Leaving the declogger in the child's reach, however, was also a cause of the injuries because "but for" that act by the mother, the child would not have been injured.[138] The foreseeability of the misuse does not prevent it from being a cause of the injury, and therefore does not render it irrelevant. Presenting misuse of the product as a defense, however, could lead courts to treat foreseeable misuses that are causes of the injury as if they were

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135. For a discussion of presumed causation, see *supra* notes 47-56 and accompanying text.

136. *But see* Berkebile v. Brantly Helicopter Corp., 462 Pa. 83, 337 A.2d 893 (1975) (arguing that foresecability is part of a negligence case and because it describes defendant's state of mind in negligence, it should not be used in strict liability cases). Other cases, however, argue that foreseeability is important in strict liability cases, but the foreseeability that is relevant in a negligence case is different from the foresecability relevant in strict liability cases. Negligence looks at foreseeability of harm while strict liability looks at foreseeability of use. Esbach v. W.T. Grant's & Co., 481 F.2d 940, 943 (3d Cir. 1973); Newman v. Utility Trailer & Equip. Co., 278 Or. 396, 397-99, 564 P.2d 674, 675-77 (1977); Ethicon, Inc. v. Parten, 520 S.W.2d 527 (Tex. Ct. App. 1975). *See also* Polelle, *The Foreseeability Concept and Strict Products Liability: The Odd Couple of Tort Law,* 8 RUT.-CAM. L.J. 101 (1976).

137. 695 F.2d 157 (5th Cir. 1983).

138. *Id.* at 163-64 nn.8 & 9. The court noted that plaintiff had failed to request jury charges on the issues of comparative causation and superseding cause. Therefore, the court did not have to state an opinion on whether having the declogger within the child's reach was the superseding cause of the injury.

irrelevant.[139] The unforeseeable misuse defense leads courts to overlook a major factor that contributes to the injury.

The unforeseeable misuse defense can also lead courts to disregard the fact that unforeseeable misuse does not always prevent the defective product from being a cause of the injury. A slight variation on the facts of *Ellis* illustrates this point. Assume that the mother saw the child open the drain declogger and made no efforts to prevent the child from being injured. A jury might find that a parent who sees a child playing with an open bottle of drain declogger and does not take it away has unforeseeably misused the product. The misuse of the product, however, does not prevent the defect from being a cause of the injury.[140] The lack of a child proof cap and the parent's failure to take the bottle away from the child combined to cause the injury. Both the manufacturer and the parent bear some responsibility. Yet, the rule of unforeseeable misuse might require the court to ignore the role that the defect had in causing injury.

The Texas Supreme Court recognized this problem in *General Motors v. Hopkins*[141] and avoided it by comparing the causative effect of the two acts.[142] Mr. Hopkins claimed that his injury was caused by a defective carburetor in a car manufactured by the defendant. The defendant claimed that the injury was caused by an unforeseeable misuse of the product: Mr. Hopkins' bungled attempts to remove and reinstall the carburetor. The court found that while the original carburetor was defective and could have caused the accident, Mr. Hopkins' misuse of the product was unforeseeable and could also have caused the accident.[143] The court reasoned that it would be unfair to excuse the defendant when his defective product was a cause of the injury. It also would be unfair to excuse the plaintiff when his unforeseeable misuse of the product was a cause of the injury. The *Hopkins* court thus recognized that the rule of unforeseeable misuse could lead courts to ignore important causes of the injury and the court apportioned damages according to the amount that each cause contributed to the injury.[144]

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139. Because the alleged misuse of the product was foreseeable, the court described it as a "failure to adequately respond to a dangerous situation" created by the defect. *Id.* at 163 n.7. *Cf. Daly*, 20 Cal. 3d 725, 575 P.2d 1162, 144 Cal. Rptr. 380 (adopting comparative fault because drunk driving is foresecable misuse and thus not relevant as a defense).

140. "But for" the lack of a child proof cap, the injury would not have occurred. Plaintiff's action will break the chain of causation only if no modification by defendant could have prevented the injury. *Compare Garcia*, discussed *supra* notes 99-103 and accompanying text *with Ellis*. In *Garcia*, there was no evidence that defendant could do anything to prevent the injury, thus the product could not have caused the injury.

141. 548 S.W.2d 344 (Tex. 1977).

142. *Id.* at 352. The *Hopkins* case and its use of comparative causation are discussed in detail in Twerski, *supra* note 78.

143. 548 S.W.2d at 352.

144. *Id.*

Misuse of the product could also support the defense of contributory or comparative negligence. If the plaintiff's use of the product was unreasonable in light of the foreseeable risk, recovery will be barred or reduced.[145] Just as most jurisdictions have adopted comparative negligence because of the unfairness of the "all or nothing" rule of contributory negligence, most jurisdictions that have a comparative negligence statute apply that statute or some form of comparative fault in strict products liability cases.[146]

Comparative negligence is the converse of the defense of unforeseeable misuse. In unforeseeable misuse the focus is on the defendant's state of mind; if the defendant was not culpable in failing to prevent this injury (that is, if the use was not foreseeable), the defendant has a defense. Comparative negligence focuses on the plaintiff's state of mind. The plaintiff's act is deemed to have a significant role in causing the injury only if the plaintiff was culpable. In comparative negligence, if the plaintiff is found to be culpable, recovery depends on the culpability of the defendant.

This focus on state of mind is extremely unfair to the plaintiff. The move to strict liability was caused, in large part, by the inability of many plaintiffs to prove that manufacturers were culpable.[147] To remove that burden from the defect issue and retain it as a defense means that many plaintiffs will still be unable to recover because they cannot show that defendant was culpable. The focus of these defenses thus penalizes those plantiffs whom strict liability was designed to help.

This focus on state of mind appears to be inconsistent with the notion of strict liability. Strict liability means that the defendant is liable even if not negligent.[148] The defendant's state of mind or culpability is not part of the plaintiff's case. To require the plaintiff to prove culpability when discussing defenses undercuts the strict liability rule and creates a rule that is much less than strict.

Some proponents of comparative fault avoid this conceptual difficulty by arguing that the defendant's comparative fault is measured not by state of

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145. The RESTATEMENT (SECOND) OF TORTS § 402A comment n (1965) explains when contributory negligence is a defense. The *Hopkins* court discussed the similarities between misuse of the product and contributory negligence. 548 S.W.2d at 350.

146. *See, e.g.*, Hasten, *Comparative Liability Principles: Should They Now Apply to Strict Liability Actions in Ohio,* 14 U. TOL. L. REV. 1151, 1154 (1982) ("[T]he majority of common law jurisdictions that have faced the issue have found some way to allow the state comparative negligence statute to function in strict tort liability cases.") (quoting Plant, *Comparative Negligence and Strict Liability,* 40 LA. L. REV. 403, 406 (1980)).

147. In explaining the reasons for adopting strict liability, Justice Traynor stated that plaintiffs are often not able to provide evidence of negligence because they lack information about the manufacturing process. Escola v. Coca Cola Bottling Co., 24 Cal. 2d 453, 463, 150 P.2d 436, 441 (1944) (Traynor, J., concurring). *See also* Comment, *In the Stream of Commerce The Liability of Non-Manufacturers in Product Liability Actions,* 13 CAP. U.L. REV. 405 (1984) (arguing that comparative fault is unfair to plaintiffs because it requires them to prove fault).

148. The RESTATEMENT (SECOND) OF TORTS § 402A (1965) states that the seller of a defective product is liable even if that seller has exercised all possible care in the preparation and sale of the product.

mind, but by how defective the product is.[149] Selling a defective product is seen as a form of fault, and the more dangerous the product is, the greater the seller's fault. This reasoning avoids the problems created by examining the defendant's state of mind, but it creates a new conceptual problem. How is the plaintiff's culpability compared with a product? What direction can a judge give a jury in making such a comparison? It may be that, like apples and oranges, the two cannot be compared.

VI. COMPARATIVE CAUSATION

The difficulties created by using the plaintiff's conduct as a defense, rather than as part of what caused the injury, can be avoided by apportioning damages based on causation. Comparative causation would recognize that the plaintiff's conduct is often a significant cause of the injury regardless of whether the defendant should have foreseen it. The unfairness of making the plaintiff prove that the defendant was negligent is avoided because causation is already part of the plaintiff's case. The apples and oranges problem is avoided because causation will be compared with causation.

Comparative causation is not free from conceptual difficulty. Indeed, some commentators argue against comparative causation on the ground that the jury would not know how to divide causation.[150] The following proposal should demonstrate the ease with which comparative causation can be used to reach fair results.

Causation is commonly divided into two parts: cause-in-fact and proximate cause. Cause-in-fact means that there must be a factual relationship between the alleged cause and the alleged effect; it is often described as "but for" causation. If the statement "'but for' X, Y would not have occurred" is true, then X is said to be a cause-in-fact of Y. Proximate cause is primarily a policy determination and is based on the probability that the risk created by one action will lead to a given result.[151] Thus, a person's birth may be a "but for" cause of an auto accident, but because birth does not increase the probability of any particular accident, it will not be the proximate cause of any accident. Failure to light a stairwell, for example, increases the probability that people will fall, so that if there is a cause-in-fact relationship between the fall and the darkness, it can be the proximate cause. If the person who fell, however, was blind, and thus would not have been helped by a light, the failure to light the stairwell did not cause the injury.

Causation should be compared by examining both of these factors. First, how do the two causes interrelate? If, for example, one was a "but for"

149. *See, e.g.*, Wade, *supra* note 127.

150. *See, e.g.*, Aiken, *Proportioning Comparative Negligence: Problems of Theory and Special Verdict Formulation*, 53 MARQ. L. REV. 293, 296 (1970); Fischer, *supra* note 127, at 448; Hasten, *supra* note 146, at 1188.

151. Twerski, *supra* note 78, at 410 (citing Malone, *supra* note 34). *See also* Calabresi, *supra* note 4 (arguing that causation is based on the increased likelihood of injury).

cause of the other, or one increased the probability that the other would occur, then that cause played a greater role in causing the injury. Second, how much did each cause increase the likelihood that this would happen? The cause that created the greater risk that this injury would occur played a greater role in causing the injury.

The facts of *General Motors Corp. v. Hopkins* provide a good illustration.[152] In *Hopkins,* the cause of the injury was deemed to be both the defective carburetor and the plaintiff's abuse of the carburetor. The relationship between the causes, however, indicates that the defect was the greater cause. The defect in the carburetor caused sudden, unexpected acceleration. In response to an episode of sudden acceleration, Mr. Hopkins removed the carburetor.[153] The misuse of the product occurred while Mr. Hopkins was attempting to repair the carburetor. The defect was a cause of the misuse because "but for" the defect Mr. Hopkins would not have removed the carburetor. The evidence presented on the risk created by these two causes indicates that they were about equally dangerous. The two factors can then be combined to find that the defect was the greater ease of the injury.

In *Hopkins,* either the defect or the misuse alone could have caused the injury. In most cases, however, neither act will be sufficient to cause injury, as the injury generally results only from the interaction of the two causes. The facts of *Daly v. General Motors Corp.,*[154] provide a good illustration. Daly, driving while intoxicated, crashed into a metal divider fence. His suit claimed that a defective door latch caused him to be thrown from the car and to sustain fatal injuries.[155] The first step in comparative causation is to look at the relationship between the causes; the question is, was one a cause of the other? In *Daly,* the defect in the product had nothing to do with the driver's negligence. The driver's negligence, however, caused the defect to manifest itself. But for the negligent driving, the defect would not have caused the injury. The relationship between the causes indicates that the plaintiff's action was the greater cause.

The second step in comparative causation is to compare how much each action increased the likelihood of injury. Again, the plaintiff's action appeared to be the greater cause. The defect in the door latch was its pushbutton design, a design that is likely to ease the door to open when hit in the side. Driving while intoxicated is more dangerous than designing a car with a pushbutton door latch. The two factors combine to show that the causative

152. 548 S.W.2d 344 (Tex. 1977).

153. *Id.* at 346-47. Professor Twerski emphasized the relationship between the sudden acceleration prior to the removal of the carburetor and the removal of the carburetor. *See* Twerski, *supra* note 78, at 408.

154. 20 Cal. 3d 725, 575 P.2d 1162, 144 Cal. Rptr. 380 (1978).

155. *Id.* at 730, 575 P.2d at 1164, 144 Cal. Rptr. at 382. It was undisputed that if he had remained in the car, his injuries would have been relatively minor. *Id.*

impact of the plaintiff's action was much greater than the causative impact of the defect.

When the plaintiff is negligent, but the negligence is the failure to perceive the danger inherent in the product, the causative impact of the defect is likely to be greater than the causative impact of the plaintiff's conduct. In all such cases, the danger created by the product is a cause of the plaintiff's negligence ("but for" the defect, the plaintiff would not have been negligent in failing to see the danger created by the defect). The plaintiff's failure to perceive the danger is likely to be the less risky activity because most products are not dangerous in normal use.

Bexiga v. Havir Manufacturing Corp.,[156] illustrates this point. In *Bexiga*, the plaintiff's hand was crushed in a punch press. The plaintiff claimed that the press was defective because it lacked a safety device that would have prevented this injury.[157] The plaintiff should have been aware of the danger and was thus negligent in failing to avoid it.[158] Both the defective product and the plaintiff's negligence were causes of the injury, but the plaintiff's negligence was the failure to perceive and avoid the danger created by the defect. Comparative causation will require the defendant to pay the greater portion of the damages because the causal impact of the defect was greater than the causal impact of the negligence. The causal impact of the defect is greater because the defect was a cause of the negligence ("but for" the defect, the plaintiff would not have been negligent in failing to perceive the danger created by the defect).

If one applied comparative fault to *Bexiga*, the plaintiff's recovery would depend on whether the plaintiff could prove that Havir was culpable. Strict liability was adopted to protect plaintiffs who were unable to prove negligence. Comparative fault thus defeats the purpose of strict liability by requiring plaintiffs to prove negligence. If the plaintiff cannot prove negligence, the plaintiff is likely to bear the greater portion of the damages because he was negligent. Comparative fault thus penalizes plaintiffs by apportioning damages by fault, a factor that is not part of the plaintiff's case in strict liability.

In addition, comparative causation is fairer than the rule that makes contributory negligence irrelevant in strict liability. If the plaintiff's role in causing the injury is ignored, the defendant will pay for that portion of the injury caused by the plaintiff's negligence. There is no reason to require defendants, or society through the risk spreading mechanism, to pay for

156. 60 N.J. 402, 290 A.2d 281 (1972).

157. *Id.* at 406, 290 A.2d at 283. Plaintiff's job required him to place discs on a die, then press a lever that would cause a ram to descend and punch two holes in the disc. The accident occurred when plaintiff noticed that a disc was not in its proper place and attempted to move it while the ram was coming down. *Id.*

158. The court rejected contributory negligence as a defense, reasoning that "[i]t would be anomalous to hold that the defendant has a duty to install safety devices but a breach of that duty results in no liability for the very injury the duty was meant to protect against." *Id.* at 412, 290 A.2d at 286 (citing Bahlman v. Hudson Motor Car Co., 290 Mich. 683, 288 N.W. 309 (1939)).

injuries caused by careless plaintiffs. Comparative causation recognizes this and apportions damages accordingly.

Cases in which an inadequate warning is alleged to have caused injury appear to be similar to the cases in which the plaintiff is negligent for failure to perceive the danger. In both, the defendant created a danger that results in injury, and the plaintiff caused injury by failing to react properly to that danger. The danger inherent in the product is likely to be a cause of the plaintiff's act, and the plaintiff's act cannot be a cause of the defect or the danger inherent in the product.

The cases differ, however, in a number of significant ways. First, with regard to a warning designed to provide information upon which the user is to base a decision whether to use the product, some people will be injured even if an adequate warning is given. This means that the danger inherent in the product is both necessary and sufficient to cause injury. In the "failure to perceive the danger" case, however, the danger is necessary to cause injury, but never sufficient.[159] The necessary and sufficient cause is a danger to all concerned: aware, unaware or otherwise. On the other hand, the danger that a reasonable person would perceive and avoid is dangerous only to those who are unaware of it. Thus, because the danger in the warning case is a necessary and sufficient cause, the danger is likely to be greater than the danger in the "failure to perceive the danger" case.

Second, plaintiff's use of the product can vary greatly in degree of riskiness. The plaintiff who is aware of the danger and is using the product with an intent to injure is likely to be engaged in a higher risk activity than the plaintiff who is unaware of the danger and is putting the product to normal use. The defendant's marketing practices, moreover, can affect the relative riskiness of the plaintiff's and the defendant's activities. The likelihood of injury from some products is the same to all users, regardless of how they use the product. The risk created by the plaintiff's use is constant while the risk created by the defendant will vary with the marketing scheme. If the defendant warns of some danger, that decreases the likelihood of injury. If the defendant makes the product look safer than it would otherwise appear, that increases the likelihood of injury. The relative risks created by the parties can thus vary with both the plaintiff's use and the defendant's marketing.

These differences between the "failure to warn" cases and the "failure to perceive the danger" cases make clear that whereas the plaintiff will almost always be the lesser cause in "failure to perceive" cases, the plaintiff may or may not be the greater cause in "failure to warn" cases. There will be some "failure to warn" cases in which the plaintiff is the lesser cause, and others in which the plaintiff is the far greater cause.[160] Each warning case will have to be examined individually.

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159. It is not sufficient because all plaintiffs who perceive the danger can avoid it. *See supra* note 61 and accompanying text (discussing the different types of warnings).

160. *See, e.g.*, Finn v. G.D. Searle & Co., 35 Cal. 3d 691, 677 P.2d 1147, 200 Cal. Rptr.

CONCLUSION

Courts and commentators grappling with the question of what must cause injury in products liability cases have developed a number of specialized rules to deal with the problems inherent in requiring a causal link between defect and injury. The biggest problem with the "defect must cause injury" rule is that it renders irrelevant many of the risks that are the key to finding the product defective. The "defect must cause injury" rule is too narrow and leads to a finding of no causation in many cases in which the danger inherent in the product has caused injury.

Many of the rules developed to overcome this problem create even greater problems. The presumption of causation often requires a court to presume something that is not likely to be true. This can lead to findings for the plaintiff when the defendant was not a cause-in-fact of the injury. The "sale must cause injury" rule effectively eliminates causation from the case and creates the same sort of unfairness as the presumption of causation.

A rule that would require the product to have caused injury can solve both of these problems. It uses all the risks inherent in the product while still requiring a causal link between the product and the injury. The "product must cause injury" rule, however, is often viewed as unfairly pro-plaintiff in that it fails to examine the plaintiff's role in causing the injury.

The use of the plaintiff's conduct as a defense enhances the problems created by each of the above rules. Some courts ignore the plaintiff's role as a cause of the injuries with the expectation that the problem created by ignoring the plaintiff's role will be solved later in the case. Other courts use the defenses to focus the case on the plaintiff's state of mind. Because of the common use of comparative negligence, the focus on the plaintiff's state of mind requires an examination of the defendant's state of mind, and the strict liability aspect of the case is lost.

The best rule is one that requires the causal link between the product and the injury and uses comparative causation. This rule which recognizes all the risks inherent in the product, still requires that the plaintiff prove causation, and requires an examination of the plaintiff's role in causing injury. The use of comparative causation will simplify the case by requiring only one examination of the plaintiff's conduct and by imposing a comparison of like items. Comparative causation also will reach fairer results because it prevents the unfairness that can result from ignoring the plaintiff's role, as well as the unfairness that can result from the tendency of comparative negligence to eliminate the strict liability aspect of the case.

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877 (1984) (plaintiff knew of the danger and disregarded it, thus breaking the causal connection between the product and the injury).