The Strict Liability Duty To Warn

Aaron Gershonowitz
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AARON GERSHONOWITZ*

Most courts describe the manufacturer's duty in strict products liability as a duty to make a product that is reasonably safe,1 or, as stated in the Restatement (Second) of Torts, not "in a defective condition unreasonably dangerous to the consumer."2 Because strict liability is determined by examining the condition of the product, not by examining defendant's conduct, the manufacturer's duty is described without reference to the types of conduct that might make the product unsafe.3 Courts, however, have generally recognized three distinct categories of product defects based on the three types of manufacturer's conduct that might make a product unsafe: defective design, defective manufacture, and defective marketing or failure to warn.4 Because the manufacturer's duty is stated without reference to the conduct that might make the product unsafe, little attention has been given to how the relationship between those types of conduct affects the manufacturer's duty.5

Plaintiffs often allege that a product contains both a design defect and a marketing or failure to warn defect. In such cases, if the same test for

* Associate with Rivkin, Radler, Dunne & Bayh, Uniondale New York; formerly Visiting Assistant Professor at Western New England School of Law.


2. RESTATEMENT (SECOND) OF TORTS § 402A (1965). Section 402A of the Restatement (Second) of Torts provides a rule of strict liability for those who sell a product "in a defective condition unreasonably dangerous to the user or consumer." Id. Many courts use the designations 'not reasonably safe' and 'defective condition unreasonably dangerous' interchangeably. See, e.g., supra note 1 (cases cited therein).

3. Dean Keeton has described the difference between negligence and strict liability as follows, "The change in the substantive law . . . has been from fault to defect. The plaintiff is no longer required to impugn the maker, but he is required to impugn the product." Keeton, Product Liability and the Meaning of Defect, 5 ST. MARY'S L.J. 30, 33 (1973). See also infra notes 17 and 31-45 and accompanying text.

4. See infra notes 11-12 and accompanying text.

5. Two commentators who have discussed the relationship between the design duty and the duty to warn have suggested that they are actually duty. See infra note 169 and accompanying text (discussing commentators' position).
determining whether the product is safe is applied to both alleged defects, the warning analysis can lead to the conclusion that the manufacturer's duty is not satisfied by making a product that is reasonably safe. If a risk utility test is used to determine whether a product is safe (a product is reasonably safe if its utility outweighs its risks), a reasonably safe design may result in a product that is both reasonably safe because the utility of the product may outweigh the risks, and not reasonably safe because the utility of not including a warning may be outweighed by the risks. If a consumer expectancy test is used to determine whether a product is safe (a product is reasonably safe if it is not more dangerous than the reasonable consumer expects), a warning can reduce the consumer's expectations and result in a very dangerous product that is reasonably safe. Thus, if courts are to be clear in describing the manufacturer's duty, they need to explain how the duty to warn relates to the duty to design a reasonably safe product.

This article describes a rule to be used in warning cases that prevents manufacturers from using warnings to undermine the manufacturer's design duty. The main thesis of the article is that the substantial differences in the policy goals implemented by the duty to warn and the duty to design safe products require use of a different definition of reasonably safe in the two types of cases. Because the chief goal of the design duty is preventing injuries by reducing product risks, a risk utility rule works well. The chief goal of the duty to warn, however, is honesty in the marketplace. The rule described in this article is designed to implement that goal.

6. See infra notes 53-61 and accompanying text.
7. Comment g to § 402A of the Restatement states that a product is defective if it is in a condition that makes it unreasonably dangerous to consumers. RESTATEMENT, supra note 2, at § 402A comment g. Comment i states that a product is unreasonably dangerous if it is more dangerous than the reasonable consumer would expect. Id. at § 402A comment i. Courts thus determine whether a product is in a defective condition unreasonably dangerous by examining whether it is more dangerous than the reasonable consumer expects. This is generally known as the consumer expectation test. See, e.g., W. KEETON, D. OWEN, J. MONTGOMERY, PRODUCTS LIABILITY AND SAFETY 224-225 (1980); see also infra notes 42-53 and accompanying text.
8. The difficulty courts have had in stating the manufacturer's duty is discussed in detail in Birnbaum, Unmasking the Test for Design Defect: From Negligence [to Warranty] to Strict Liability to Negligence, 33 VAND. L. REV. 593 (1980). She stated that "courts have made the uneasy adjustment from negligence to warranty to strict liability without fashioning a uniform set of definitions and rules that can be relied on with any consistency . . . by manufacturers and retailers as besieged defendants, and by lay jurors as arbiters of the conflict." Id. at 600. The uncertainty about the manufacturer's duty is also a major theme of Henderson, Judicial Review of Manufacturer's Conscious Design Choices: the Limits of Adjudication, 73 COLUM. L. REV. 1531 (1973) and Twerski, From Defect to Cause to Comparative Fault - Rethinking some Products Liability Concepts, 60 MARQ. L. REV. 297 (1977). Commenting on the need to develop a standard for defectiveness Professor Twerski stated: "It may now be true that defect like obscenity in Justice Stewart's definition, will be discovered by sense impression. Unfortunately, 'I know it when I see it' will not suffice as a judicial standard for products liability." Twerski, supra, at 304-05.
9. See infra notes 53-61 and accompanying text.
10. See infra note 47 and accompanying text.
Background

Strict products liability has roots in negligence and warranty law. When a product had a defect that caused injury, a plaintiff could claim that the manufacturer or seller was negligent in the design, manufacture, or marketing of the product. The plaintiff could also claim that the seller had breached the warranty of merchantability provided in Section 2-314 of the Uniform Commercial Code (U.C.C.). Most products liability plaintiffs joined negligence and warranty claims and, in spite of the differences between the tort and contract theories, courts had little difficulty trying these combined claims.

Negligence and breach of warranty actions differ in three significant ways: (1) mental state, (2) main focus of the suit, and (3) relevance of the degree of risk. In negligence, plaintiff must prove that the defendant knew or, with use of reasonable foresight, should have known of the danger.

11. Comment b to § 402A of the Restatement describes some of this history. RESTATEMENT, supra note 2, at § 402A comment b. The history and the relationship between the negligence and warranty causes of action and treated in more detail in Prosser, The Assault Upon the Citadel (Strict Liability to the Consumer), 69 YALE L.J. 1099 (1960) and Birnbaum, supra note 8. See also Birnbaum, Unmasking the Test for Design Defect: From Negligence [to Warranty] to Strict Liability to Negligence, 33 VAND. L. REV. 593, 599 (discussing problems caused by this “dual legacy”).

12. See, e.g., Wade, On the Nature of Strict Tort Liability for Products, 44 Miss. L.J. 825, 836-37 (1974) (noting that in strict liability courts recognize three types of defects—defects in 1) manufacture, 2) design and 3) warnings—corresponding to three actions that, prior to strict liability, were alleged as basis of manufacturer’s negligence); W.P. Keeton, D. Owen & J. Montgomery, PRODUCTS LIABILITY AND SAFETY: CASES AND MATERIALS 40 (1980) (explaining that negligence cases are presented in three contexts—1) manufacture, 2) design and 3) warnings—“corresponding to the three contexts in which a manufacturer may fail in its duties toward consumers”).

13. See Prosser, The Implied Warranty of Merchantable Quality, 27 MINN. L. REV. 117-122 (1943); Prosser, supra note 11, at 1124-1134; Birnbaum, supra note 8 at 595. The history of the implied warranty as a products liability theory is also discussed in § 402A comments b and m. RESTATEMENT, supra note 2, at § 402A comment b & m.


15. See PROSSER & KEETON ON TORTS § 31, 169-70 (5th ed. 1985). The Restatement (Second) of Torts states this requirement as follows:

§ 289. Recognizing Existence of Risk

The actor is required to recognize that his conduct involves a risk of causing an invasion of another’s interest if a reasonable man would do so while exercising

(a) such attention, perception of the circumstances, memory, knowledge of other pertinent matters, intelligence, and judgment as a reasonable man would have; and

(b) such superior attention, perception, memory, knowledge, intelligence, and judgment as the actor himself has.

RESTATEMENT, supra note 2, at § 289. The reason most commonly given for this requirement is that one cannot be at fault for causing an injury unless he could have anticipated a reasonable likelihood that injury would occur. Greene v. Sibley, Lindsay & Curr Co., 257 N.Y. 190, 177 N.E. 416 (1931), cited in PROSSER & KEETON, supra, at 170 n.15.
Breach of warranty is strict liability; therefore, what the defendant knew or should have know is irrelevant. In negligence, plaintiff must prove that defendant did something wrong. The main focus of the case is thus on defendant's action. To prove breach of warranty, plaintiff must prove that the product was not fit for its ordinary use. The main focus of the case is thus on the product and how it is expected to perform in ordinary use.

Negligence is determined by balancing the foreseeable risks of the action against the foreseeable benefits. The jury is asked, based on that balancing, to determine whether the plaintiff's action was reasonable. In warranty cases that balancing is never done. The risk may be slight, but if the ordinary consumer does not expect that danger to be there, the product is not merchantable.

Each of these differences can be explained by the different policy goals emphasized by the negligence and warranty theories. The official comments to U.C.C. section 2-314 make clear that the primary goal of the warranty cause of action is product honesty—the seller must provide goods that conform to the contract. The primary goal of negligence law is to avoid unreasonable

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18. See White & Summers, supra note 16, at 349-56, explaining that the merchantability requirement is determined by focusing on the product and the purchaser's expectations. Some courts have stated that to prove breach of the warranty of merchantability all plaintiff must do is prove that the product has a defect. See, e.g., Durett v. Baxter Chrysler-Plymouth, Inc., 198 Neb. 392, 253 N.W.2d 37 (1977); Holloway v. General Motors Corp., 399 Mich. 617, 250 N.W.3d 736 (1977); Vanek v. Kirby, 253 Or. 494, 450 P.2d 778 (1969).

19. Learned Hand set out the formula as follows: "[I]f the probability be called P; the injury L; and the burden [or, the cost of the precautions to avoid risk], B; liability depends upon whether B is less than L multiplied by P; i.e., whether B is less than PL." United States v. Carroll Towing Co., 159 F.2d 169, 173 (2d Cir. 1947). See Prosser & Keeton, supra note 15, at 171 (discussing Hand's balancing test). For a general discussion of the risk utility test for determining negligence, see Tetelman & Burack, An Introduction to the Use of Risk Analysis Methodology in Accident Litigation, 42 J. Air. L. & Comm. 133 (1976); Green, The Risk Benefit Calculus in Safety Determination, 43 Geo. Wash. L. Rev. 791 (1975); Posner, A Theory of Negligence, 1 J. Leg. Stud. 29, 32-34 (1972).

20. See Prosser & Keeton, supra note 15, at 698-99 (stating that consumer expectation test is basically warranty test and that key weakness in it is failure to balance risks and benefits).

21. See, e.g., Restatement, supra note 2, at § 402A comment c (stating that seller's obligation does not extend beyond providing goods that meet "their contract description," and that underlying reason for warranty, like good faith provisions, is to require that information
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risks. Because product honesty is the chief goal of contract law, courts focus on the product to determine whether it is what the buyer was led to expect. Because the goal of negligence law is to avoid unreasonable risks, courts examine both the defendant's state of mind and the risks created by the product to determine whether defendant acted unreasonably.

In practice, courts found ways to minimize these differences between negligence and breach of warranty cases. *Res ipsa loquitur*, a negligence doctrine that permits an inference of negligence based on unexplained product failures, provided a way to focus on the product to find negligence. Some courts went further than that and reasoned that any product defect is evidence of negligence. Some courts avoided discussion of defendant's mental state in negligence cases by reasoning that a manufacturer is an expert on its product and thus ought to be aware of any dangers inherent in the product. Finally, some courts used a risk utility-type balancing to prove breach of warranty, reasoning that the ordinary consumer never expects a product to be more dangerous than it is useful.

These efforts to minimize the differences between negligence and breach of warranty were useful when the product was alleged to be defective in manufacture or design because such negligence can often be proved by examining the product. Negligent marketing or failure to warn cases, however, could not be decided by merely examining the product. What the defendant knew or should have known about the product and how the product was likely to be used are essential elements of a warning case.

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about product dangers be fully disclosed). Comments h and j also discuss honesty and good faith as the basis of warranty. *Id.* at § 402A comments h & j.

22. The use of a risk utility analysis to determine negligence makes clear that the primary goal of negligence law is to avoid unreasonable risks. If the risk is reasonable, the action is not negligent. If the risk is not reasonable, proceeding in the face of it is negligence. *See supra* note 19 (articles cited therein).

23. *See PROSSER & KEETON, supra* note 15, at 242-262 (discussing *res ipsa loquitur*). The California Supreme Court used *res ipsa loquitur* to prove negligent manufacture in *Escola v. Coca Cola Bottling Co. of Fresno*, 24 Cal.2d 453, 150 P.2d 436 (1944) (plaintiff injured when coke bottle exploded for no apparent reason). *See also Escola*, 150 P.2d at 440-44 (Traynor, J., concurring) (arguing that *res ipsa loquitur* is form of strict liability).


26. *See, e.g.*, *Seattle First Nat. Bank v. Tabert*, 86 Wash. 2d 143, 154, 542 P.2d 774, 779 (1975) (stating that consumer expectations could be determined by examining gravity of harm and cost of eliminating risk); *Heaton v. Ford Motor Co.*, 246 Or. 467, 435 P.2d 806, 809 (1967) (stating that evidence of cost and feasibility of alternative design is necessary to permit jury to decide whether reasonable consumer expectations have been met).

27. The *Restatement (Second) of Torts* states that a supplier of chattels has a duty to warn only when the supplier knows or should know of a danger that the user is not likely to be aware of. *Restatement*, *supra* note 2, at § 388.
Knowing what information about the product was already in the public domain would also assist in determining whether a warning should be provided. Negligent failure to warn was thus a type of negligence used in products liability that could not be decided by using a warranty-type analysis. Moreover, warranty law did not provide for a duty to warn. Disclaimers are the closest analogue to a warning in warranty law and disclaimers do not provide a separate source of liability; they merely prevent liability in some cases in which the product is not merchantable. This difference between the negligent failure to warn and negligence in design and manufacture is important because strict liability in tort is an attempt to combine negligence with warranty. The similarities in the mode of analysis make the combination work more smoothly in design and manufacturing cases than in warning cases.

**Strict Liability**

Strict products liability developed as a response to some problems plaintiffs faced in proving negligence and breach of warranty. Justice Traynor's landmark decisions in *Escola v. Coca Cola Bottling Co. of Fresno* and *Greenman v. Yuba Power Tools Co.* illustrate those problems and how strict liability could eliminate them. In *Escola* a coke bottle exploded in plaintiff's hand and plaintiff alleged negligent manufacture and design of the bottle. Plaintiff could not sue for breach of warranty because she had not purchased the coke. The trial court used res ipsa loquitur to find that the manufacturer was negligent. The California Supreme Court affirmed the jury verdict, but Justice Traynor, in a concurring opinion, explained that strict liability would be a better ground for the decision. First, he explained that res ipsa loquitur, by focusing on the product and permitting a finding of negligence without any evidence of what defendant knew or should have known, was a form of strict liability. Honesty thus required that the court make clear that it was applying a strict liability

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28. Comment k to § 388 of the Restatement states that a supplier of chattels has no duty to warn if "those for whose use the chattel is supplied will discover its condition and realize the danger involved." *Restatement, supra* note 2, at § 388 comment k. See also *Martinez v. Dixie Carriers, Inc.*, 529 F.2d 457, 464 (5th Cir. 1976) (stating that "[t]he great weight of authority" holds that there is no duty to warn of known dangers).
29. See U.C.C. §§ 2-314, 2-316 (1978). The official comments to § 2-316 explain that the key purpose of the rule on disclaimers is to prevent unfair surprise. The disclaimers, thus, serve to reduce the seller's obligation to the buyer, not to fulfill a separate obligation. *Id.*
30. *See infra* notes 31 to 46 and accompanying text.
33. *Escola*, 150 P.2d at 437-438. Plaintiff was unable to present any specific evidence of negligence. The court said that the defect could have been in the glass and it could have been excessive pressure in the bottle. *Id.*
34. *Id.* at 437. Plaintiff was a waitress in restaurant. The bottle that exploded had thus been purchased by her employer and not by her. *Id.*
35. *Id.* at 440.
He then stated that strict liability is fairer than negligence because the manufacturer's control of the evidence relating to design and manufacture often makes it difficult for persons injured by defective products to prove that the manufacturer did something wrong. He reasoned further that strict liability would be fairer because it would be easy for sellers to treat these injuries as a cost of doing business and spread the risk among all users of a product.

In Greenman, plaintiff was seriously injured when a piece of wood was thrown out of a lathe. Unlike Escola, where negligence was plaintiff's main theory, warranty played an important role in the Greenman case. The defendant claimed that no breach of warranty could be proved because plaintiff failed to give timely notice of the breach. Justice Traynor, writing for the court, adopted strict liability, reasoning that strict liability is preferable to warranty because warranty law is still controlled by many of the formalities of contract law. These formalities may be important in a commercial context, but they often result in unfairness in personal injury cases.

Justice Traynor also noted that strict liability in tort is preferable because courts should make clear that the duty to make a product safe is imposed by law and not by agreement.

The Restatement (Second) of Torts adopted a rule of strict liability shortly after the Greenman decision. The drafters claimed to be following Greenman, but Justice Traynor's decisions gave no guidance on what test should be used to determine defect. The drafters attempted to do this in section 402A and its official comments. Section 402A provides strict

36. Id. at 441. Judge Traynor in Escola stated, "It is needlessly circuitous to make negligence the basis of recovery and impose what is in reality liability without negligence. If public policy demands that the manufacturer of goods be responsible for their quality regardless of negligence there is no reason not to fix that responsibility openly". Id.

37. See id. (noting that consumer's unfamiliarity with manufacturing process makes it difficult for consumers to prove negligence).

38. See id. (noting that cost of injury is often overwhelming to individual, but can be insured against and treated as cost of doing business by manufacturer).

39. Greenman, 27 Cal. Rptr. at 699, 377 P.2d at 899. Defendant's claim was based on California Civil Code § 1769, a provision of the Uniform Sales Act that provided that a seller has no liability for breach of warranty if the purchaser fails to give the seller notice of the breach within a reasonable time after discovery of the breach. Id.

40. Greenman, 27 Cal. Rptr. at 700, 377 P.2d at 900. The court in Greenman quoted from La Hue v. Coca Cola Bottling Co., which called the notice requirement a "booby-trap" because the consumer is not usually "steeped in the business practice which justifies the rule." Id.; Lahue v. Coca-Cola Bottling Co., 50 Wash. 2d 645, 314 P.2d 421, 422 (1957).

41. Greenman, 27 Cal. Rptr. at 701, 377 P.2d at 901. Justice Traynor also noted that this has the additional advantage of preventing manufacturers from defining the scope of their own duty. Id.

42. See Birnbaum, supra note 11, at 597. See also Cronin v. J.B.E. Olson Corp., 8 Cal. 3d 121, 104 Cal. Rptr. 433, 501 P.2d 1153 (1972), in which the California Supreme Court rejected the Restatement's definition of defect and suggested a return to the rule of Greenman which had no external definition of defect.

43. Section 402A of the Restatement passed two years after the Greenman decision,
liability for one who sells a product "in a defective condition unreasonably dangerous." The Restatement thus attempts to combine a familiar warranty concept—defect, with a familiar negligence concept—unreasonable danger. Because the primary policy goals of negligence and warranty are different, the question of which branch of the law is dominant in this combination is central to the debate over what the standard for determining strict liability should be. The differences between negligent failure to warn and negligent design and manufacture make this question more difficult in warning cases. While negligent design and manufacture clearly emphasize risk reduction, the goal of product honesty or providing adequate information is very important to the duty to warn. The duty to warn is thus at the same time closer to warranty in terms of policy goals and further from warranty in terms of mode of analysis. The Restatement drafters attempted to combine warranty and negligence concepts without a thorough discussion of these policy differences or the differences in mode of analysis.

The official comments to the Restatement indicate that section 402A is designed to follow the policy goals and mode of analysis of warranty law more than negligence law. Comment c indicates that product honesty is to

provides:

§ 402A. Special Liability of Seller of Product for Physical Harm to User or Consumer.
(1) One who sells any product in a defective condition unreasonably dangerous to the user or consumer or to his property is subject to liability for physical harm thereby caused to the ultimate user or consumer, or to his property, if
   (a) the seller is engaged in the business of selling such a product, and
   (b) it is expected to and does reach the user or consumer without substantial change in the condition in which it is sold.
(2) The rule stated in Subsection (1) applies although
   (a) the seller has exercised all possible care in the preparation and sale of his product, and
   (b) the user or consumer has not bought the product from or entered into any contractual relation with the seller.

Restatement, supra note 2, at § 402A.

44. During the ALI discussion of 402A of the Restatement, Professor Dickerson moved to have the phrase "defective condition" deleted on the ground that it added nothing to the phrase "unreasonably dangerous." 38 ALI Proc. 86-89 (1961). The motion was defeated because "defect" and "unreasonably dangerous" can have different meanings. Id. The key difference noted by Dean Prosser was that some things that are dangerous are clearly not defective and should thus be protected from liability. Id.


46. See supra note 19 and accompanying text. See also PROSSER & KEETON, supra note 15, at 169 (discussing "unreasonable risk").

be the primary policy goal. Comments g and i define defective and unreasonably dangerous and indicate that the test for strict liability is whether the product is more dangerous than the ordinary consumer would expect. This rule sounds very much like the definitions of merchantability in section 2-314 of the Uniform Commercial Code, and conforms to the basic contract policy of fulfilling the reasonable expectations of the parties. Comment n states a rule allowing the use of plaintiff's conduct as a defense that is on all fours with the rule that was being applied in warranty cases when the Restatement was drafted. And comment m states that the rule of section 402A is really warranty of merchantability without the formalities of contract law.

The Restatement's use of reasonable consumer expectations has been severely criticized for its failure to reduce the risks to which sellers can
expose consumers. Some products contain great dangers that the manufacturer could easily eliminate. However, if these dangers are likely to be recognized by the consumer, the products are not more dangerous than the consumer expects. The consumer expectation test thus provides no incentive to eliminate these dangers. Some products are so complex that the reasonable consumer has no way of knowing what to expect. The consumer expectations test would again require courts to find that some avoidable dangers in these products are not defects. Finally, some very useful products contain unavoidable dangers. If the utility of the product outweighs the risks, use of a consumer expectation test to find these products defective could deprive society of great benefits.

Each of the above criticisms of the Restatement rule suggests that negligence provides a better model on which to base strict liability than does warranty. If a product can be redesigned so that many injuries could be avoided at a low cost, the manufacturer is probably negligent and it would be anomalous to hold that such a product is not defectively designed. Similarly, where the utility of a product exceeds the known risks, it seems unfair to hold that one who sells such a product should incur tortious liability. Use of a negligence-type balancing test would thus reduce the number of injuries and lead to fairer results.

These criticisms of the Restatement rule relate to the way the Restatement rule handles design cases. When a product was mismanufactured and is therefore not in the condition that the manufacturer expected, the


56. See Keeton, supra note 53, at 304. Professor Keeton focused on the case of Heaton v. Ford Motor Co., 248 Or. 467, 455 P.2d 806 (1967). Id. In Heaton plaintiff was injured when the truck he was driving hit a five inch rock. Id. The court held that the jury could not decide the defect issue because plaintiff had provided no evidence concerning the expectations of consumers. Id. Professor Keeton argues that even where the average consumer has no clear expectations, a risk utility test could be used to find a defect. Id. at 304.

57. See Keeton, supra note 53, at 303 (stating that "this test can result in the identification of products as dangerously defective when clearly they are not so").

58. See supra note 53 (each of commentators cited in note 53 supra concludes that appropriate test would be one that balances risks and utilities of products).
Restatement rule works quite well.\textsuperscript{59} It is the design cases, however, where the product is exactly what the manufacturer wanted it to be, that create problems. We may want to provide an incentive for manufacturers to redesign products to avoid obvious dangers. Complicated design decisions make it difficult to determine what reasonable consumers expect. Furthermore, in the case of the unavoidable danger, even though the product is dangerous, the design of the product can be quite reasonable. These criticisms emphasize a need for a design defect test that is based more on negligence than on warranty.

Many courts and commentators have suggested a rule for determining product defect in design cases that balances the risks created by the product against the benefits provided by the product.\textsuperscript{60} In support of this rule, Deans Wade and Keeton have suggested that strict liability is really negligence with the scienter element removed. Their test for strict liability is thus to assume that the seller knows the dangerous condition of the product and ask whether selling the product in such a condition constitutes negligence.\textsuperscript{61}

We thus have two very different conceptions of strict products liability—one based in contract law and most useful in manufacturing defect cases, and one based in tort law, created for use in design defect cases. The contract version of strict products liability is true strict liability—reasonableness is irrelevant. The product could be extremely dangerous and only slightly useful, but as long as consumers are aware of the dangers, the product is not defective. Moreover, the product could be very useful and the danger very slight, but if users do not expect the danger, the product is defective. The tort type is a sort of quasi-strict liability because the negligence mental state, reasonable foreseeability, is eliminated. However, the basic analysis is still one of reasonableness. The same risk utility analysis is used; but the change in mental state means that courts are now comparing actual risks and utilities instead of foreseeable risks and utilities.

What should happen to the duty to warn when courts adopt strict liability? If the tort model described above is followed, a seller can have a duty to warn of a danger about which it could have no knowledge. This is the result reached by the New Jersey Supreme Court in \textit{Beshada v. Johns-}
Manville Products Corp.,62 and subsequently rejected by the vast majority of commentators.63 If courts follow the contract model, sellers of most pharmaceuticals will face liability, even when the usefulness of their products far exceeds the risks. Faced with this dilemma, the drafters of the Restatement wrote comment k to provide an exemption from strict liability for sellers of "unavoidably unsafe" products.64 A brief discussion of each of these attempts to describe the strict liability duty to warn should make clear why courts have had so much difficulty deciding whether a strict liability duty to warn is possible.

In Beshada, the New Jersey Supreme Court used a tort-type, strict liability duty to warn to hold that a seller of asbestos products could have a duty to warn of scientifically unknowable dangers.65 Plaintiffs, insulation workers who claimed to suffer from asbestosis and mesothelioma as a result of exposure to asbestos products, alleged that the asbestos products were defective because the defendants failed to warn of the dangers inherent in the products.66 Defendants responded by asserting the state of the art defense—they could not have a duty to warn because at the time the asbestos was marketed no one knew or could have known that it was dangerous.67 Plaintiffs moved to strike that defense. The trial court denied

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63. See infra notes 74 to 77 and accompanying text.
64. Comment k to § 402A of the Restatement states:

   k. Unavoidably unsafe products. There are some products which, in the present state of human knowledge, are quite incapable of being made safe for their intended and ordinary use. These are especially common in the field of drugs. An outstanding example is the vaccine for the Pasteur treatment of rabies, which not uncommonly leads to very serious and damaging consequences when it is injected. Since the disease itself invariably leads to a dreadful death, both the marketing and the use of the vaccine are fully justified, notwithstanding the unavoidable high degree of risk which they involve. Such a product, properly prepared, and accompanied by proper directions and warning, is not defective, nor is it unreasonably dangerous. The same is true of many other drugs, vaccines, and the like, many of which for this very reason cannot legally be sold except to physicians, or under the prescription of a physician. It is also true in particular of many new or experimental drugs as to which, because of lack of time and opportunity for sufficient medical experience, there can be no assurance of safety, or perhaps even of purity of ingredients, but such experience as there is justifies the marketing and use of the drug notwithstanding a medically recognizable risk. The seller of such products, again with the qualification that they are properly prepared and marketed, and proper warning is given, where the situation calls for it, is not to be held to strict liability for unfortunate consequences attending their use, merely because he has undertaken to supply the public with an apparently useful and desirable product, attended with a known but apparently reasonable risk.

Restatement, supra note 2, at § 402A comment k.

65. Beshada, 90 N.J. at 204, 209, 447 A.2d at 546, 549. Because Beshada concerned a motion to strike a defense, the court assumed the truth of defendant's contention that the danger was unknowable. Id. at 197, 447 A.2d at 543.

66. Id. at 196, 447 A.2d at 542.

67. Id.
the motion and the New Jersey Supreme Court reversed, holding that the state of the art is not a defense in a strict liability action. The court began by summarizing its decision in Freund v. Cellofilm Properties, Inc. In Freund the court held that the strict liability instruction to be given in warning cases is the same as the instruction given in design defect cases. The court quoted extensively from the writings of Wade and Keeton and concluded that the proper rule for strict liability in warning cases was to assume that defendant knew of the danger and ask whether he was negligent in selling such a product. Negligence was to be determined, as always, on the basis of reasonableness.

Next, the Beshada court addressed the issue of what the Freund court meant when it said we should assume the defendant knew of the danger. Should we assume the defendant knew of the danger or should we assume knowledge of the danger that was scientifically knowable at the time of sale. The court held that the knowledge of the danger that is available at the time of trial was to be imputed because to hold otherwise would, as in negligence, permit defendants to avoid liability by showing that they acted reasonably. Finally, the court attempted to explain why the goals and policies of strict products liability support this rule.

First, the costs of the injury will be spread among all users. Second, accident avoidance is advanced because if the state of that art is not a defense, defendants will have an incentive to invest more in safety research. Third, the rule simplifies the fact-finding process because determining what "could have been known" is almost impossible.

The Beshada rule has been rejected by most courts and commentators. Most who reject the rule reject the result rather than the reasoning.

68. Id. at 196, 447 A.2d at 542. The court in Beshada reasoned that the state of the art means use of the best available technology and knowledge. Id. at 204, 447 A.2d at 546. Acting on the best available technology and knowledge is, as a matter of law, reasonable. Thus, the state of the art is a defense in negligence, but not in strict liability because in strict liability the reasonableness of defendant's act is irrelevant. Id.


71. Beshada, 90 N.J. at 202, 447 A.2d at 545. Defendant in Beshada argued that the question of whether a product can be made safer must be limited to consideration of technology available at the time of sale because manufacturers would be liable for all injuries even if the product was fit for foreseeable uses. Id. at 202-03, 447 A.2d at 545-46.

72. The Beshada court reasoned that the phrase "duty to warn" may be misleading because it implies a negligence standard. Id. at 204, 447 A.2d at 546. Strict liability, however, is concerned with the product and whether it is safe, not whether defendant acted reasonably. Id.

73. Id. at 205-09, 447 A.2d at 547-49. The Beshada court's policy arguments are attacked in Wade, infra note 74, at 754-756 and Schwartz, New Products, infra note 74, at 825.

says that one can have a duty that cannot possibly be fulfilled. Beshada accurately applied the strict liability rule commonly used in design cases to warning cases and reached this unreasonable result. Therefore, the strict liability rule should not be used in warning cases.

The error in that reasoning lies in the premise that if a rule of strict liability is to be applied to warning cases, the Beshada court was correct in using the rule used in design cases. This premise ignores the significant differences between warning and design cases. The policies underlying the duty to design a safe product and the duty to warn are different. In design cases, risk reduction is clearly the dominant policy. In warning cases, the policy of product honesty is dominant. Consequently, on a risk utility analysis, a court could find that the design of the product is reasonable, but because the product contains a known danger, the manufacturer has a duty to warn.

The difference in the policy goals creates a difference in which element of the case tends to be decisive. In design cases, because risk reduction dominates, the risk utility analysis tends to be decisive. In warning cases, because providing adequate information is important, the scienter element tends to be decisive. Once it is determined that defendant should have been aware of the danger, it is almost impossible to conclude that failure to warn was reasonable. The risk will almost always outweigh the slight cost of providing a warning. Negligent failure to warn cases are thus a form of quasi-strict liability because what the defendant should have known almost always determines the reasonableness of the act.

Because negligent failure to warn cases are quasi-strict, the Beshada court erred in creating a rule that is true strict liability when it intended to follow the quasi-strict rule. The Beshada rule is true strict liability because it produces liability whenever a product causes injury. It produces liability whenever the product causes injury because the rule assumes that defendant knew of the danger and asks whether it was reasonable not to warn. The reasonableness inquiry is not a real inquiry, however, because the costs of warning are so low that knowledge of the danger makes failure to warn unreasonable. Thus, by assuming knowledge of the danger in a


75. Dean Wade, for example, explained that because the Beshada court's application of the Wade-Keeton rule was accurate, he no longer agreed with the rule. Wade, supra note 74, at 761-64. Epstein and V. Schwartz also reject the result, but not the court's application of its rule. Epstein, supra note 74, at 933-35; V. Schwartz, supra note 74, at 902-05. See also Feldman v. Lederle Laboratories, 97 N.J. 429, 479 A.2d 374 (1984) (restricting Beshada to facts that gave rise to its holding).

76. It may not be true that the costs of warning are always low. Courts always treat those costs that way, however, because neither party can argue that the costs of warning are
warning case, the court has created a rule that differs significantly from the rule for design cases that the court was attempting to follow.

To illustrate this difference, consider two cases in which plaintiff alleges that smokeless tobacco is defective. In case one plaintiff alleges defective design, and in case two plaintiff alleges failure to warn. In case one the court will begin by assuming that defendant knows of the danger. The decision will then hinge on balancing the risks inherent in this design against the benefits. A court could find that the risks are so remote and the benefits so great (people enjoy it) that the design of the product is reasonable; thus no liability. In the failure to warn case, however, if the court assumes that defendant knows of the danger, defendant has no chance of winning. If the risks (a remote chance of death from oral cancer) are balanced against the benefits of not warning (saving the few cents per package that it costs to print a warning) no court could find the failure to warn to be reasonable because any life is worth more than a few cents. Thus, the strict liability rule that is based on presumed knowledge will work very differently in design cases than it will in warning cases. It is quasi-strict liability in design cases, but true strict liability in warning cases.

Use of the Beshada rule for warning cases is likely to eliminate some of the benefits the Wade/Keeton risk utility rule was created to provide. The quasi-strict liability rule created by Deans Wade and Keeton for use in design defect cases was a response to the failure of the Restatement's consumer expectation rule to adequately consider what risks a manufacturer should be permitted to expose consumers to.\textsuperscript{7} The risk/utility component of the rule provides two important benefits: it eliminates obvious dangers and justifies the manufacturer in exposing consumers to some dangers. Attempts to apply this risk/utility rule to warning cases, however, could eliminate the latter benefit. Many products that are not defective in design because the utility of the product outweighs the risks are likely to be defective because of failure to warn.

The cases that arose out of the mass polio immunizations in the 1960s illustrate this problem.\textsuperscript{78} The risk of getting polio from the vaccine was less than one in a million.\textsuperscript{79} There was no claim that this risk made the vaccine defective in design. Indeed, if that claim were made, the risk utility analysis would have led to a finding of no defect.\textsuperscript{80} In terms of design, that danger high. Plaintiff cannot argue that the costs of warning are high because plaintiff must show that the costs of warning are less than the costs of not warning. Defendants cannot argue that the costs of warning are high because that would require an admission that the product is bad and that people would not buy it if a warning were provided. Cf. Twerski et al., supra note 47 at 514-17 (arguing that costs of warning are higher than most courts think).

\footnotesize{77. See supra notes 53-60 and accompanying text.}

\footnotesize{78. See, e.g., Reyes v. Wyeth Laboratories, 498 F.2d 1264 (5th Cir.), cert. denied, 419 U.S. 1096 (1974); Davis v. Wyeth Laboratories, 399 F.2d 121 (9th Cir. 1968); Givens v. Lederle, 556 F.2d 1341 (5th Cir. 1977).}

\footnotesize{79. Reyes v. Wyeth Laboratories, 498 F.2d at 1274.}

\footnotesize{80. One commentator has suggested that with such a low risk no sensible application of}
was innocent and the manufacturer was justified in marketing the product. When the claims of failure to warn were adjudicated, however, the danger that was not great enough to render the product defective in design was great enough to render the product defective for failure to warn. The results produced by the Beshada rule thus conflict with the results produced by the rule the Beshada court tried to follow.

The Restatement Rule on Warnings

Consistent with its contract approach, § 402A of the Restatement does not provide for a strict liability duty to warn. The official comments treat warnings almost like warranty disclaimers—warnings can provide a way to avoid liability, but they are not a separate source of liability. Comments j and k to § 402A of the Restatement make this use of warnings clear. Comment j states that the purpose of warnings is "to prevent a product from being unreasonably dangerous." The comment never explains when warnings are required, but the focus of the inquiry is clear. Examine the product and, if it is unreasonably dangerous without a warning, a warning can prevent it from being unreasonably dangerous. The danger inheres in the product, not in the lack of an adequate warning. Lack of a warning will not make the product defective, it can only prevent an otherwise defective product from being considered defective.

Comment k provides another way to prevent a product from being unreasonably dangerous. It states that some products are "unavoidably unsafe," and if a product is "unavoidably unsafe" and a proper warning a risk/benefit analysis could find a defect. Britain, Product Honesty is the Best Policy: A Comparison of Doctors' and Manufacturers' Duty to Disclose Drug Risks and the Importance of Consumer Expectations in Determining Product Defect, 79 N.W. L. Rev. 342, 390 (1984).

81. The manufacturer was found liable for failure to warn in each of the cases cited supra at note 78. See Reyes, 498 F.2d at 1293 (manufacturer found liable for failure to warn); Davis, 399 F.2d at 131 (same); Givens, 556 F.2d at 1346 (same).

82. Comment j to § 402A of the Restatement starts as follows: "In order to prevent the product from being unreasonably dangerous, the seller may be required to give directions or warning, as to its use." RESTATEMENT, supra note 2, at § 402A comment j.

83. Comment j to § 402A of the Restatement reasons primarily by example; thus we can be sure that comment j would require no warning on alcoholic beverages and eggs, but the exact dimensions of the duty to warn remain unclear. RESTATEMENT, supra note 2, at § 402A comment j.

84. Comment j's discussion of allergies makes clear that the danger inheres in the product. The reasonable consumer is expected to be aware of whether he is allergic to eggs or strawberries, therefore no warning is needed. However, if a substantial number of people are allergic to an ingredient in the product and the reasonable consumer is likely to be unaware of the chances or unaware of the presence of that ingredient, a warning is needed. Comment j thus seems to merely restate the consumer expectation test. If the seller is aware that the product is more dangerous than the reasonable consumer expects, a warning will reduce those expectations and thus prevent the product from being unreasonably dangerous. See RESTATEMENT, supra note 2, at § 402A comment j.

85. See supra note 64 (quoting comment k to § 402A of the Restatement).
is given, the seller is not to be held strictly liable. Because the comment illustrates, but does not define, unavoidably unsafe, its boundaries are not clear. However, because all of the illustrations can be described as pharmaceuticals, most have read comment k as referring to products that produce a danger that is far outweighed by the benefits produced. Comment k thus prevents the application of strict liability when: (1) the utility of a product outweighs the unavoidable risks inherent in the product, and (2) proper warning is given.

Because comment k provides an exclusion from strict liability, many have assumed that the standard for determining whether the warning is proper is negligence. A better reading of the comment, however, indicates that it is providing for a form of quasi-strict liability. It is quasi-strict liability, not negligence, because the comment applies only to products whose utility outweighs the risks. Sale of these products is not negligent.

The scienter aspect of negligence, however, is required. The comment thus creates a form of quasi-strict liability and avoids the problem created by Beshada by only requiring a warning for known dangers.

Some commentators have suggested that comment k applies to unknown as well as to known dangers. This conclusion is usually based on the

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86. Comment k to § 402A of the Restatement concludes, "The seller of such products [unavoidably unsafe products], again with the qualification that they are properly prepared and marketed, and proper warning is given . . . is not to be held to strict liability for unfortunate consequences attending their use." Restatement, supra note 2, at § 402A comment k. For some general discussions of comment k, see generally Schwartz, Unavoidably Unsafe Products: Clarifying the Meaning and Policy Behind Comment k, 42 Wash. & Lee L. Rev. 1139 (1985); Page, Generic Product Risk: The Case Against Comment k and for Strict Tort Liability, 58 N.Y.U. L. Rev. 853 (1983); Willig, The Comment k Character: A Conceptual Barrier to Strict Liability, 29 Mercer L. Rev. 545 (1978).

87. Comment k to § 402A of the Restatement states, "These [unavoidably unsafe products] are especially common in the field of drugs." The comment then uses as illustrations "the Pasteur treatment of rabies," prescription drugs and "new or experimental drugs." Restatement, supra note 2, at § 402A comment k.


89. See, e.g., Schwartz, supra note 86, at 1141 ("The Restatement authors believed that classic negligence law was adequate and sufficient to provide incentives for safety for the design of ethical drugs and vaccines"); Page, supra note 86, at 855-56.

90. See supra notes 17 to 19 and accompanying text.

91. Comment k to § 402A of the Restatement concludes by stating that "[t]he seller . . . is not to be held to strict liability . . . merely because he has undertaken to supply the public with an apparently useful and desirable product, attended with a known but apparently reasonable risk." (emphasis added). Restatement, supra note 2, at § 402A comment k.

language of the comment that indicates that some experimental drugs can be comment k products. Experimental drugs necessarily contain unknown or as yet undetermined dangers. The idea that comment k can apply to these products should not be seen as suggesting that comment k requires a warning for unknown dangers. It means that if a manufacturer is or ought to be aware of a danger or of the likelihood that there is a danger, warning must be given. The unknown dangers of experimental drugs are thus not unknown in the same sense as the unknown dangers in Beshada. In Beshada, defendant claimed that there was no reason to know of any danger. With experimental drugs, the particular danger may be unknown, but the possibility of danger is known. Users should be warned that the product is experimental and such a warning may make the manufacturer not strictly liable under section 402A of the Restatement.

The quasi-strict liability provided for in comment k is a contract type rather than a tort type. In tort-type, quasi-strict liability we assume knowledge of the danger and determine the reasonableness of the product by balancing the product risks and utilities. It is tort-type, quasi-strict liability because the decisive issue is still reasonableness. In comment k the risk/utility balance is assumed and there is a duty to warn as long as there is a known danger. This fits in well with the contract nature of section 402A because reasonableness is not relevant to the determination of defect. The comment k rule is thus breach of warranty with a scienter requirement. In breach of warranty the key to liability is the failure to provide a product that meets the reasonable expectations of consumers. Comment k therefore means that there are some products for which strict liability does not apply, and we use a reasonableness, risk/utility analysis to determine whether a product can be exempt from strict liability. However, if the seller is aware of a danger that cannot be removed from the product, the seller must make consumers aware of the danger. This duty to warn is quasi-strict because it requires knowledge, but not a finding, of reasonableness. It is contract-type quasi-strict because the emphasis, as in contract, is on the expectations of consumers and not on reasonableness. Even if the product is reasonably safe, the goal of product honesty can require the manufacturer to provide a warning.

Davis v. Wyeth Laboratories illustrates how comment k creates a form of quasi-strict liability. Plaintiff contracted polio after receiving an oral

2, at § 402A comment k. The language of comment k, however, is clear that a safe haven is achieved only if warning is provided. Id. Thus, comment k applies in this situation must mean that comment k would require a warning. See also Page, supra note 86, at 872 (noting that Restatement never takes clear position on issue).

93. In Beshada, no danger was suspected at time of sale. Beshada, 90 N.J. at 197, 447 A.2d at 542-43. In the case of experimental drugs, the seller is aware of a danger, but unaware of the type and extent of the danger.

94. See supra notes 60 to 63 and accompanying text (describing Wade-Keeton test).

95. See supra notes 16 to 20 and 48 to 52 and accompanying text.

96. 399 F.2d 121 (9th Cir. 1968).
DUTY TO WARN

polio vaccine and sued the manufacturer alleging that the product was defective because of the failure to warn. The court found that comment k applied because the risks inherent in the product were outweighed by the utility (the likelihood of contracting polio from the vaccine was less than one in a million). The court then reasoned that because the manufacturer knew of this danger, the product, without a warning, was defective. The product was more dangerous than the reasonable consumer expects, even though sale of the product was reasonable. The decision to warn the dispensers of the vaccine and not the consumers may also have been reasonable, but under comment k that would not relieve the seller of liability.

Because the duty to warn depends on what the seller knew or should have known, the Davis facts would probably lead to the same result under any rule. Using Beshada, negligence, or comment k, there is very little that a seller who knows of the danger can do to justify the failure to warn. The facts of Beshada, however, would lead to different results. Because the defendant could not have known of the danger, the failure to warn was not negligent and comment k would not have required a warning. Under the Beshada rule, however, the product was defective for failure to warn.

The differences between comment k and negligent failure to warn are differences between tort and contract, not differences in degree of culpability. First, because comment k is contract based, it makes clear that selling a risk beneficial product without a warning will not prevent liability. Negligent failure to warn, on the other hand, still pays lip service to the risk utility analysis, leaving open the possibility that a jury could find that the costs of adding a warning outweigh the benefits. Second, negligent failure to warn focuses on the act, the decision not to warn. If comment k is used, and its requirements, including warning, are not met, we conclude that the product is unreasonably dangerous. This statement about the

97. In Davis v. Wyeth Laboratories, the vaccine was administered to the public in a mass distribution scheme. Id. at 123. The health care administrators who ran the distribution were informed of the risk, but neither they nor the manufacturer made any effort to warn the users. Id. at 123-25.

98. Id. at 128-29.

99. Id. The Davis court stated: “As the comment stresses, however, strict liability is avoided in these situations only where sale is accompanied by proper directions and proper warnings.” Id.

100. Both negligence and comment k to § 402A of the Restatement require a warning only if defendant knew or should have known of the danger. See RESTATEMENT, supra note 2, at § 402A comment k.

101. As the Davis court noted, comment k stresses the fact that unavoidably unsafe products avoid strict liability only if accompanied by proper warnings. Davis, 399 F.2d at 128-29; see supra note 99.

102. See, e.g., Twerski, Weinstein, Donaher, Piehler, The Use and Abuse of Warnings in Product Liability—Design Defect Litigation Comes of Age, 61 CORNELL L. REV. 495, 514-16 (1976) (arguing that true costs of warnings are greater than most courts seem willing to accept); Britain, supra note 80, at 390-94 (discussing use of risk benefit analysis in warning cases).

103. See supra notes 85 to 88 and accompanying text.
product rather than about the warning decision has caused some confusion concerning whether a product can be defective in more than one way or whether we should aggregate the risks created by each alleged deficiency to determine whether the product is defective. A brief analysis of this problem demonstrates why the tort approach to failure to warn is superior to the contract approach.

One Duty to Warn or Several

In *Jackson v. Johns-Manville Sales Corp.*,104 the Fifth Circuit Court of Appeals used a contract approach to hold that one can have only one duty to warn with respect to the same sale of the same product. James Jackson, a shipyard worker suffering from asbestosis, sued Johns-Manville, alleging that Manville’s failure to warn of the hazards of exposure to asbestos products caused his injuries. Mr. Jackson sought compensation for his asbestosis and for the likelihood that he would contract cancer as a result of his exposure to asbestos.105 After a jury verdict for the plaintiff, the Fifth Circuit Court of Appeals reversed and remanded for a new trial on the ground that evidence relating to cancer is inadmissible when there is no evidence that plaintiff has cancer.106 The court said that a cause of action for failure to warn that asbestos causes asbestosis had accrued, but no cause of action had accrued concerning the failure to warn of the link between asbestos and cancer.107

Upon rehearing en banc, the Fifth Circuit vacated its earlier decision in *Jackson* and certified three questions of state law to the Mississippi Supreme Court.108 Among those was the question of “whether a plaintiff who does not presently have cancer can state a claim or recover damages in an action based upon strict liability in tort for the reasonable medical probability of contracting cancer in the future.”109 The Mississippi Supreme Court declined certification110 and the case returned to the Fifth Circuit for a third decision. In its third *Jackson* decision the Fifth Circuit affirmed the judgment of the district court, reasoning that exposure to asbestos gives rise to only one cause of action, and plaintiff is therefore entitled to recover for all injury that is likely to result from the exposure.111

105. *Jackson*, 781 F.2d at 410.
107. The *Jackson* court reasoned that an action for a latent disease accrues upon physical manifestation of the disease. Cancer and asbestosis are unrelated diseases in the sense that neither is a symptom or cause of the other. Therefore, the cancer evidence adds nothing to the asbestosis cause of action and the cancer cause of action has not yet accrued. *Id.* at 516-22.
108. 750 F.2d 1314, 1327-28 (1985) (reasoning that the court’s decision hinges on some unsettled issues of state law).
109. That is, essentially, the one issue or two issues question.
111. 781 F.2d 394, 412 (5th Cir. 1986) (reasoning that cause of action is not manifestation of disease, but is invasion of body by asbestos fibers that cause injury).
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The Jackson case raised the issue of whether exposure to asbestos can give rise to two separate causes of action: one for failure to warn of the risk of asbestosis and one for failure to warn of the risk of cancer. In holding that Mississippi courts would permit only one cause of action, the court used a contract view of strict liability rather than a tort view. This contract view is most evident from the court’s conclusion that the cause of action consists of exposing plaintiff to this product. This view of the cause of action required the court to accumulate all the risks inherent in the product to determine whether the product was more dangerous than a reasonable consumer would expect. A tort view of strict liability, on the other hand, would reject that accumulation of risks and thereby permit several causes of action for failure to warn.

The contract view supports looking at the product as a whole and asks whether the product is what consumers expect it to be. Section 402A of the Restatement, following this contract approach, never speaks of separate aspects of the product creating a danger or being defective. It speaks only of the product. Similarly, when section 402A speaks of warnings, it does not separate them from the product. Because a product is defective if it fails to meet the expectations of the reasonable consumer, and warnings can manipulate those expectations, warnings can prevent a product from being unreasonably dangerous. The failure to warn never renders the product unreasonably dangerous; it merely fails to prevent the product from being unreasonably dangerous.

Tort law, however, treats the duty to warn as separable from the duties to manufacture and design a product safely. Section 388 to the Restatement (Second) of Torts provides that a seller has a duty to warn whenever (1) he knows or has reason to know of a danger, and (2) he has no reason to believe that the user will realize the danger.

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112. Jackson, 727 F.2d at 519. As stated by the Jackson I court, the issue is “whether, upon the manifestation of one disease, a cause of action accrues for all prospective diseases, so that plaintiff has the right (and in a limitations context, a duty) to seek recovery for physically distinct and separate diseases that may or may not develop in the future. Id.; see also id. at 516 (under heading “One Cause of Action or Two”).

113. Jackson, 781 F.2d at 410-11. The Jackson court reasoned that exposure to asbestos is like a car accident. There is one breach of duty—sale of the defective product—and a variety of different results. Id. at 412.

114. See id. at 409 (stating that “evidence of all known or foreseeable hazards posed by the product is relevant”).

115. See Restatement, supra note 2, at § 402A. Note also that 402A never mentions different types of product defects. The only action that seller need take to breach the 402A duty is sale of a product.

116. See generally Restatement, supra note 2, at § 402A comments j and k; supra notes 83 to 93 and accompanying text.

117. Section 388 of the Restatement (Second) of Torts provides: One who supplies directly or through a third person a chattel for another to use is subject to liability to those whom the supplier should expect to use the chattel with the consent of the other or to be endangered by its probable use, for physical harm.
product has several dangers, the seller can have several duties to warn.

Assume, for example, that a particular make of car is reported to have a problem with its steering system. When the seller becomes aware of the problem, he has a duty to warn purchasers (or fix it). If the seller subsequently becomes aware of a problem with the brakes, a new duty to warn arises. What makes them so clearly separate duties is that evidence of breach of one of the duties is not relevant in a suit arising out of breach of the other. If the brakes fail and the injured driver claims that the manufacturer was negligent in failing to warn, evidence of a defective steering system will not be relevant. Such evidence does not help show whether defendant knew of this danger and it does not help show what caused this injury. As long as courts require a causal link between defect and injury, evidence of defect must be specific to this injury, otherwise plaintiff will be unable to show that this defect caused his injury. The problem with the steering cannot have caused the brake problem and is therefore irrelevant.

Under a contract-type analysis, however, evidence of dangers that are not related to the injury are relevant. If defect is defined as a condition more dangerous than the reasonable consumer expects, every danger in the product is relevant, regardless of how far removed it is from this accident. In the car accident described above, the problems with the steering had nothing to do with the accident, but they are relevant to show that the car was more dangerous than the reasonable consumer expects. Following this reasoning the Jackson court found that evidence that asbestos can cause cancer is relevant even in a case in which plaintiff does not claim to have cancer.118

The contract-type warning analysis used in Jackson leads to two serious problems. First, it gives plaintiffs a cause of action when the defendant adequately warned of the risk that manifested itself, but not of other risks. Second, it seems to prevent a plaintiff from bringing a second suit when the other risk manifests itself. Aggregation of dangers gives plaintiffs a cause of action even if the risk that manifests itself was adequately warned of. Assume the same facts as Jackson, except that defendant adequately warned all users of the risk of getting asbestosis. Plaintiff, whose only injury is asbestosis, sues, claiming that the product was defective for failure to warn that asbestos causes cancer. Is the product defective? Yes, since it is more dangerous than the reasonable consumer expects. Could the defect

caused by the use of the chattel in the manner for which and by a person for whose use it is supplied, if the supplier
(a) knows or has reason to know that the chattel is or is likely to be dangerous
for the use for which it is supplied, and
(b) has no reason to believe that those for whose use the chattel is supplied will
realize its dangerous condition, and
(c) fails to exercise reasonable care to inform them of its dangerous condition or of the facts which make it likely to be dangerous.

118. Jackson, 781 F.2d at 409. The Jackson court stated that evidence of all dangers is relevant to prove breach of the duty to warn. Id.
have caused this injury? Yes, again, because plaintiff could show that, had he known that asbestos caused cancer, he would have avoided working with asbestos. We therefore seem to have a good cause of action. The product has a defect that caused injury. Yet it seems quite unfair to permit plaintiff to recover for an injury of which he was adequately warned. Indeed, if product honesty is the primary goal of warnings law, a plaintiff should never be able to collect for injuries caused by a danger about which the manufacturer had provided adequate warning. Because product honesty is also the primary goal of breach of warranty, the policy underlying the warranty of merchantability would reject the result of the above hypothetical and the Jackson court’s attempt to fashion a contract-based duty to warn.

The second problem with the Jackson view of the products liability cause of action is that it seems to bar a plaintiff’s suit when the cancer does arise. The Jackson court said that exposure to one product can give rise to only one products liability cause of action. The likelihood of getting cancer must be litigated when the first injury occurs because the suit alleging failure to warn will be time barred if the cancer develops ten years later. Moreover, because the court aggregated dangers to prove defect, there are no issues or factors relevant in the second suit that were not relevant in the first. The two causes of action are the same, and principles of res judicata should bar the second suit.

Because one cannot know whether an individual will get cancer, the damage award for the likelihood of getting cancer is likely to be much less than the damage award for a person who actually has cancer. By denying a cause of action when the cancer arises, the Jackson decision implies that many plaintiffs will be undercompensated. This problem is somewhat offset by the fact that some plaintiffs who collect for the likelihood of getting cancer will never get cancer. These plaintiffs will be overcompensated. In both situations, however, it is the contract version of strict liability, by

119. The Jackson court reasoned that if there is only one cause of action for failure to warn that cause of action accrues when plaintiff becomes aware of injury. 781 F.2d at 412. The court explained that for statute of limitations purposes the Jackson case is significantly different from Pierce v. Johns-Manville Sales Corp., 296 Md. 656, 464 A.2d 1020 (1983) and Wilson v. Johns-Manville Sales Corp., 684 F.2d 111 (D.C. Cir. 1982). Jackson, 781 F.2d at 423. In both those cases plaintiffs with asbestosis let a substantial period of time pass without suing, contracted cancer and then sued. Both courts held that the statute of limitations did not bar the suit. Pierce, 464 A.2d at 1028; Wilson, 684 F.2d at 120-21. To explain the difference between the cases, the Jackson III court quoted the following from the Wilson decision “we need not and do not decide . . . whether judgment on a claim for asbestosis . . . would have precluded a subsequent claim based on the . . . mesothelioma diagnosis.” Jackson, 781 F.2d at 412 n.23.

120. This is what the Jackson I court meant when it said that the issue was not just whether Jackson had a right to sue for cancer injuries, but whether, in a statute of limitations sense, he had a duty to. Jackson, 727 F.2d at 518.

121. See 1B Moore’s Federal Practice 352 (explaining that one way to determine whether causes of action are same is to see whether same evidence would suffice to support judgment in both).
focusing on the product as a whole instead of examining the separate risk-producing aspects of the product, that leads to the unfair results. A tort-based duty to warn, on the other hand, recognizes that a product can produce a number of dangers, each of which can be the basis of a separate cause of action.122

The widespread refusal of courts to use offensive collateral estoppel in products liability cases123 illustrates how the same product can produce several different duties to warn. Offensive collateral estoppel is a judge-made procedural device that precludes a defendant from relitigating a fully litigated issue when a court has decided the issue against defendant and the decision was essential to the judgment.124 The definition seems to imply that if an insulation worker contracts asbestosis and wins a lawsuit claiming that asbestos products are defective, subsequent suits by insulation workers ought to apply estoppel at least on the issue of whether the product is defective.

One reason that courts have refused to use offensive collateral estoppel is the claim that the second suit has no issues that are identical to issues in the first suit. In Hardy v. Johns-Manville Sales Corp.,125 for example, the Fifth Circuit refused to permit asbestos workers suffering from asbestosis and cancer to use estoppel based on a prior suit in which asbestos workers had prevailed on similar claims. The court reasoned that different uses of different asbestos products produce different risks,126 and that the duty to warn varies depending on what plaintiff and defendant know about the product.127 Thus, within the same person there could be different exposures

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122. See supra note 117 (quoting Restatement § 388).
124. See, e.g., Restatement (Second) of Judgments § 27. The first restatement at § 68 used the phrase collateral estoppel while the second restatement uses "issue preclusion." Offensive use of collateral estoppel was first permitted in the federal courts in Parklane Hosiery Co. v. Shore, 439 U.S. 322 (1979).
126. 681 F.2d 334 (5th Cir. 1982).
127. Id. at 345. Plaintiffs in Hardy v. Johns-Manville Sales Corp. attempted to base the estoppel on the Fifth Circuit's decision in Borel v. Fibreboard Paper Products Corp., 493 F.2d 1076 (5th Cir. 1973), cert. denied, 419 U.S. 869. The Borel court had found a group of asbestos manufactures liable for injuries caused by the failure to warn of the dangers inherent in asbestos products. 493 F.2d at 1093. The Hardy court reasoned that because different products produce different risks, the Borel decision must have been considerably more narrow than it appeared to plaintiffs. Hardy, 681 F.2d at 342-43.
128. Hardy, 681 F.2d at 644-645. The plaintiffs in Hardy were exposed over a 30 year
to the same product, some of which may be exposures to a defective product and others not. Estoppel therefore was not proper because there were no identical issues. If two cases alleging that the same product is defective have no identical issues, we must be dealing with separable duties to warn.

The treatment of the duty to warn in collateral estoppel cases demonstrates that most courts are using the tort model rather than the contract model. The contract model sees the defect issue as always the same for the same product. Courts aggregate all the risks and see if they are greater than the reasonable consumer would expect. The view of the cause of action that looks at the product as a whole requires use of estoppel in cases like *Hardy*. The refusal of most courts to use estoppel shows that the tort view which examines the risks related to individual aspects of the product has, for the most part, prevailed.

*The Strict Liability Duty to Warn*

Thus far we have analyzed two suggested rules for a strict liability duty to warn. The *Beshada* rule is true strict liability: the negligence state of mind is eliminated and there is no true balancing of risks and benefits to determine whether the product is reasonable. The comment k rule is quasi-strict liability: the negligence mental state is required and there is no balancing of risks and benefits. We termed this a contract-type, quasi-strict liability because the central inquiry is what the user expects of the product, not the risks inherent in the product. What we have yet to see is a tort-type, quasi-strict liability warning rule, one that looks at the individual risks associated with the product and makes product honesty the controlling policy.

The California Supreme Court attempted to state such a rule in *Finn v. G.D. Searle & Co.* In *Finn* the court upheld a jury verdict for defendant in a warning case even though there was some evidence that defendant should have known of the dangers inherent in its product. Plaintiff claimed that Diodoquin, a prescription drug manufactured by defendant, was defective because of defendant's failure to warn that Diodoquin can cause blindness. The defendant claimed that it could not have known of the
danger at the time of sale. This raised the issue of whether knowledge available at the time of sale or knowledge available at the time of trial should be used to determine whether there is a duty to warn. The court found that it did not have to answer that question because plaintiff had proceeded on a negligence theory and not a strict liability theory. The court did discuss the issue, however, and suggested a middle ground between the two theories.

The Finn court began its discussion of this issue by pointing out that the only real difference between strict liability and negligence in warning cases is over whether liability can be imposed for dangers that were not reasonably discoverable at the time of sale. The court noted that two main lines of cases exist on this issue: one that uses a negligence standard and thus focuses on what defendant knew or should have known, and one that presumes knowledge of the danger. These cases differ from design and manufacturing defect cases, the court noted, because failure to warn cases cannot be decided by comparing the product to other units of the same product or to an alternative design presented by plaintiff. This difference led the court to conclude that the test for strict liability in warning cases should be different from the test used in manufacturing and design defect cases.

132. Id. at 696, 200 Cal. Rptr. at 873, 677 P.2d at 1151. Plaintiffs in Finn presented three studies to show that defendant should have known of the risk. Defendant responded to these by pointing out that the 1966 study never made clear whether the optic nerve problem was caused by Diodoquin or the skin disease that Diodoquin was used to treat and the other two studies reported on Vioform, a drug that is different from but chemically similar to Diodoquin.


134. Finn, 35 Cal. 3d at 875, 200 Cal. Rptr. at 1153, 677 P.2d at 1147.
135. Id. at 700, 200 Cal. Rptr. at 875, 677 P.2d at 1153.
136. See supra note 133 and accompanying text.
137. The Finn court stated:

"Failure-to-warn" cases involving claims that the manufacturer knew or should have known of the asserted danger and accordingly should have supplied a warning have been subject in California to a distinct form of analysis in the strict liability arena. The unique nature of the "defect" within this context was recently well described as follows: "[T]he jury cannot compare the product with other units off the same assembly line, nor can they at least weigh the reasonableness of the design against alternative designs presented by the plaintiff [citation]. Instead, they must decide whether a product flawlessly designed and produced may nevertheless possess such risks to the user without a suitable warning that it becomes 'defective' simply by the absence of a warning." (Cavers v. Cushman Motor Sales, Inc., 95 Cal. App.3d 338, 347, 157 Cal. Rptr. 142) (1979).

Finn, 35 Cal. 3d at 699, 200 Cal. Rptr. at 874-75, 677 P.2d at 1151-1152.
The court rejected the two tests most commonly used in failure to warn cases and suggested that knowledge of the danger is not the proper focus because we never reach the point at which we know with certainty that a product causes a certain injury. Instead, we have evidence of a causal link that "may range from extremely vague to highly certain." Even the most vague and inconclusive study provides defendant with reason to know that there may be a danger. Yet, the court reasoned, if courts require a warning based on a vague, inconclusive study, physicians would be so inundated by warnings that the usefulness of warnings would be greatly diluted. What courts should do, therefore, is determine how much evidence of causal link gives rise to a duty, not whether someone knew of the danger.

This emphasis on strength of the causal link provides a middle ground between the two commonly used rules on mental state. The evidence of causal link will not be present before the first study is done. Therefore, the Finn court rejected the Beshada decision that one can have a duty to warn of a danger that could not be known. At the same time, because the seller has a strong interest in defending its product, the reasonable seller will deny the significance of the causal link until a court finds the product to be defective. What the Finn court would have courts do is focus on the

138. Finn, 35 Cal.3d at 699, 200 Cal. Rptr. at 874, 677 P.2d at 1152.
139. Id. at 701, 200 Cal. Rptr. at 876, 677 P.2d at 1153. The Finn court stated that "both common sense and experience suggest that if every report of a possible risk, no matter how speculative, conjectural, or tentative, imposed an affirmative duty to give some warning, a manufacturer would be required to inundate physicians indiscriminately with notice of every hint of danger, thereby inevitably diluting the force of any specific warning given." Id.  

141. Finn, 35 Cal. 3d at 701, 200 Cal. Rptr. at 876, 677 F.2d at 1153. The Finn court noted that strength of the causal link is relevant to both whether to warn and what form a warning should take. Id.  

142. The history of mass tort litigation shows that as knowledge of a danger increases, the manufacturer generally denies the existence of the danger. The manufacturers of asbestos, DES, MER/29 and the Dalkon Shield all denied the existence of danger and litigated numerous lawsuits before warning or removing the product from the market. See, e.g., Borel v. Fibreboard Paper Products Co., 493 F.2d 1076, 1092 (5th Cir.), cert. denied, 419 U.S. 869 (1974) (finding that although dangers of asbestos were well known in 1930s and 1940s no manufacturer warned of dangers until the 1960's); Jackson v. Johns-Manville Sales Corp., 727 F.2d 506, 524, 530-31 (1984) (estimating number of asbestos cases pending as about 14,000 and still disputing issue of when defendants should have known of danger). The history of DES is described in Note, Proof of Causation in Multiparty Drug Litigation, 56 TEX. L. REV. 125 (1980). See also Sindell v. Abbott Laboratories, 26 Cal.3d 588, 163 Cal. Rptr. 132, 607 P.2d 924 (1980); Bichler v. Eli Lilly & Co., 55 N.Y.2d 571, 436 N.E.2d 182 (1982); Collins v. Eli Lilly & Co., 116 Wis. 2d 166, 342 N.W.2d 37 (1984).

MER/29 was an anti-cholesterol drug marketed by Richardson-Merrill, Inc. The manufacturer concealed evidence of side effects in order to get FDA approval and a flood of
product, not what someone knew or should have known, to determine what has always been the mental state aspect of the case.

This produces a tort-type, quasi-strict liability duty to warn that differs from the tort-type, quasi-strict liability used in design cases in exactly the same way that negligent duty to warn cases differ from negligent design cases. Because of the different policies underlying the design and warning duties, different aspects of the case tend to be decisive in each. In negligent failure to warn cases, the mental state is usually decisive—if the seller knew or should have known of the danger, it is unreasonable not to warn.143 In design cases, the risk utility analysis is usually decisive. If defendant could make the product safer at little cost, failure to do so is negligence.144

Warning cases focus on the mental state while design cases focus on the product.

The quasi-strict liability rule used in design cases eliminates discussion of the mental state and replaces it with an examination of the causal link between the danger and the injury. This analysis provides results that are similar to the results produced by a negligence analysis, except it makes clear that we are concerned with what the product actually does, not with what defendant thinks it will do. To take into account the key difference between warning and design cases, the quasi-strict liability warning rule focuses on the aspect of the case that is central to warning cases—the mental state. To make clear that this is a form of strict liability, not negligence, the inquiry into the mental state is made as objective as possible. To accomplish this, we should do what we did in the design case: eliminate references to the defendant and focus exclusively on the product.145

The results of this analysis will be similar to the results in negligent failure to warn cases. However, the rule makes clear that the duty to warn if strict liability will arise before the negligent duty to warn. That is, the causal link between product and injury will usually require a warning before the reasonable seller is likely to acknowledge that connection.146

products liability suits followed. See Rheingold, The MER/29 Story—An Instance of Successful Mass Disaster Litigation, 56 Calif. L. Rev. 116 (1968). The Second Circuit’s decision in Roginsky v. Richardson-Merrill, Inc., gives a detailed history of the product, from the false data used to get FDA approval to the fines paid by the company as a result of a criminal investigation. Roginsky v. Richardson-Merrill, Inc., 378 F.2d 832 (2d Cir. 1967).

The Dalkon Shield was a contraceptive device marketed by A.H. Robins Co. The manufacturer ignored or concealed reports about the dangers and ineffectiveness of the shield for several years before removing the product from the market. See Seltzer, Punitive Damages in Mass Tort Litigation: Addressing the Issues of Fairness, Efficiency and Control, 52 Fordham L. Rev. 37, 38 (1983) (estimating that as of April 1981 about 6,000 products liability suits had been filed against A. H. Robins alleging injuries caused by Dalkon Shield).

143. See supra notes 75 to 77 and accompanying text.

144. See supra notes 76 to 77 and accompanying text.

145. See supra note 3 and accompanying text.

146. Because the reasonable manufacturer is likely to deny the danger until the loss of lawsuit, as knowledge of a danger develops the duty to warn arises when the danger becomes significant, not when a reasonable seller would recognize its significance. See supra note 142 (discussing number of manufacturers who denied danger in face of a huge volume of lawsuits).
This focus on the product to determine whether there is a duty to warn permits courts to do what the move from negligence to strict liability was designed to do—make warning decisions by examining the product, similar to the way they make decisions in design and manufacturing defect cases. As in design and manufacturing cases, examination of what defendant knew is eliminated because what defendant knew goes to whether he was culpable. Also, examining the strength of the causal link demonstrates that, like the test used in design defect cases, this is not true strict liability—not all dangers that cause injury produce liability. We examine the product and the causal link between product and injury to determine whether the magnitude of the danger is sufficient to warrant a warning. Although the rule eliminates reasonableness and emphasizes product honesty, the degree of risk still has a role.

The use of causal link between product and injury to determine defect offers several advantages over the traditional view that courts should decide whether the product is defective before taking up the causation issue. In warning cases the causation and defect aspects of the case are linked more closely than in design and manufacturing cases. Most courts agree that if a danger is so well known that a warning would probably have no impact, there is no duty to warn. Consequently, in warning cases no causation often means no duty. The facts of Sherk v. Daisy-Hedden Co. illustrate this. Plaintiff claimed that defendant’s failure to warn that a BB gun shot at close range can cause serious injury was the cause of plaintiff’s decedent’s death. The court, however, found that this danger was so well known that the person who shot plaintiff’s decedent must have known it. If the user of the product knew the danger, a warning could not have prevented the injury. There was thus no causal link between the failure to warn and the injury. The court recognized that if a warning could not have helped prevent injury, it makes no sense to conclude that defendant had a duty to warn. Therefore, the causal link between product and injury plays a key role in whether a duty to warn exists.

147. See, e.g., Jamieson v. Woodward & Lothrop, 247 F.2d 23 (D.C. Cir.), cert. denied, 355 U.S. 855 (1957); Shugut v. Aeublin Inc., 511 F.2d 1104 (10th Cir. 1975); Ward v. Hobart Mfg. Co., 450 F.2d 1176 (5th Cir. 1971); Posey v. Clark Equipment Co., 409 F.2d 560 (7th Cir. 1969). The rule was stated in Boutkewich v. Billinger, 432 Pa. 351, 356, 247 A.2d 603, 606 (1968) as follows: [W]e hardly believe it is anymore necessary to tell an experienced factory worker that he should not put his hand into a machine that is at that moment breaking glass than it would be necessary to tell a zookeeper to keep his head out of a hippopotamus' mouth.


149. Sherk v. Daisy Hedden Co., 450 A.2d 615, 620 (Pa. 1982). In Sherk v. Daisy Hedden Co., plaintiff and a friend were playing with the gun, shooting bottles and cans, and intended to use the gun to hunt small game. Id. at 620. The friend pointed the gun at plaintiff and, as a joke, pulled the trigger. Id. at 617-18.

150. A warning in Sherk would have merely provided information that the child already had. Moreover, the gun came with directions that emphasized the danger of pointing the gun at people. The boys, however, never read the directions. Id. at 619.
A second advantage provided by the use of causal link to determine the duty to warn is that the rule makes clear that a manufacturer need not warn when the danger is very slight. The Finn court recognized that there is a significant difference between directions and warnings. Directions tell the user how to use the product safely, while warnings provide information about dangers that exist regardless of how the product is used. Because these risks exist regardless of how the product is used, the risk reduction policy would be furthered by preventing the product from being marketed rather than providing warnings. The product honesty policy, however, could require a warning to permit individuals to choose what risks they want to expose themselves to. A weak causal link between product and injury means that there is very little evidence that the product can cause injury and, consequently, most consumers who are aware of the danger will choose to use the product. If there is very little evidence that the product can cause injury and it is likely that a warning would be ignored, plaintiff will have a great deal of difficulty proving that it is more likely than not that failure to warn caused his injury. Thus, examination of the causal link explains why a manufacturer need not warn of very slight dangers.

The Finn court further reasoned that this emphasis on product honesty could reduce the number of product-related injuries. Requiring manufacturers to warn of all dangers dilutes the effectiveness of all warnings. The court cited an article by Professors Twerski et al. that suggested that overuse of warnings would create a situation like the little boy who cried wolf. People would begin to ignore warnings more than they already do, thus leading to a greater number of injuries. Therefore, a manufacturer should not have a duty to warn of very slight dangers because excess warnings will cause more injuries than they would prevent.

The Finn court's reasoning that overwarning may cause more injuries than it prevents suggests a striking interplay between the policies underlying strict liability. The Finn court reasoned that the test should be based on

151. Finn, 35 Cal. 3d at 691, 699-700, 200 Cal. Rptr. at 870, 875, 677 P.2d at 1147, 1152.
153. This is essentially the reasoning of Judge Weinstein in the Agent Orange Class Action Settlement. In re Agent Orange Product Liability Litigation, 597 F. Supp. 740, 781 (E.D.N.Y. 1981). Judge Weinstein explained that the evidence of causal link between agent orange and injury was so slight that plaintiff would have a great deal of difficulty proving that agent orange can cause injury. Id. at 872. If the plaintiff will have difficulty proving that the product can cause injury, plaintiff will certainly be unable to prove that it is more likely than not that the product caused injury in this case.
154. Finn, 35 Cal. 3d at 701, 200 Cal. Rptr. at 876, 677 P.2d at 1153 (stating that warning of even most insignificant dangers would dilute effectiveness of all warnings).
155. See supra notes 139-40 and accompanying text.
the product and not on reasonableness, in part because the rule for warnings ought to be controlled by the product honesty policy rather than the risk prevention policy. The court then suggested that a test based on product honesty would, in fact, reduce the number of injuries more than a test based on risk prevention. When Professors Twerski et al. suggested that overuse of warnings would cause more injuries, they were assuming use of a risk utility test and suggesting that the costs of warning are higher than most courts think. Courts that use the risk utility analysis have not used this reasoning to suggest that there are significant costs to warnings. Thus, the Finn court's suggestion that the product honesty policy could reduce injuries more than the risk prevention policy is based more on a perceived flaw in the way the risk reduction policy is presently being applied than on a paradoxical interplay between the policies.

The Finn court never suggested what standard a court should use to determine whether the causal link between product and injury is strong enough to create a duty to warn. The court, however, could not have intended to leave the choice of standards to the discretion of the trial judge. California courts have been explicit in describing the need to define "defect" to give it sufficient substance to produce predictable outcomes. The Finn court's failure to state a standard is, thus, probably the result of its conclusion that it was faced with only a negligence case.

The test that ought to be used is: has this danger reached the level at which it would be a material fact in the decision of a reasonably prudent consumer. A materiality test provides the same advantages for warning cases that the risk utility test provides for design cases. Deans Wade and Keeton argued for the risk utility test on the ground that it permits courts to work with concepts with which they were already familiar while promoting the primary policy underlying design defect litigation—avoiding unreasonable risk. A materiality test permits courts to use concepts with which they are already familiar while promoting the primary policy underlying the need for warnings—product honesty. The risk utility test was

156. See Twerski, Use and Abuse, supra note 140.
157. See, e.g., Barker v. Lull Eng'g Co., 20 Cal. 3d 413, 435, 143 Cal. Rptr. 225, 239, 573 P.2d 443, 457 (1978) (discussing dangers of leaving jury free to choose their own definition of defect).
158. Finn, 35 Cal. 3d at 698, 200 Cal. Rptr. at 874, 677 P.2d at 1151 (stating that because plaintiff proceeded only on negligence theory they did not have to reach decision on strict liability). Chief Justice Bird, dissenting, claimed that the failure to give a strict liability instruction was error. Id. at 705-25, 200 Cal. Rptr. at 878-93, 677 P.2d at 455-70 (Bird, J., dissenting).
159. See, e.g., Phillips v. Kimwood Machine Co., 269 Or. 485, 493, 525 P.2d 1033, 1037 (1974) (discussing writings of Deans Wade and Keeton and concluding "The advantage of describing a dangerous defect in the manner of Wade and Keeton is that it preserves the use of familiar terms and thought processes with which courts, lawyers, and jurors customarily deal").
160. Materiality is a concept that courts and lawyers are familiar with from its use in the definitions of fraud and informed consent.
seen as fair because it reduced the risks to which manufacturers could expose consumers while making clear that some product risks are justified. Similarly, the materiality test should increase the amount of product information available to consumers while recognizing that consumers need not be warned of some risks. The risk utility test was said to be clearer because it is difficult to determine what consumers expect of complex designs. The materiality test will also be clearer because it prevents use of a warning risk utility test from undermining the results of the design risk utility test, thus clarifying the manufacturer's duty.

An attempt to use a risk utility test instead of a materiality test would fail because such an attempt would either undermine the design defect test or repeat it. Two possible ways to use a risk utility test to, as Finn suggested, focus on the causal link between product and injury to determine whether a warning is needed are to ask (1) could a reasonably prudent consumer use this information to prevent injury, and (2) is the reasonably prudent consumer likely to use this information to prevent injury. Both of these tests are closer to the design test because they are based primarily on the degree of risk. It is for precisely that reason that the tests fail.

When a product is found to be defective in design, the court is saying that a reasonable person would not sell such a product and, conversely, the risk is so great that a reasonable consumer would not purchase it. The manufacturer must, therefore, redesign the product. The warning test based on whether a reasonable consumer would avoid using the product will reach the same results because the same risk utility analysis will be used, and any danger that is so great as to prevent a reasonable person from selling a product should prevent a reasonable person from buying it. The warning test thus would be redundant and would ignore the significant differences between design and warning cases.

The key difference is that there are some products that are dangerous, and although a reasonable person would want to know of the danger, the danger is not so great as to prevent all reasonable consumers from purchasing. Cigarettes may be such a product. Congress and the Surgeon General have mandated warnings and education campaigns, but sellers continue to sell cigarettes and millions of people continue to smoke. The danger is great, but apparently many consumers believe that the benefits outweigh the risks. The rule that requires warnings only when the reasonable consumer would avoid purchasing the product thus may not require a warning on cigarettes. Many people decide not to smoke because of the danger. The warning allows those people to avoid the danger. If the purpose of the warning is to permit an informed choice, consumers need a warning on cigarettes. This difference in the policies underlying design and warning defects means that a much lower degree of risk should be required and

161. A reasonable consumer would not purchase a product when the risks inherent in the product outweigh the benefits.
DUTY TO WARN

prove failure to warn than to prove design defect. The test for failure to warn must take that possibility into account.

The test based on the possibility of preventing injury would require warnings on everything. Because every product presents the possibility of some injury that a warning may prevent, every product would need a warning. The results, as the Finn court explained, would be more injuries because warnings would be more routinely ignored. The results would also be harsh to defendants. The much criticized case of Moran v. Faberge, Inc. seems to have applied such a rule. In Moran, plaintiff was burned when her friend threw cologne on a lit candle. The plaintiff claimed that the cologne was defective because of the failure to warn that it was flammable. Although the cologne had been marketed for 27 years without incident, the court found that there was a duty to warn, reasoning that it is possible for someone to be injured applying the cologne while sitting very close to a candle. This possibility meant that a warning could prevent injury to a reasonable user. The harshness of this test ought to be clear. To require a manufacturer to pay for injuries because it failed to note a very remote possibility of injury means that whenever someone is injured all plaintiff must prove is a possibility of danger, a standard that is much too low to prove a product defective. Indeed using that standard, users of the safest product could collect if injured, and a manufacturer would, in effect, become the insurer of the safety of its products.

The materiality test is fairer because it balances the need to provide adequate information against the possibility of diluting the efficacy of warnings. It protects manufacturers from becoming insurers by finding a duty only when the danger is so great that a reasonable consumer would want to know. Warnings would not be diluted because consumers would be warned of only significant dangers. Consumers would be protected in two ways. First, they would have sufficient information to avoid significant dangers, and second, their freedom of choice would be protected because

162. See supra notes 139-40 and accompanying text.
163. 273 Md. 538, 332 A.2d 11 (1975). Professor Twerski sees the case as an illustration of the problem with requiring warning of insignificant dangers. Twerski, supra note 47, at 516. Moran v. Faberge, Inc., 273 Md. 538, 553, 332 A.2d 11, 20 (1975). The court in Moran v. Faberge reasoned that defendant need not foresee the danger that occurred, "it was only necessary that it be foreseeable to the producer that its product, while in its normal environment, may be brought near a catalyst. . . . For example while seated at a dressing table, a woman might strike a match to light a cigarette close enough to the top of the open cologne bottle so as to cause an explosion. . . ." Moran, 273 Md. at 553, 332 A.2d at 20.
164. Moran, 273 Md. at 553, 332 A.2d at 20. The court in Moran reasoned that defendant need not foresee the danger that occurred, "it is only necessary that it be foreseeable to the producer that its product, while in its normal environment, may be brought near a catalyst. . . . For example, while seated at a dressing table, a woman might strike a match to light a cigarette close enough to the top of the open cologne bottle so as to cause an explosion." Id.
165. See, e.g., Twerski, et al., supra note 47, at 516-17. See also Britain, supra note 80, at 590 (criticizing courts for using risk utility test to hold that warnings must be given even when risk of harm is astronomically small).
they may decide to use the product. Moreover, the materiality test avoids sending contradictory signals to the manufacturer. If courts use a warning test that is based primarily on the degree of risk, manufacturers see their duty to design a safe product undermined. That is, the utility may outweigh the risks and, if so, the design of the product is proper. Then, to determine the duty to warn, the same risk utility analysis is done, and this time the risk that was not a defect is deemed to be a defect. The materiality test, however, would not state that the same risk is both a defect and not a defect. Instead it would suggest that the manufacturer has several distinct duties—a duty to avoid creating unreasonable risks and a duty to provide sufficient information about the product. If design and warning defects are both treated as if they were intended to prevent unreasonable risk, manufacturers are justified in complaining that it is unfair to suggest that they have a duty to make their product reasonably safe, but that may not be safe enough. However, if the duty to make a reasonably safe product and the duty to provide sufficient information are seen as separate duties, it is not inconsistent or confusing to tell the manufacturer that it must make its product reasonably safe and it must provide adequate information about significant potential dangers. The materiality test, by focusing on product honesty, makes clear that finding a failure to warn when the product is not defectively designed does not mean that we are finding a reasonable risk to be unreasonable; it means that some reasonable risks are material.

Note the significant differences between viewing design and marketing as separate duties and a Barker v. Lull-type standard that views consumer expectations and risk/utility analysis as alternative means toward the same end. The Barker v. Lull test provides that one can prove that the product is defective in design by showing that either it fails to meet reasonable consumer expectations, or it is not risk beneficial. That tells the manufacturer that in designing the product, reduction of risk and providing sufficient information are of equal importance, and plaintiff can choose which is to control. Because a risk beneficial design is never necessarily an adequate design and providing full information is never sufficient either, the manufacturer is left with no guidance on how to design its product. The materiality test for marketing, however, provides clear guidance to the manufacturer. First, it says that in terms of design, a risk beneficial design is sufficient. Then as far as marketing is concerned, all material information must be provided. Manufacturers generally treat the design and marketing

166. In Barker, the California Supreme Court defined design defect as follows: A trial judge may properly instruct the jury that a product is defective in design if the plaintiff demonstrates that the product failed to perform as safely as an ordinary consumer would expect when used in an intended or reasonably foreseeable manner, or if the plaintiff proves that the product's design proximately caused his injury and the defendant fails to prove, in light of the relevant factors discussed above, that on balance the benefits of the challenged design outweigh the risk of danger inherent in such design.

*Barker*, 20 Cal. 3d. at 435, 143 Cal. Rptr. at 239-40, 573 P.2d at 457-58.
functions separately. Different people are involved in each function. Products liability law ought to recognize this and tell each group what its duty is, rather than giving both a confusing overlap of duties.

In contract law the controlling policy was clear—the product had to be what the seller said it would be. In negligence the controlling policy was also clear—the use of a risk utility analysis meant that reducing risks ought to control. The present state of confusion concerning which one to choose leaves manufacturers with a confusing set of instructions concerning how to design and market their products. Allowing the plaintiff to choose does not reduce the level of confusion, it merely makes it more likely that plaintiffs will prevail in litigation. There is very little disagreement on the proper standard for design defects. The risk utility analysis sets a fair standard. In warning cases, however, product honesty is the more central policy. Even though the choice is not all that difficult, courts seem unwilling to make it. This refusal to choose between the potentially conflicting policies can be attributed in part to the use of risk spreading as a means of developing product liability law.

Risk spreading generally means that it is better to make a large number of people pay a small amount to cover the costs of injuries than to have one person suffer a huge loss.167 This policy has played an important role in the development of strict products liability because, if a product exposes all users to a risk, it is fairly easy for the manufacturer to raise the price to cover that risk. This is fair because everyone probably would prefer to pay a little extra to avoid the possibility of a huge loss and because requiring the manufacturer to run the risk spreading mechanism gives the manufacturer an incentive to reduce the risk inherent in its product.168 Thus, there is general agreement that risk spreading makes sense in the context of product injury.

One problem with the risk spreading policy, however, is that it is one directional—it will always lead to a victory for the plaintiff.169 Because fairness seems to reject a rule that says one side should always win, risk spreading is suspect as a decision-making guide. Moreover, risk spreading sometimes conflicts with the policies of preventing injuries and the policies of providing adequate information. Because risk spreading is one directional, it is seldom used as the sole basis of decision. However, there is a tendency to use risk spreading to resolve conflicts between the other two policies. For example, the California Supreme Court in Barker v. Lull recognized

167. As Justice Traynor stated in Escola, "The cost of an injury... can be insured by the manufacturer and distributed among the public as a cost of doing business." Escola, 24 Cal.2d at 462, 150 P.2d at 441 (Traynor, J., concurring).


169. See, e.g., Britain, supra note 80, at 409-10 (stating that loss spreading is subject to criticism in terms of both fairness and economic efficiency); Owen, Rethinking the Policies of Strict Products Liability, 33 Vand. L. Rev. 681, 703-07 (1980).
that there are cases in which the product is risk beneficial, yet the manufacturer might not have provided sufficient information. There are also cases in which the manufacturer has provided sufficient information, but the design of the product is not risk beneficial. In both types of cases the two main policies lead to different results. The *Barker* court used the risk spreading policy to settle the conflict.\(^\text{170}\) Risk spreading means that it is better for plaintiffs to collect. Therefore, the policy that favors the plaintiff will control in every case. This use of risk spreading to settle the policy conflict permits a policy that is, at best, of suspect fairness to answer questions that are essentially questions of fairness. It also justifies the refusal to make an important policy decision when that decision is essential to providing clear guidance to manufacturers. Use of the materiality test is better because, at minimum, the manufacturer's duty is clear.

Some commentators have suggested that the duty to warn cannot be separated from the duty to design a safe product. They argue that, because a warning often impairs the marketability of the product, a court must examine the product as a whole to determine whether there is a duty to warn.\(^\text{171}\) The duty to warn, they argue, thus requires the same risk utility analysis as the design duty. The error in that reasoning is a failure to distinguish the cases in which a warning will substantially impair marketability from those in which it will not. A warning should substantially impair marketability if the risks outweigh the benefits of the product. That is, if there is a design defect, a warning ought to substantially impair marketability. If there is no design defect, that is, if the benefits of the product outweigh its risks, the warning is not likely to substantially impair marketability. Because the marketability will not be impaired when there is no design defect, a risk avoidance policy should not control such decisions. The risk created by such products, however, may be so great that reasonable users would want information concerning such risks. Thus the product honesty or informational policy may require a warning. Therefore, an examination of the effect of warnings on the marketability of the product helps explain why we need to have different tests for design and warning cases.

### Conclusion

Most courts decide warning cases by using either a negligence standard or a strict liability standard that is based on reasonableness. This leads to a number of serious problems. It gives manufacturers an incentive to deny the existence of danger until a court or legislature compels a warning. It permits a conflict between the warning test and design test that undermines the design test and fails to make clear the manufacturer's duty.

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\(^{170}\) *Barker*, 20 Cal. 3d at 434, 143 Cal. Rptr. at 239, 573 P.2d at 457. The *Barker* court said that its rule would provide recovery whenever there was something wrong with the product, while stopping just short of insurer's liability. *Id.* at 239, 573 P.2d at 457.

\(^{171}\) *See* Britain, *supra* note 80, at 405-07; Twerski, *supra* note 47, at 500.
A strict liability duty to warn of all material dangers would help solve each of these problems. As information about a product danger becomes known the duty to warn will arise earlier than the negligence duty to warn. The conflict between the design and warning rules is avoided by making clear that the two rules are governed by different policies, that they are, in fact, two different rules. Furthermore, since the design and warning rules are indeed governed by different policies, courts can, without internal conflict or confusion, state that a manufacturer has a duty to design products so that they are reasonably safe and a duty to provide all material information regarding product risks.
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