Reflections on the Theory and Administration of Strict Tort Liability for Defective Products

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REFLECTIONS ON THE THEORY AND ADMINISTRATION OF STRICT TORT LIABILITY FOR DEFECTIVE PRODUCTS

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I. INTRODUCTION

Impatient with the inaction of the state supreme court, the South Carolina General Assembly took control of the matter of products liability once again¹ in 1974 and enacted a statute

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We would like to express our appreciation to our colleague, Pat Hubbard, for his review of and comments upon an early draft of this article.


This article is limited to a consideration of the doctrine of strict liability in tort for the sale of "defective" products as enacted into law by the South Carolina General Assembly in 1974. See note 2 infra. It should be observed that the adoption of the strict tort statute was almost certainly not intended to restrict the use of Article 2 of the Code as a source of products liability law. Instead, the legislature probably was simply attempting to create an alternative, and in many respects parallel, source of products liability law. Cf. Restatement (Second) of Torts § 402A, comment m (1965) [hereinafter cited as § 402A]. See also Dickerson, Was Prosser's Folly Also Traynor's? Or Should the Judge's Monument Be Moved to a Firmer Site?, 2 Hofstra L. Rev. 469 (1974); Wade, Is Section 402A of the Second Restatement of Torts Preempted by the UCC and Therefore Unconstitutional?, 42 Tenn. L. Rev. 123 (1974). Nor, of course, was negligence law preempted by the adoption of strict tort. See § 402A, comment a.

For articles examining the interrelationship of strict tort liability and warranty law under the Uniform Commercial Code, see Dickerson, Was Prosser's Folly Also Traynor's? Or Should the Judge's Monument Be Moved to a Firmer Site?, 2 Hofstra L. Rev. 469 (1974); Dickerson, The ABC's of Products Liability — With a Close Look at Section 402A
adopting section 402A of the Restatement (Second) of Torts. In so doing, the legislature aligned South Carolina with the substantial and still-growing majority of jurisdictions imposing strict tort liability upon sellers of "defective" products. In addition to clari-


2. See S.C. CODE ANN. §§ 66-371 to -373 (Cum. Supp. 1976), which provides as follows:

§ 66-371. Conditions under which seller liable. — (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 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) shall apply 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.

§ 66-372. When recovery barred. — If the user or consumer discovers the defect and is aware of the danger, and nevertheless proceeds unreasonably to make use of the product and is injured by it, he is barred from recovery.

§ 66-373. Intent of chapter. — Comments to § 402A of the Restatement of Torts, Second, are incorporated herein by reference thereto as the legislative intent of this chapter.

Section 66-371 is an adoption of § 402A of the Restatement (Second) of Torts, with only minor variations in language. Specifically, the word "thereby" appearing in § 402A(1) between the words "harm" and "caused" does not appear in § 66-371(1) of the statute. Secondly, § 66-371(2) states that the rule "shall apply" despite certain circumstances as distinguished from the Restatement's use of the word "applies." See § 402A(2). Both of these differences were in all probability either inadvertent or merely an attempt to improve stylistically upon the language of § 402A, and consequently they should not be accorded any substantive significance.

Section 66-372 is a verbatim recitation of the last sentence of comment n to § 402A which recognizes the affirmative defense of assumption of risk in strict tort actions, limited by the requirement that such conduct be shown to have been unreasonable in order to be effective as a bar to recovery.

Section 66-373 adopts the comments to § 402A as the "legislative intent" of the statute, probably in an attempt to make it clear that the legislature was indeed adopting § 402A of the Restatement and also in an effort to add some meat to the bare bones of § 66-371. See note 26 and accompanying text infra.

3. For recent compilations by jurisdiction, see 2 L. FRUMER & M. FRIEDMAN, PRODUCTS LIABILITY § 16A[3], at 3-248 n.2 (1975) [hereinafter cited as FRUMER & FRIEDMAN]; 1 R. HURSH & H. BAILEY, AMERICAN LAW OF PRODUCTS LIABILITY § 4.41 (2d ed. 1974); Annot. 13
fying the state of products liability law in South Carolina, the enactment of this legislation naturally raises many questions as well. Indeed, the codification of strict tort by the legislature


5. In addition to interpreting the core language of the statute—“defective condition unreasonably dangerous”—the courts of South Carolina will also face the task of determining the proper interpretation to be given to the statutory words “product,” “sell,” “physical harm,” and “ultimate user or consumer.” Other courts have dealt extensively with these issues, and a brief consideration of some major issues raised by each should prove beneficial at this point.

“Product”—Used Products. The statute does not specifically address the issue of whether a seller of a defective used product which injures a consumer should be held strictly liable in tort. Nevertheless, it does speak in terms of “any” product which may suggest that sales of used products should be included within the coverage of the statute. Several cases have held that § 402A applies to the sale of used products. E.g., Rossignol v. Danbury School of Aeronautics, Inc., 154 Conn. 549, 227 A.2d 418 (1967); Peterson v. Lou Backrod Chevrolet Co., 17 Ill. App. 3d 690, 307 N.E.2d 729 (1974); Realmuto v. Straub Motors, Inc., 65 N.J. 336, 322 A.2d 440 (1974); Turner v. International Harvester Co., 133 N.J. Super. 277, 336 A.2d 62 (1975); Bombardi v. Pochel’s Appliance & TV Co., 9 Wash. App. 797, 515 P.2d 540 (1973), modified on other grounds, 10 Wash. App. 243, 518 P.2d 202 (1976).

“Sell”—Non-Sales Transactions. While it is clear that the term “seller” in § 402A includes every participant in the distributional chain from the manufacturer—and perhaps even the component part manufacturer—through the distributor and wholesaler to the retail merchant (see § 402A, comment f), the terms “sell” and “sale” in the statute give rise to the question of whether non-“sales” transactions come within the umbrella of strict tort liability. There is considerable authority for extending the “sale” concept of strict tort liability to certain transactions, such as leases, which are not “sales” transactions in the strict sense of the concept. See generally Frumer & Friedman § 16A[4][b][iii]. Cintrone v. Hertz Truck Leasing & Rental Service, 45 N.J. 434, 212 A.2d 769 (1965), decided in warranty, is the seminal case. For other cases extending strict liability to bailment and licensure transactions, in addition to leaseholds, see Bachner v. Pearson, 479 P.2d 319 (Alas. 1970); Price v. Shell Oil Co., 2 Cal. 3d 245, 466 P.2d 722, 85 Cal. Rptr. 178 (1970); Kasel v. Remington Arms Co., Inc., 24 Cal. App. 3d 711, 101 Cal. Rptr. 314 (1972); Garcia v. Halsett, 3 Cal. App. 3d 319, 82 Cal. Rptr. 420 (1970); Whitfield v. Cooper, 30 Conn. Sup. 47, 298 A.2d 50 (1972); Stewart v. Budget Rent-A-Car Corp., 83 N.M. 730, 497 P.2d 732 (1972). See generally Annot., 52 A.L.R. 3d 337 (1973).

“Physical Harm”—Damages. A seller of a defective product is responsible under the statute for any “physical harm thereby caused to the . . . consumer, or to his property.” The principal obligation imposed by the statute upon the product seller is clearly one of
compensating for personal injuries or property losses occasioned by product "accidents." Not so clear from either the statute or the comments to § 402A, however, is whether a seller should also be liable for (1) damage to the product itself, or (2) "economic," "pecuniary," or "commercial" losses attributable to a failure of the product. As for damages resulting to the product itself from an accident attributable to a defect in the product, such as damages to an automobile which crashes due to a defect in its brakes, probably a majority of courts today would permit recovery under the theory of strict liability in tort. See Seely v. White Motor Co., 63 Cal. 2d 9, 403 P.2d 145, 45 Cal. Rptr. 17 (1965); Hiigel v. General Motors Corp., ____ Colo. ___, 544 P.2d 983 (1975). See generally W. Prosser, Law of Torts 685 (4th ed. 1971). But cf. Cooley v. Salopian Indus., Ltd., 383 F. Supp. 1114, 1119 (D.S.C. 1974). Where the product itself is simply received in a damaged condition, or where it deteriorates excessively over time, warranty law is most likely the buyer's exclusive remedy, and an action in strict tort would not properly lie. See Cooley v. Salopian Indus., Ltd., supra. Some disagreement has developed over whether strict liability in tort should embrace recovery for commercial or economic losses such as lost profits attributable to the failure in the product. Some decisions have held that pecuniary losses of this type are properly recoverable in a strict products action. E.g., Dennis v. Ford Motor Co., 471 F.2d 733 (3d Cir. 1973); cf. Santor v. A & M Karagheusian, Inc., 44 N.J. 52, 207 A.2d 305 (1965). Another group has held that it is not. E.g., Seely v. White Motor Co., supra; Hawkins Constr. Co. v. Matthews Co., 190 Neb. 546, 209 N.W.2d 643 (1973). The reasoning of the Hawkins court is sound:

[The doctrine of strict tort liability was not conceived as a substitute for warranty liability in cases where the purchaser has only lost the benefit of his bargain . . . . [I]t was designed to make the risk of defect-caused injuries an enterprise liability, so that the burden of injury is not placed entirely on "the unfortunate victim" who is often ill-equipped to bear it . . . . If the loss is merely economic, the Uniform Commercial Code has given the purchaser an ample recourse . . . . Placed broadly, it is the law of sales, and not the law of torts, which protects the buyer's interest in the benefit of his bargain.]


"Ultimate user or consumer"—Bystanders. Despite the apparent limitation of responsibility to "users" or consumers on the face of the statute, the draftsmen of § 402A took an expressly neutral stance on whether responsibility should extend beyond the user or consumer to the "innocent bystander" as well. § 402A, caveat (1) & comment o. The American Law Institute adopted this neutral position because the cases at the time had simply not gone beyond the user or consumer. § 402A, comment o. Today, however, in harmony with the tort principles underlying the doctrine, the strict tort liability case law has advanced in many jurisdictions to cover the foreseeable bystander injured by a defective product. See Passwaters v. General Motors Corp., 454 F.2d 1270 (8th Cir. 1972); Sills v. Massey-Ferguson, Inc., 296 F. Supp. 776 (N.D. Ind. 1969); Lamendola v. Mizell, 115 N.J. Super. 514, 280 A.2d 241 (1971). See generally 2 Frumer & Friedman, supra note 3, at § 16A[4][e].

The case for extending responsibility to bystanders was compellingly advanced in Elmore v. American Motors Corp., 70 Cal. 2d 578, 586, 451 F.2d 84, 89, 75 Cal. Rptr. 652, 657 (1969):

If anything, bystanders should be entitled to greater protection than the consumer or user where injury to bystanders from the defect is reasonably foreseeable. Consumers and users, at least, have the opportunity to inspect for defects and to limit their purchases to articles manufactured by reputable manufacturers and sold by reputable retailers, whereas the bystander ordinarily has no such opportunities . . . . [If any distinction should be made between bystanders
strict tort liability raises not only the usual difficult questions involving the nature and scope of liability which arise from a judicial adoption of section 402A but also raises some nice questions involving the power of the judiciary to interpret the black letter rule in the same manner or to the same extent as the judiciaries of those states which have adopted the identical rule through the common law process.6

By adopting the rule of strict tort liability, the South Carolina legislature has accepted the view that the responsibility of sellers of products which cause harm to persons or property is best determined by the principle of strict liability in tort.7 While the majority of courts and commentators agree on the appropriateness of the strict tort theory in this context, considerable differences of opinion exist concerning the proper conceptual basis for the strict tort theory of liability,8 the manner in which it differs from negligence,9 the appropriate roles of judge and jury in the

and users, it should be made . . . to extend greater liability in favor of the bystanders.

The bystander issue is explicitly addressed in § 2-318 of the Uniform Commercial Code. South Carolina Code § 10.2-318, addressing the question of horizontal privity, adopts a slightly modified version of Alternative C of UCC § 2-318. It should be noted however, that both the Official Comment and the South Carolina Reporter’s Comments to this section are addressed to Alternative A, the version studied and spoken to by the South Carolina Reporter. Interview with Dean Robert W. Foster, South Carolina Reporter for the Uniform Commercial Code, Feb. 22, 1976. Inconsistencies between the text of § 10.2-318 and its comments should of course be resolved in favor of the language on the face of the statute, any other approach being destined to result at least in confusion, if not in error. See McHugh v. Carlton, 369 F. Supp. 1271, 1274-75 (D.S.C. 1974).

6. One immediate decision which must be made is whether or not the statute should be given retrospective effect. Compare Cooley v. Salopian Indus., Ltd., 383 F. Supp. 1114, 1118 (D.S.C. 1974) (South Carolina strict tort liability statute retrospective) with General Motors Corp. v. Tate, 516 S.W.2d 602, 606-07 (Ark. 1974) (Arkansas strict tort liability statute not retrospective).


8. See notes 29-51 and accompanying text infra.

9. The difficulties experienced by the Oregon Supreme Court are instructive. In
administration of the doctrine,¹⁰ and the proper role in strict tort cases of the traditional affirmative defenses of negligence law.¹¹ This article will explore some of the basic issues of liability and administration of the doctrine of strict products liability in tort.¹²

II. STRICT TORT LIABILITY THEORY

It is helpful to begin an analysis of strict tort liability by establishing the doctrine's parameters. The most striking aspect of the doctrine is that liability is imposed without regard to whether the seller was in any way at fault or, conversely, whether he exercised the greatest possible care.¹³ The doctrine of strict tort

Anderson v. Klix Chem. Co., 256 Ore. 199, 472 P.2d 806 (1970), the court concluded that there was no difference between the negligence and strict tort theories of liability in the context of inadequate warnings. This view was subsequently repudiated by implication in Roach v. Kononen, 269 Ore. 457, 525 P.2d 125 (1974), and expressly so in Phillips v. Kimwood Mach. Co., 269 Ore. 485, 497-98, 525 P.2d 1033, 1039 (1974). In both cases the court recognized the basic theoretical differences between the two theories of liability. The similarities and differences between the two doctrines are developed extensively in section III of this article infra.

10. See section IV A of this article infra.


13. See S.C. CODE ANN. § 66-371(2)(a) (Cum. Supp. 1976). A caveat must be noted here to the effect that due care is, in essence if not in doctrine, the underlying rationale to the cases which exculpate sellers of "unavoidably" unsafe products. See notes 79-81 and accompanying text infra.
purports to direct attention away from the conduct of the seller, at least according to traditional theory, and to focus it instead upon the injury-producing product in its environment of use.14 The need to substitute strict liability for due care as the appropriate standard of tort responsibility for manufacturers of defective products springs from a variety of circumstances:15

1. Manufacturers convey to the public a general sense of product quality through the use of mass advertising and merchandising practices, causing consumers to rely for their protection upon the skill and expertise of the manufacturing community.

2. Consumers no longer have the ability to protect themselves adequately from defective products due to the vast number and complexity of products which must be “consumed” in order to function in modern society.

3. Sellers are often in a better position than consumers to identify the potential product risks, to determine the acceptable levels of such risks, and to confine the risks within those levels.

4. A majority of product accidents not caused by product abuse are probably attributable to the negligent acts or omissions of manufacturers at some stage of the manufacturing or marketing process, yet the difficulties of discovering and proving this negligence are often practicably insurmountable.

5. Negligence liability is generally insufficient to induce manufacturers to market adequately safe products.

6. Sellers almost invariably are in a better position than consumers to absorb or spread the costs of product accidents.

7. The costs of injuries flowing from typical risks inherent in products can fairly be put upon the enterprises marketing the

14. “Since the manufacturer’s conduct is no longer on trial in strict liability, it follows that the central issue in a products trial must be the product in the environment of its use.” Weinstein, Twerski, Fiehler & Donaher, Product Liability: An Interaction of Law and Technology, 12 Duquesne L. Rev. 425, 442 (1974). But cf. notes 141-147 and accompanying text infra.

products as a cost of their doing business, thus assuring that these enterprises will fully "pay their way" in the society from which they derive their profits.

In combination, these reasons present a compelling case for basing the liability of product sellers on some foundation other than fault. On the other hand, even in combination these reasons by no means compel a conclusion that product sellers should be treated as insurers for all losses connected with their products. And so the courts have unequivocally held.

Strict tort liability under section 402A reflects these principles. On the one hand, it is made clear that a seller will be subject to liability although "the seller has exercised all possible care in the preparation and sale of his product." This portion of section 402A emphasizes the "strict" nature of the liability imposed and clearly distinguishes the liability theory from that of traditional negligence law. On the other hand, liability is expressly limited to products which are sold "in a defective condition unreasonably dangerous to the user or consumer," indicating that liability will fall upon sellers for product-caused injuries only if something went wrong with the product—only if it failed in some respect. These are the parameters of the doctrine.

Within these broad outlines the necessary first step in establishing liability in strict tort is to attribute the plaintiff’s injury to some "dangerous," "unsafe," or "hazardous" condition in the product in question. The second step, and frequently the more difficult one, is to demonstrate that the danger was excessive. In every case the crucial question will be: Was the product duly safe, or was it unduly hazardous? Especially in defective design cases,

17. E.g., Helene Curtis Indus., Inc. v. Pruitt, 385 F.2d 841 (5th Cir. 1967); Elliott v. Lachance, 109 N.H. 481, 256 A.2d 153 (1969); Dippel v. Sciano, 37 Wis. 2d 443, 155 N.W.2d 55 (1967). "Strict liability has never meant that the party held strictly liable is to be a general insurer for the victim no matter how or where the victim comes to grief." Calabresi & Hirschoff, supra note 12, at 1056. For a critical examination of this proposition, its reasons and implications, see Holford, supra note 12.
21. In most cases involving injury-producing products containing physical flaws re-
the question may be phrased slightly differently: How much danger is too much? How much safety is enough? As an aid to the examination of this central issue in particular cases, courts and commentators have identified three aspects of the manufacturing and marketing process where excessive dangers are likely to arise. These stages may be categorized as follows:

(1) Inadequate manufacture or assembly—the individual, injury-producing product is excessively dangerous because it contains a physical flaw occasioned by a failure in construction or processing not screened out by the quality control process;\(^2\)

(2) Inadequate design—the entire product line is excessively dangerous within its foreseeable environment of use because of an error in the selection, combination or omission of component parts, or because of an error in the overall design concept;\(^2\)

(3) Inadequate warnings or instructions—the entire product line is excessively dangerous because inadequate information is conveyed to users concerning hazards in the product or concerning the proper method for its safe use.\(^4\)

To determine whether too much danger has been built into a particular injury-producing product at one of these three stages of the manufacturing and marketing process, the strict tort principle calls for a determination of whether the product was sold “in a defective condition unreasonably dangerous” to the user or an-

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other. In an attempt to add some meaning to this phrase the legislature adopted the official comments to section 402A as the "legislative intent" of the act. This was at once both expansive and restrictive. It was expansive by making clear to the courts that the legislature was indeed adopting section 402A of the Restatement (Second) of Torts, thus allowing the judiciary to look freely to the judicial experience of the rest of the nation with section 402A in interpreting the provisions of the act. On the other hand, while some of the comments are helpful in understanding the nature of strict tort liability, others are not, for they were drafted in the early 1960's against a backdrop of cases largely involving defective foodstuffs. Moreover, these same cases which provided the foundation for section 402A were decided in warranty and spoke the contracts parlance of the law of sales. This contract law history to section 402A and its comments gives rise to some problems of moment, not the least of which involves the very basis of the theory of liability.

The primary problem is that the black letter text and the comments of section 402A suggest rather schizophrenically that strict tort theory is founded both upon the contract law notion of the frustration of the consumer's expectancy interest and upon the tort law touchstone of reasonableness. This dual approach is reinforced by the comments which define "defective condition" as "a condition not contemplated by the ultimate consumer" and "unreasonably dangerous" as "dangerous to an extent beyond that which would be contemplated by the ordinary consumer." Thus the comments quite clearly predicate liability

27. See 38 ALI PROCEEDINGS 50-51 (1961); RESTATEMENT (SECOND) OF TORTS § 402A (Tent. Draft No. 6, 1961).
29. Comment q to § 402A provides in part:
The rule stated in this Section [402A] applies only where the product is, at the time it leaves the seller's hands, in a condition not contemplated by the ultimate consumer, which will be unreasonably dangerous to him.
30. Comment i to § 402A provides in part:
The rule stated in this Section [402A] applies only where the defective condition of the product makes it unreasonably dangerous to the user or consumer. . . . The article sold must be dangerous to an extent beyond that which would be contemplated by the ordinary consumer who purchases it, with the ordinary knowledge common to the community as to its characteristics.
upon the notion of product disappointment or frustration of the reasonable expectations of the ordinary consumer — a concept derived substantively from the law of contracts.\(^3\) However, although the phrase "unreasonably dangerous" is defined in terms of the failure of a consumer's expectancy interest, the inquiry must proceed further because of the clear tort flavor with which the phrase is imbued.\(^3\) Nor can a contract law test of liability be accepted unquestioningly in view of the fact that "[t]he basis of liability [under § 402A] is purely one of tort."\(^3\)

The phrase "unreasonably dangerous" was initially proposed by Dean Prosser, the Reporter for the Restatement, in an early draft of section 402A as the sole standard of liability, the thought being that the phrase adequately suggested that something must be wrong with the product before strict liability could be imposed.\(^4\) However, in order to further emphasize the requirement that the product fail in some respect before the seller could be subjected to liability, the phrase "defective condition" was subsequently added, giving the core phrase in section 402A its present form.\(^5\) The tone of the comments indicates this same concern that liability should not be imposed in the absence of a finding that something indeed was wrong with the product.\(^6\) Thus, certain classes of products, such as those which are unavoidably unsafe, are outside of the scope of liability.\(^7\) For example, the very quality of a knife which renders it useful—its ability to cut—is the very same property which renders it dangerous. Yet

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31. See Wade, supra note 1, at 127. For a considered analysis of the expectancy interest of consumers, see Dickerson, supra note 7.

32. The notion of unreasonableness has been of central importance in tort law for more than a century. See Edgerton, Negligence, Inadvertence and Indifference; The Relation of Mental States to Negligence, 39 Harv. L. Rev. 849, 852 (1926) ("Negligence is unreasonably dangerous conduct — i.e., conduct abnormally likely to cause harm. Freedom from negligence . . . does not require care, or any other mental phenomenon, but requires only that one's conduct be reasonable safe . . . ." (footnote omitted)); Terry, Negligence, 29 Harv. L. Rev. 40, at 40 (1915) ("Negligence is conduct which involves an unreasonably great risk of causing damage.") Professor Terry proposed that the reasonableness of a given risk is a risk-benefit function of the magnitude of the risk, the value of the object exposed to the risk, the utility of the risk-producer's conduct, and the necessity for the risk.

33. § 402A, comment m. And of course the type of liability under consideration is one of strict liability in tort. See 39 ALI PROCEEDINGS 236-40 (1962).

34. See 38 ALI PROCEEDINGS 55, 87-89 (1961).

35. Id.

36. See § 402A, comments i & k.

37. § 402A, comment k.
technological and economic constraints preclude the manufacture of a knife which is both functional and completely safe. Consequently, the seller of such products, assuming that they have been properly manufactured 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." 38

One reason why some types of unavoidably unsafe products will not give rise to liability in strict tort is because the consumer will often be aware of the risk and willingly accept it and thus should not be unduly surprised when the product fails. 39 However, a sounder and more unifying basis of analysis for unavoidably unsafe products, and one which is of general use for other products as well, is the familiar balancing of risks and benefits associated with the marketing of the product in a particular condition. This risk-benefit approach inheres in the phrase "unreasonably dangerous" and is the traditional basis for determining negligence liability so familiar to all torts lawyers. 40

A product then is "in a defective condition unreasonably dangerous to the user or consumer or to his property" when the risks of damage associated with its sale in a particular condition outweigh the benefits to be derived from marketing the product in such a condition. Refining and applying a risk-benefit analysis to the products liability context, Professor Wade has suggested that the determination of whether a product is unreasonably dangerous should be made upon a balancing of the following factors:

1. The usefulness and desirability of the product—its utility to the user and to the public as a whole.
2. The safety aspects of the product—the likelihood that it will cause injury, and the probable seriousness of the injury.

38. Id.
(3) The availability of a substitute product which would meet the same need and not be as unsafe.
(4) The manufacturer's ability to eliminate the unsafe character of the product without impairing its usefulness or making it too expensive to maintain its utility.
(5) The user's ability to avoid danger by the exercise of care in the use of the product.
(6) The user's anticipated awareness of the dangers inherent in the product and their avoidability, because of general public knowledge of the obvious condition of the product, or of the existence of suitable warnings or instructions.
(7) The feasibility, on the part of the manufacturer, of spreading the loss by setting the price of the product or carrying liability insurance.  

Building upon a solid risk-benefit nucleus of traditional negligence law theory, Professor Wade's factors have supplied the courts with a fundamentally sound framework for deciding products liability cases. Other commentators have offered other approaches. Professor Fischer, for example, accepts most of the concepts embraced in the Wade factors but splinters them into 15 separate considerations. Professor Dickerson, on the other

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41. Wade, supra, note 7, at 837-38. See also Wade, Strict Tort Liability of Manufacturers, 19 Sw. L.J. 5, 17 (1965).
43. Professor Fischer outlines the relevant considerations in the following manner:
I. Risk Spreading
   A. From the point of view of consumer.
      1. Ability of consumer to bear loss.
         a. Knowledge of risk.
         b. Ability to control danger.
         c. Feasibility of deciding against use of product.
   B. From point of view of manufacturer.
      1. Knowledge of risk.
      2. Accuracy of prediction of losses.
      3. Size of losses.
      4. Availability of insurance.
      5. Ability of manufacturer to self-insure.
      6. Effect of increased prices on industry.
      7. Public necessity for the product.
hand, constructs a "legal defectiveness" framework principally upon the vantage point of consumer expectations, recommending five factors for use in liability determinations. Building on, but far beyond, a consumer expectations base, Professor Shapo offers a highly developed representational analysis with 13 relevant considerations. Others, such as Professors Page Keeton and Cala-

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8. Deterrent effect on the development of new products.

II. Safety Incentive
   A. Likelihood of future product improvement.
   B. Existence of additional precautions that can presently be taken.
   C. Availability of safer substitutes.


44. Professor Dickerson proposes that "a product is 'legally defective' if it meets the following conditions:
   (1) The product carries a significant physical risk to a definable class of consumer and the risk is ascertainable at least by the time of trial.
   (2) The risk is one that the typical member of the class does not anticipate and guard against.
   (3) The risk threatens established consumer expectations with respect to a contemplated use and manner of use of the product and a contemplated minimum level of performance.
   (4) The seller has reason to know of the contemplated use and, possibly where injurious side effects are involved, has reasonable access to knowledge of the particular risk involved.
   (5) The seller knowingly participates in creating the contemplated use, or in otherwise generating the relevant consumer expectations, in the way attributed to him by the consumer."

Dickerson, supra note 7, at 331.

45. Professor Shapo lists his factors as follows:
   1. The nature of the product as a vehicle for creation of persuasive advertising images, and the relationships of this factor to the ability of sellers to generate product representations in mass media;
   2. The specificity of representations and other communications related to the product;
   3. The intelligence and knowledge of consumers generally and of the disappointed consumer in particular;
   4. The use of sales appeals based on specific consumer characteristics;
   5. The consumer's actions during his encounter with the product, evaluated in the context of his general knowledge and intelligence and of his actual knowledge about the product or that which reasonably could be ascribed to him;
   6. The implications of the proposed decision for public health and safety generally, and especially for social programs that provide coverage for accidental injury and personal disability;
   7. The incentives that the proposed decision would provide to make the product safer;
   8. The cost to the producer and other sellers of acquiring the relevant information about the crucial product characteristic and the cost of supplying it to
bresi, propose unifying theories of defectiveness based upon a single notion.48

Much more than law professors, the courts have a very real need for a decisional tool in strict tort cases to aid in liability determinations. Fifteen factors or fifty may well be pertinent to the liability determination in every products case, but fifteen factors of varying degrees of importance are too many; a judge attempting to use them all would likely become smothered in factors. Yet single-factor tests suffer from problems of their own. For example, Calabresi's test which asks "Who is best suited to make the cost-benefit analysis between accident costs and accident avoidance costs?"47 may be attractive from a theoretical perspective, but it probably strays too far from accepted doctrine to be embraced soon by the many courts generally content with the more traditional approaches.48 Professor Wade's criteria, hav-

persons in the position of the disappointed party;
9. The availability of the relevant information about the crucial product character-
tistic to persons in the position of the disappointed party and the cost to
them of acquiring it;
10. The effects of the proposed decision on the availability of data that bear
on consumer choice of goods and services;
11. Generally, the likely effects on prices and quantities of goods sold;
12. The costs and benefits attendant to determination of the legal issues in-
volved, either by private litigation or by collective social judgment;
13. The effects of the proposed decision on wealth distribution, both between
sellers and consumers and among sellers.


46. Professor Keeton's test involves a determination of whether a reasonable manufacturer would market the product in a particular condition with full knowledge of the harm which in fact is subsequently caused by the condition. See notes 141-45 and accompanying text infra. Professor Calabresi has stated his test succinctly as follows: "The question for the court reduces to a search for the cheapest cost avoider." Calabresi & Hirschoff, supra note 12, at 1060. See Calabresi, THE COSTS OF ACCIDENTS: A LEGAL AND ECONOMIC ANALYSIS 135-40 (1970). See also notes 47 & 48 and accompanying text infra. Of course neither Keeton nor Calabresi has suggested that a court's analysis should end with the application of the particular single factor test without considering the subfactors which underlie it. See Calabresi & Hirschoff, supra note 12, at 1060-61 n.20.


48. A flaw in the single, unifying factor approach is that the courts are apt to and should demand a delineation of the subfactors which may be relevant to the liability determination in particular cases. Single factor tests such as Calabresi's "cheapest cost avoider" suffer from inflexibility and by their very nature are prone to mechanistic application and resulting erroneous decisions. And once a single factor scheme takes cognizance of the problem and provides "veto room" in the system to accommodate such cases, the unitary nature of the system is itself destroyed. See Calabresi & Hirschoff, supra note 12, at 1080.
ing served the courts quite well to date, can profitably be used as a core for a refined framework designed in the light of the judicial experience and academic explorations of recent years.

We propose the following factors as a guide to the determination of liability in strict tort cases involving the manufacture and sale of injury-producing products:

1. The cost of injuries attributable to the condition of the product about which the plaintiff complains—the pertinent accident costs.
2. The incremental cost of marketing the product without the offending condition—the manufacturer's safety cost.
3. The loss of functional and psychological utility occasioned by the elimination of the offending condition—the public's safety cost.
4. The respective abilities of the manufacturer and the consumer to (a) recognize the risks of the condition, (b) reduce such risks, and (c) absorb or insure against such risks—the allocation of risk awareness and control between the manufacturer and the consumer.

The core of our decisional model, our first three factors, contemplates a balancing of the costs and benefits of marketing the product with and without the offending condition. Our fourth factor allows for some flexibility in the system where factors other than costs and benefits may appropriately be considered in determining liability as, for example, in certain cases involving products with unavoidable dangers, others involving product abuse by the consumer, and those involving processing flaws reasonably left in the product by the manufacturer.

Professor Keeton's unitary factor does not of course suffer from the same type of inflexibility since it is predicated upon the notion of reasonableness. The concept of reasonableness, however, is divisible into various component parts that are capable of individualized description and analysis in a manner productive of improved decision-making. This is the teaching of cost-benefit analysis and should be the starting point for constructing a test of strict tort liability for judicial decision-making.

49. Our model is designed to cover only the manufacturer of a defective product, the usual defendant in a products liability case. We do not address the basis of liability for other "sellers," notwithstanding the fact that frequently similar considerations will affect the liability determination in cases brought against such defendants.


51. For example, the application of a strict cost-benefit analysis to a serum hepatitis case might result in a decision adverse to a plaintiff in an action against a blood bank which supplied infected blood. A court, however, might wish to impose liability on the blood bank despite the undiscoverability of the defect in order to stimulate research into
In view of the absence of agreement on the proper conceptual basis to strict tort liability theory, it is no wonder that there is also confusion and disagreement surrounding the most appropriate language for use in jury instructions to define liability. As discussed above, the terms "defective condition" and "unreasonably dangerous" are both defined in the comments in terms of the contemplations of the consumer, suggesting that the terms are essentially synonymous and perhaps even redundant. Indeed, this view receives some support from the "legislative" history of section 402A as it evolved during the early 1960's.


An adult glue sniffer might be permitted to recover against the glue manufacturer under a strict cost-benefit analysis if the loss of adhesiveness from eliminating an intoxicating and toxic chemical from the formula would be slight compared to the amount of injury caused to adults sniffing the glue containing the toxic chemical. A court, nevertheless, might wish to deny liability in the first instance by a ruling of nondefectiveness due to the control of the plaintiff over the risk environment, rather than relying upon the affirmative defense of assumption of risk. See § 402A, comment h: "A product is not in a defective condition when it is safe for normal handling and consumption. If the injury results from abnormal handling, . . . from abnormal preparation for use, . . . or from abnormal consumption, . . . the seller is not liable. See also § 402A, comment g.

Finally, since perfect quality control is often an impossibility, and the cost of manufacturers of improving the search for manufacturing flaws at some point becomes prohibitive, manufacturers of physically flawed, injury-producing products could sometimes establish that the benefits from improving quality control would be outweighed by the increase in costs. A court might nonetheless desire to place the burden of such injuries upon manufacturers in all cases because of the manufacturer's superior position to recognize the risk of such injuries and then to insure against or make plans to absorb the cost of the resulting losses.

52. We propose that our four factors be used by trial and appellate courts as a guide in decision-making but that juries not be specifically instructed on the factors. See Wade, supra note 7, at 840-41. Instead, jury instructions should probably be kept at a more general level in order to avoid confusion. See notes 118-49 and accompanying text infra. The jury instruction we advance below, based upon the holding in Welch v. Outboard Marine Corp., 481 F.2d 252 (5th Cir. 1973), reflects the same basic principles which underly our judicial decision-making model. Courts and juries should not, therefore, find themselves working at cross-purposes. Some subfactors, however, such as a manufacturer's ability to insure against products liability losses, may be more properly examined by the court alone. With this one caveat, counsel should generally be permitted to establish the reasonableness vel non of the product through proof and argument based upon the individual factors.

53. See notes 29 & 30 and accompanying text supra.

54. See generally Wade, supra note 7, at 829-31. During the first floor debate of §402A by the American Law Institute in 1961, Professor Dickerson moved to strike the phrase "defective condition" and leave only the phrase "unreasonably dangerous" as the standard of liability, observing prophetically:

"I am a little bothered by the phrase "defective condition unreasonably dangerous to the consumer. . . ." This signifies some nondefective conditions
In part because of the dispute over the proper theoretical foundation for strict tort liability, there has been no judicial consensus as to whether the entire phrase "defective condition unreasonably dangerous" should be used as the test of liability in particular cases or whether "defective condition" or "unreasonably dangerous" used alone more clearly conveys the true meaning of unreasonably dangerous to the consumer, and if there are, I would be interested in hearing an example of a product which was at the same time unreasonably dangerous but not defective.

I had always thought that "unreasonably dangerous" was simply the best possible test for what was legally defective. It seems to me this idea is supported fully in the analysis on Comment e on page 35, and it seems to me that everything we might want to cover here is subsumed under the words "unreasonably dangerous."

Now, the addition of the words "defective condition"—it would seem to me that this involves unnecessary questions of meaning. For example, in addition to "unreasonably dangerous," what would a purchaser have to show in order to make out a defective product? I would think that if he showed that it was unreasonably dangerous, it would per se be legally defective, and it is only gilding the lily to add the word "defective."

. . . Whenever we gild the lily, I think we just invite difficulty.

38 ALI PROCEEDINGS 87-88 (1961).

In response to Professor Dickerson's motion, Dean Prosser indicated that as the Reporter he had himself submitted § 402A to the Council in only the "unreasonably dangerous" form and that the additional phrase "defective condition" was thereafter added to address the concern of the Council that sellers of products such as cigarettes, whiskey and powerful drugs not be held responsible for harm resulting from excessive use. "Therefore, they suggested that . . . something must be wrong with the product itself, and hence the word 'defective' was put in . . . ." Id. By way of illustration, Dean Prosser remarked: "'Defective' was put in to head off liability on the part of the seller of whiskey, on the part of the man who consumes it and gets delirium tremens, even though the jury might find that all whiskey is unreasonably dangerous to the consumer." Id. at 88. Professor Joiner spoke in favor of Professor Dickerson's motion, and suggested that "the Reporter's case of whiskey is taken care of by the words "unreasonably dangerous," adding that "We merely confuse the law by adding 'defective.'" Id. at 89. With an appreciation of the difficult problems of interpretation which the "defective condition" phrase was likely to generate, Dean Lockhart also spoke in favor of striking the "defective condition" language, revoking the support he had previously given to the addition of the language as a member of the Council. He pointed specifically to the problems of applying a "defective condition" standard, which connotes that the product must be physically flawed, to the developing warning and design cases in which an unduly dangerous product is nevertheless marketed "exactly the way the manufacturer intended," lamenting that such a defendant would be "in a position to claim that it is not defective as long as it is made the way he intended it to be made." Id. Upon a voice vote, which apparently was quite close, Professor Dickerson's motion to strike the "defective condition" language failed. Id. See note 129 infra. In view of the very large number of warning and design cases which have arisen under § 402A, and the very small number of cases involving the excessive use of whiskey, cigarettes and drugs, it is indeed unfortunate that the predictions of needless confusion likely to result from including the "defective condition" phrase were not heeded by the Institute.
the liability theory and hence is the preferable working test of liability. Some courts use the entire phrase from the Restatement which, if confusing to lawyers and juries, at least gives a court the solace of knowing that it is in the eminently respectable company of the American Law Institute. Other courts have eschewed this dual approach. The most noted case rejecting the use of the complete phrase was the California Supreme Court's decision in Cronin v. J.B.E. Olsen, Inc., holding that the proper standard of liability in strict tort cases is simply whether the particular product was "defective." The "unreasonably dangerous" language of the Restatement was rejected by the court on the ground that it "burdened the injured plaintiff with proof of an element which rings of negligence." The court anticipated that its return to the word "defective" as the sole criterion for liability theory and hence is the preferable working test of liability. Some courts use the entire phrase from the Restatement which, if confusing to lawyers and juries, at least gives a court the solace of knowing that it is in the eminently respectable company of the American Law Institute. Other courts have eschewed this dual approach. The most noted case rejecting the use of the complete phrase was the California Supreme Court's decision in Cronin v. J.B.E. Olsen, Inc., holding that the proper standard of liability in strict tort cases is simply whether the particular product was "defective." The "unreasonably dangerous" language of the Restatement was rejected by the court on the ground that it "burdened the injured plaintiff with proof of an element which rings of negligence." The court anticipated that its return to the word "defective" as the sole criterion for


56. 8 Cal. 3d 121, 501 P.2d 1153, 104 Cal. Rptr. 433 (1972). The product involved in Cronin was a hasp used to hold bakery trays in place in a delivery truck. The action was brought by the injured driver against various defendants in the vehicle's chain of sale. When the truck collided with another vehicle, the trays slid forward striking the hasp which broke due to a structural flaw. The trays slid into the plaintiff's back hurling him through the windshield and injuring him severely. At trial, the court instructed the jury that the plaintiff should prevail if his injuries were attributable to a defect in the manufacture or design of the truck. The defendant contended unsuccessfully at trial and on appeal that proof of the hasp's unreasonable danger, in addition to its defective condition, should have been required.


57. 8 Cal. 3d at 133, 501 P.2d at 1162, 104 Cal. Rptr. at 442.

58. Id.

59. In adopting the doctrine of strict liability in tort in Greenman v. Yuba Power Prod., Inc., 59 Cal. 2d 57, 377 P.2d 897, 27 Cal. Rptr. 697 (1963), Judge Traynor spoke only in terms of defectiveness and did not even mention the notion of unreasonable danger. "A manufacturer is strictly liable in tort when an article he places on the market, knowing that it is to be used without inspection for defects, proves to have a defect that causes injury to a human being." Id. at 62, 377 P.2d at 900, 27 Cal. Rptr. at 700. "To establish the manufacturer's liability it was sufficient that plaintiff proved that he was injured while using the Shopsmith in a way it was intended to be used as a result of a
determining liability might lead to problems of interpretation, as indeed it has.61

Other courts have taken the opposite tack in fashioning a test of liability, discarding the phrase "defective condition" in favor of a standard based solely on a determination of whether the product could properly be characterized as "unreasonably dangerous."62 Of these three basic approaches, we believe that the "unreasonably dangerous" standard is generally to be preferred.63 Thus, at least in design and warning defect cases, the liability
determination can often best be made upon a consideration of whether the injury-producing product was "unreasonably dangerous" as marketed in light of the four factors proposed above.

An advantage of the standard of unreasonable danger is that it often focuses more precisely upon the critical question to be determined in each case—the question of whether the risks attending the use of the product in the condition in which it was marketed are acceptable to society in the light of the four factors previously enumerated.\textsuperscript{4} While in many cases the consumer expectations analysis produces a sound result, in others the test works restrictively, producing results inconsistent with a sound risk-benefit analysis of the problem. An expectancy analysis logically leaves little place for liability where the defect is open and obvious,\textsuperscript{5} despite the fact that the obviousness of a danger is only one of the several considerations which properly should bear on the determination of liability.\textsuperscript{6} Nor does an expectancy standard provide a sound basis of liability in cases where the person injured by the product is other than the buyer or user.\textsuperscript{6} Moreover, an attempt to determine the consumer's reasonable expectations of safety concerning a technologically complex product may well be an exercise in futility,\textsuperscript{8} for the consumer may have at most only a generalized expectancy—perhaps more accurately only an unconscious hope—that the product will not harm him if he treats it with a reasonable amount of care. Thus the determination of whether a particular product contains a minimally acceptable level of safety will often be rendered more satisfactorily upon

\textsuperscript{4} Cf. Donaher, \textit{supra} note 56, at 1307:
The issue in every products case is whether the product \textit{qua} product meets society's standards of acceptability. The unreasonable danger question, then, is posed in terms of whether, given the risks and benefits of and possible alternatives to the product, we as a society will live with it in its existing state or will require an altered, less dangerous form. Stated succinctly, the question is whether the product is a reasonable one given the reality of its use in contemporary society.


\textsuperscript{6} See Fischer, \textit{Products Liability—The Meaning of Defect}, 39 \textit{Mo. L. Rev.} 339 (1974). For example, the innocent bystander who is struck by a fragment of a defective product may not even be aware of the product's existence before being hit and thus cannot be said to have any expectation whatsoever about the product or the dangers it contains.

an evaluation of the risks and benefits associated with the sale of the product in the particular condition than upon a consideration of consumer expectations about the proper level of safety for the particular product.  

The Cronin court was undoubtedly correct in observing that the "unreasonably dangerous" phrase "rings of" and can be confused with the principles of negligence. Carefully administered, however, the unreasonable danger test concentrates attention on the safety of the product in the abstract and, at least to some extent, shifts attention away from the issue of whether or not the seller exercised due care, an issue declared to be irrelevant by section 402A itself. Consequently, while the unreasonable danger standard can be confused with negligence, the risk of confusion can be controlled reasonably well. If a single standard of liability is to be selected, the unreasonable danger standard thus appears to be preferable as the basis for the theory of strict tort liability.

III. STRICT PRODUCTS LIABILITY IN THE TORTS MILIEU

The thesis has been developed to this point that the form of strict liability enunciated in section 402A of the Restatement (Second) of Torts is a tort law theory of liability which should be analyzed primarily according to traditional tort concepts and terminology. The confusion between the strict tort liability theory predicated upon unreasonable danger with the negligence basis of liability springs from the fundamental similarity underlying both theories of liability which in turn accounts for the similarity in the language used in the formulations of the separate tests of liability. Both theories of liability are predicated in many in-

69. Manufacturing flaw cases, however, do not fit into the "unreasonable danger" model particularly well. See note 21 supra. The fourth of our factors proposed above establishes a basis for the holdings in these cases. See note 51 and accompanying text supra.


71. Refinements are added to the standard below, see notes 139-49 and accompanying text infra, where it is proposed that the expectancy idea may play a constructive residual role in defining the standard of liability.

72. Indeed, before the advent of strict liability in tort, courts and commentators often spoke in terms of "unreasonable danger" as the standard to be applied in negligence cases: "Liability is imposed only when an unreasonable danger is created. Whether or not this has occurred should be determined by general negligence principles . . . ." Noel,
stances upon the same basic type of risk-benefit analysis, a form of analysis which pervades the law of torts and lies at the foundation of the theories of nuisance and abnormally dangerous activity liability as well. This section will explore some of the similarities and differences between strict tort liability for defective products, liability for abnormally dangerous activities, and negligence.

Despite the use in each of these separate tort doctrines of a form of risk-benefit analysis for determining liability, the analysis varies somewhat under each of the theories, reflecting the differences in the policies underlying these different types of tort liability. Consider, for example, the sale by a manufacturer to a contractor of a blasting cap containing adequate instructions and warnings and which has been designed and manufactured as safely as possible in light of existing technical, functional, and economic constraints. Despite these precautions, assume that the blasting cap is nevertheless triggered in some uncontrollable manner, such as by a stray radio signal from a low-flying aircraft, causing an explosion which injures persons and property in a residential area where the mishap occurred. A damages action against the manufacturer of the blasting cap predicated on strict tort liability would be likely to fail since the product, as designed, manufactured, and marketed probably could not properly be characterized as unreasonably dangerous. However, an action against the contractor predicated upon a theory of liability for conducting an abnormally dangerous activity would have a strong chance of success. The application of a similar, though not identical, risk-benefit analysis to both situations will generate opposite results for the plaintiff in the two cases.

This result may be explained on the basis of the different factors weighed in the risk-benefit calculus under the two theories and the policy differences underlying each. The manufacturer of the blasting cap in the above example would probably not be liable under principles of strict tort liability because the cap was properly manufactured and designed and contained adequate

Manufacturers Negligence of Design or Directions for Use of a Product, 71 Yale L.J. 816, 818 (1962).

73. See, e.g., James, The Future of Negligence in Accident Law, 53 Va. L. Rev. 911, 915-16 (1967); Wade, supra note 7, at 834-37, 841-42.

instructions and warnings. Since we have assumed that it would be technically impossible to eliminate the risk of explosion from all non-product sources, the manufacturer of this "unavoidably unsafe" product was simply incapable of preventing the failure of the product and thus would likely be exculpated from liability. This result would be consistent with the principles of strict tort liability since the manufacturer is not to be held as an insurer against all losses caused by the product but rather is to be held responsible only for damages attributable to some failure of the product to perform with reasonable safety in its normal environment.\textsuperscript{75}

The fact that the danger in the blasting cap was unavoidable sits on the other side of the scales in the case brought against the contractor for engaging in an abnormally dangerous activity. Under this theory of liability the inability to reduce or eliminate the risk associated with the product weighs in favor of holding the user of the product responsible for losses flowing from its use.\textsuperscript{76} Liability is based upon the fact that the user, in order to accomplish his own ends, has injected into the community a far greater danger than is fair, particularly in view of the non-reciprocal nature of the risk.\textsuperscript{77} An important factor in deciding to classify an activity as abnormally dangerous is that the actor is likely to consume more resources from the persons in the area of the activity than is just in view of the relatively small utility which will accrue to those particular persons from the activity. While persons in the area of the activity are thus allowed to recover their losses because they have been exposed to an unfairly large amount of risk compared to the benefits accruing to them, society refuses to place an outright prohibition upon such activities because of the additional benefits flowing to the larger community which result from permitting such activities to be conducted.

The different resolutions of liability in the two blasting cap cases may also be explained on the basis of whether the particular defendant had substantial control over the decision to expose the citizens of the residential neighborhood to a particularly large risk

\textsuperscript{75} On the facts as stated, an injured plaintiff would be unable to propose a reasonable, alternative method of producing the product which would have prevented the injury.

\textsuperscript{76} See Restatement (Second) of Torts § 520(c) (Tent. Draft No. 10, 1964).

of harm. The manufacturer of the explosive device sold a product which could be used either in a remote stone quarry or within a densely populated neighborhood. When put to the former use, the product’s malfunction would be much less likely to cause serious harm than would its malfunction in the latter environment. The manufacturer will have little if any control over the environment in which its explosive will be used. Consequently, the risk that the product might damage a residential neighborhood is largely “unavoidable” from his point of view. The contractor, on the other hand, is precisely the party who makes the decision to promote his own objectives at the expense of exposing the residential neighborhood to a substantial risk of harm. Since it is the contractor and not the manufacturer who makes the “product” ultra-hazardous—or unreasonably dangerous—by his decision to use the explosive device in a residential neighborhood, it seems appropriate to hold the contractor and not the manufacturer responsible for the injuries flowing from this decision. In a sense the contractor in this case is an assembler of two raw materials or components—the explosive and the neighborhood—and the unreasonableness of the danger arises only because of his clearly “avoidable” decision to combine these two ill-suited components.\(^7\)

The different policies which underly strict tort liability for selling defective products account for the different effect the unavoidability of a danger has on the determination of liability in this area. While risk-spreading principles are shared tenets of both doctrines, liability in strict tort for sellers of defective products arose in part because of a basic presumption that persons not abusing products are not usually injured unless the manufacturer has failed in some respect in designing, manufacturing, or marketing the product. Because of the coincidence of this presumption with the difficulty of discovery and proof of actual negligence on the part of manufacturers, the strict tort theory was designed in part to facilitate redress for consumers whose injuries are probably attributable to some negligence by the manufacturer.\(^7\)

Therefore, in cases of unavoidably dangerous products where the manufacturer’s care is clearly not in question, one of the central

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78. To speak of a requirement that an abnormally dangerous activity contain a danger which cannot be eliminated is then, in this sense, imprecise.
79. See note 15 supra and accompanying text.
policies lying behind strict tort theory would not be advanced by the imposition of liability. Another policy underlying strict tort liability generally not promoted in cases where the product is proved to have been unavoidably unsafe is the policy of deterrence—of encouraging manufacturers to market safer products because of the increased threat of liability for injuries caused by dangers in the products. To the extent that the product is in fact "unavoidably" dangerous, it cannot by definition be marketed in a safer condition, and so to impose liability upon the manufacturer of such a product could not advance the deterrence objective of strict tort liability. For these reasons the unavoidability of the danger has traditionally played a different role in the determination of liability within these two separate doctrines of strict tort.

Substantial similarities in analysis exist between strict tort liability for the sale of defective products and negligence principles of liability. For example, a manufacturer may design an automobile with the fuel tank placed at the very rear of the vehicle. This design will create a substantial risk of a gasoline-fed fire in the event of a rear-end collision, a frequent type of accident. In an action brought in negligence against such a manufacturer, the design decision to locate the fuel tank at a point where it would be particularly likely to be burst in a collision could easily be characterized as unreasonable in light of the feasibility of safer design alternatives. In the language of negligence law, the risk of the foreseeable harm created by this design decision would very probably outweigh any resulting benefits from the design. The result would be the same if the action were brought in strict tort. The location of the gas tank at the very rear of the automobile increases the risk that persons will be seriously injured in the event of a rear-end collision, and the risk can probably be substantially reduced by redesign without great expense or impairment of the utility of the product. Moreover, the operator of the car, if he is aware of the danger at all, will have no real ability to prevent other cars from colliding into the back of his own even if he exercises the greatest of care. On balance, then, a product

80. However, where some hope of discovering a means to avoid the danger does exist, the imposition of liability upon the manufacturer for injuries attributable to the danger should encourage efforts to make such a discovery. See note 51 supra.
81. See text accompanying notes 75 & 76 supra.
82. See note 73 and accompanying text supra.
designed in such a manner could also quite easily be characterized as unreasonably dangerous.

The manufacturer in such a case should thus be liable whether the question is framed in terms of whether his conduct failed to match that of a reasonably prudent automobile manufacturer or, without regard to his conduct at all, whether the product itself was simply too dangerous. But the fact that the results are the same under the two theories of liability does not mean that the methods used to reach the results are precisely the same. A manufacturer would be negligent in designing an automobile in such a fashion because the benefits to be derived from the dangerous design are outweighed by certain clearly foreseeable risks. From the perspective of strict tort theory, however, the better view is that the balancing process includes not only risks or costs which are foreseeable but all such costs which in fact result. The manufacturer in a strict tort case is thus held to have much more than reasonable foresight of the types and amount of harm the product is likely to cause; he is held to have absolute prevision of all harm the product actually causes in his evaluation of the relative weights of the costs and benefits of his proposed course of action.

Thus strict tort and negligence principles are apt to be very similar in design cases, as will also be true in cases involving inadequate warnings. But differences between the theories do exist and must be comprehended. In addition to the difference in the foresight required of sellers, another distinction of vital importance is the unavailability of the defense of contributory negligence in strict tort actions in most jurisdictions. Moreover, cost-benefit analysis is generally inappropriate for use in manufacturing defect cases where liability is almost absolute. It may therefore be of considerable importance to the plaintiff that the jury not confuse the negligence and strict tort theories of liability, and it is the responsibility of the trial judge to effectively minimize the risk of confusion through careful administration of the two doctrines.

83. See notes 141-45 and accompanying text infra.
85. See notes 21, 51 and 69 supra.
IV. ADMINISTRATION OF STRICT TORT LIABILITY LITIGATION

A. Functions of Judge and Jury

While strict tort liability is similar to the theory of liability for abnormally dangerous activities in the sense that both reject "fault" as a condition of liability, the administration of strict tort liability litigation more closely resembles the administration of negligence litigation. Whether a particular activity may be characterized as abnormally dangerous is generally considered to be a fundamental policy decision for the court; once the judge has so classified an activity, the jury's role is largely confined to determinations of causation, affirmative defenses, and damages. In strict tort liability litigation, on the other hand, despite the potential magnitude of a decision declaring an entire product line to be unreasonably dangerous, that determination may nevertheless be left to the jury in much the same manner that the reasonableness of an actor's conduct is ordinarily left to the jury in a negligence case.

In a strict tort case the factors and policies involved in determining whether a particular product is unreasonably dangerous are first used by the court in deciding whether a particular case is properly submissible to the jury. Once the jury has received the case, its function in a strict tort action is to determine whether the product in fact was unreasonably dangerous as marketed, similar to a negligence case where it would determine whether the manufacturer had exercised reasonable care. Thus the issue of unreasonable danger, like reasonable care, is ordinarily a question of fact for the jury, whether it arises from a failure in design, manufacture, or warning. Nevertheless, due to the ineluctable tendency of questions of law, fact, and policy to merge together, the law-fact distinction as a mechanism for allocating responsibilities between judge and jury is considerably easier to articulate than it is to administer. Particularly during the earlier stages of the development of strict tort theory when the notion of a "strict" tort responsibility for product manufacturers was novel and still somewhat heretical, many courts withheld the issue of a product's defectiveness from the jury for various reasons.

86. See Restatement (Second) of Torts § 520, comment h (Tent. Draft No. 10, 1964).
One such reason was a belief that the judicial system in general, and the jury in particular, simply did not have the capability—given its limited resources and the limited nature of its function of resolving particular disputes—to intelligently determine whether or not a product was indeed "too" dangerous. For example, in one case involving a determination of the defectiveness of a truck wheel, the court held that the issue of whether the wheel was excessively dangerous could not be submitted to the jury in view of its lack of expert knowledge concerning the cost or feasibility factors involved in designing a safer wheel.\textsuperscript{88} Since the jury had not been presented with any expert evidence on these points, the court held that the jury lacked the competence to determine whether the failure of the wheel had violated the reasonable expectations of the ordinary consumer.\textsuperscript{89}

Because of the substantial impact on both the manufacturer and society at large of a jury determination that a product's design is unduly dangerous, the argument has been forcefully advanced that juries should not be permitted to pass upon the adequacy of a product's design in cases where comparative guidelines, such as design safety standards promulgated by the industry or a legislature, are unavailable to assist the jury.\textsuperscript{90} Proponents of this view contend that in such cases the jury will have no standard against which to measure the safety or danger of the product in question and thus will have no reasonable basis for rendering an intelligent determination of whether the design of the product is or is not unreasonably dangerous. The counterargument, of course, and probably the better view, is that the removal of large categories of design cases totally from judicial scrutiny would relieve many manufacturers of any legal obligation whatsoever to design reasonably safe products and thereby obviate an important incentive for the development and improvement of safety standards in industry as a whole.\textsuperscript{91} Another related

\textsuperscript{88} Heaton v. Ford Motor Co., 248 Ore. 467, 474, 435 P.2d 806, 808-09 (1967).
\textsuperscript{89} Id. at 474, 435 P.2d at 809.
\textsuperscript{91} There are presently many products for which no safety standards whatsoever have been promulgated by any regulatory agency. Intrauterine devices were until very recently a glaring case in point. See generally Hearings on Regulation of Medical Devices (Intrauterine Contraceptive Devices) Before the Subcomm. of the House Comm. on Governmental Operations, 93d Cong., 1st Sess. (1973); Note, The Intrauterine Device: A Criticism
reason why courts sometimes withhold cases from jury determination, especially those involving allegations of defective design, rests upon the political decision that the jury, although perhaps capable of deciding whether the product is too dangerous, cannot properly be given that power in cases involving fundamental policy decisions which could result in massive shifts of resources within society. An examination of some of the recurring issues will help to demonstrate these points.

1. The Technological and Economic Feasibility of Risk Reduction.

Some cases raise the issue of the technological or functional feasibility of altering the product in a manner that would reduce or eliminate a particular risk of injury. Certain products, such as knives, may be unavoidably unsafe because the elimination of the risk of harm would also eliminate the function of the product,
as discussed above. The serum hepatitis cases present the related issue of the technological infeasibility of discovering the product defect prior to the time it has actually caused some harm. Whatever the ultimate merits of imposing liability on knife manufacturers or hospitals and blood banks for losses caused through the use of their products, a valid argument may be made in both situations that the question of who should most appropriately bear the losses in these cases—where traditionally losses have been borne by the victims as a risk of living—is simply too important for the jury to decide and is more properly one for the legislature. But where the feasibility of risk reduction is open to serious question, the jury should be permitted to make the determination.

In other cases it may be clear to the judge that the strict tort policy of encouraging the manufacture of safer products cannot realistically be furthered without substantially or completely eliminating the availability of a beneficial—if somewhat unsafe—product, in view of the added expense or reduction in the product’s usefulness which a liability decision would generate. This would be a proper type of case for a judge to withhold from the jury if indeed a reasonable jury could only conclude that the addition of safety improvements would excessively increase the product’s price or impair its functionality. Stated otherwise, a court should dismiss the case or direct a verdict for the manufacturer where the evidence clearly compels the conclusion that the utility of safety improvements is plainly outweighed by their disutility. If, on the other hand, a jury could reasonably conclude that safety improvements to the product were feasible, the judge should permit the jury to make that determination.

2. Liability for the Second Collision.

A rapidly proliferating category of cases involves the “second collision” or “crashworthiness” issue of whether a manufacturer

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94. See text accompanying notes 37 & 38 supra.
has an obligation to design its product in a manner reasonably calculated to minimize injuries likely to result from foreseeable misadventure. The issue most frequently arises in the context of automobile accident litigation, the plaintiff contending that the manufacturer's obligation to market a reasonably safe vehicle includes, for example, an obligation to provide adequate interior padding, a properly located gasoline tank, and passenger seats designed with adequate safety. The issue simply stated is whether a manufacturer will be required, in the first instance, to anticipate the possibility that its products will be involved in accidents from time to time and, in the second, whether it will then be required to design the product to render it reasonably safe for that environment.

The courts have divided on this issue. Some, following the lead of Evans v. General Motors Corp., have held that the automobile manufacturer does not have a duty to make its product crashworthy since automobiles are intended to be used for driving and not for crashing. These courts have employed this "intended use" doctrine as a justification for refusing to submit the crashworthiness issue to the jury. The decision to keep such cases from the jury may be based on several considerations. First, the court may believe that the general policy of encouraging manu-


100. 359 F.2d 822 (7th Cir. 1966), cert. denied, 385 U.S. 836 (1966).

facturers to design safer products is outweighed in this particular class of cases by the need to keep the cost of basic transportation, a virtual necessity in modern society, as low as possible. Another explanation for the Evans line of cases is a possible judicial skepticism about the jury's ability to render an intelligent determination of optimal safety characteristics of such a highly complex piece of machinery as an automobile. Finally, many of the courts following the Evans intended use rule believe the imposition of burdensome safety obligations upon manufacturers is a legislative and not a judicial function.

A majority of cases, however, have followed the lead of Larsen v. General Motors Corp. in rejecting the Evans intended use rationale. These cases have emphasized the irrelevancy of the intended use notion in light of the statistical inevitability that a sizeable percentage of all automobiles will become involved in accidents subjecting the occupants to risks of serious injury. This is the growing and better view. The intended use doctrine's limitation of the design obligation of reasonable safety to a point short of the environment in which the product foreseeably will be put to use is inconsistent with prevailing notions of the appropriate scope of responsibility for manufacturing enterprises. The determination, therefore, of whether a given design may be unreasonably for failure to provide adequately for the accident environment is one which the court should ordinarily leave to the jury.

The logical weakness of the intended use doctrine does not mean, however, that the issue of the reasonableness of the prod-

102. See notes 88-91 and accompanying text supra.
103. See note 92 and accompanying text supra. The competing considerations are quite thoroughly examined in the two principal cases, Larsen v. General Motors Corp., 391 F.2d 495 (8th Cir. 1968), and Evans v. General Motors Corp., 359 F.2d 822 (7th Cir. 1966).
104. 391 F.2d 495 (8th Cir. 1968).
106. "Collisions with or without fault of the user are clearly foreseeable by the manufacturer and are statistically inevitable." Larsen v. General Motors Corp., 391 F.2d 495, 502 (8th Cir. 1968). The Larsen court was influenced by Professor O'Connell's finding that "between one-fourth to two-thirds of all automobiles during their use at some time are involved in an accident producing injury or death." 391 F.2d at 502, citing O'Connell, Taming the Automobile, 58 Nw. L. Rev. 299, 348 (1963).
uct’s design should be submitted to the jury in every second collision case. The court must of course make a threshold determination on the reasonableness of the design prior to submitting such a case to the jury. In reaching this decision, the foreseeability of product misadventure—if to be considered at all in a strict tort case—is but one factor among several that the court must consider in determining whether the jury may properly conclude that the design of the particular product is unreasonably dangerous.

3. **Obvious Dangers and the Obligation to Provide Safety Devices**

A corollary issue to the second collision situation is raised in the safety device cases. If a manufacturer has an obligation to minimize injuries likely to occur once the product is involved in an accident, does it have a corresponding obligation to provide safety features which will prevent the accident from occurring in the first place? As in the crashworthiness area, a substantial split of opinion has arisen on this issue. The one point on which there is general agreement is that a manufacturer does have an obligation to provide a safety device—or a warning if a safety device is not feasible or if the warning alone would sufficiently reduce the risk—in situations where the dangerous condition in the product is hidden or “latent.” If, on the other hand, the danger is open and obvious, a number of courts have held as a matter of law that the seller has no obligation to provide a safety device or to warn. This rule has been vigorously criticized, and rightly so, since the

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107. See notes 141-45 and accompanying text infra.
108. See text accompanying notes 41 & 50 and notes 43-45 supra.
110. For a discussion of this point see Marschall, supra note 109, at 1077-84.
112. See Pike v. Frank G. Hough Co., 2 Cal. 3d 465, 467 P.2d 229, 85 Cal. Rptr. 629...
mere fact that a dangerous condition was "patent" falls far short of compelling a conclusion in every case that a particular product was reasonably safe or even that the user fully appreciated the risk.\footnote{113}

Whether a particular product is in fact unreasonably dangerous will depend not only upon the obviousness of the hazard and the ability of the user to avoid the risk but also upon the ability of the manufacturer to take reasonable steps to reduce or eliminate the dangerous condition.\footnote{114} An obviously dangerous condition in a product may be unreasonably dangerous because of the tendency of users to occasionally drop their guard from boredom or pressure in an assembly line environment, momentary diversions, forgetfulness, or simply careless—but predictable—inaffection.\footnote{115} If the risk of harm could have been substantially

\footnote{1970. \textit{See generally} Marschall, supra note 109. In Palmer v. Massey-Ferguson, Inc., 3 Wash. App. 508, 476 P.2d 713 (1970), the court remarked as follows: It seems to us that a rule which excludes the manufacturer from liability if the defect in the design of his product is patent but applies the duty if such a defect is latent is somewhat anomalous. The manufacturer of the obviously defective product ought not to escape because the product was obviously a bad one. The law, we think, ought to discourage misdesign rather than encouraging it in its obvious form. \textit{Id.} at 517, 476 P.2d at 718-19 (footnotes omitted).}

\footnote{113. "[E]ven if the obviousness of the danger is conceded, the modern approach does not preclude liability solely because a danger is obvious." Pike v. Frank G. Hough Co., 2 Cal. 3d 465, 474, 467 P.2d 229, 235, 85 Cal. Rptr. 629, 635 (1970). \textit{See also} Sargent v. Ross, 113 N.H. 388, 395, 308 A.2d 528, 532 (1973) ("The mere fact that a condition is open and obvious . . . does not preclude it from being unreasonably dangerous . . . ."); 2 F. Harper & F. James, \textit{The Law of Torts} 1495 (1956). \textit{See note 66 and accompanying text supra.}}

\footnote{114. \textit{See} Dorsey v. Yoder Co., 331 F. Supp. 753, 759 (E.D. Pa. 1971), aff'd, 474 F.2d 1339 (3d Cir. 1973) ("The obviousness of the danger must constitute but one of the factors that determines whether the danger is unreasonable.").}

\footnote{115. A peril or danger may be patent but still not appreciated. Moreover, a manufacturer should incur responsibility for foreseeable injuries caused by the dangers which were appreciated but momentarily forgotten, at least where it is feasible to install a safety device to eliminate the danger. Such questions should be decided by a jury, not by the court.}

\footnote{1 Frumer & Friedman, supra note 3, § 7.02, at 118. For examples of excusable inadvertence}
reduced by a warning or by some form of safety device which
was both technologically and economically feasible, and which
would not have substantially impaired the utility of the product,
a jury should be permitted to determine that the absence of
such a device from the product rendered its design unreason-
ably dangerous despite the fact that the danger was open and
obvious.

4. The Need for Flexibility

The important lesson to be learned from an analysis of the
cases in each of the three categories discussed above is that the
judicious administration of products liability litigation based on
the principles of strict tort liability requires first, a sound un-
derstanding of the policies underlying the theory of strict tort liabil-
ity and, second, a considered application of the pertinent liability
factors to the facts of the individual case. A proper allocation of
responsibilities between judge and jury is much more likely to be
achieved on the basis of these considerations than upon a me-
chanical use of arbitrary and stale categorizations such as the
unavoidability of a defect, the intended use doctrine, or the
latent-patent danger distinction.

Rigid classification of tort law principles into narrow rules of
law reflects a nineteenth century fetish for imbuing the common
law with an artificial appearance of logic and certainty. Despite
an occasional and well-intentioned resurgence of effort in this
direction, the trend toward departmentalization in tort law was
halted long ago.116 Courts in recent years have shown an increas-

by the user of an obviously dangerous product, see Dorsey v. Yoder Co., 331 F. Supp. 753
104 (1972). A notion running through many of these cases is that the obviousness of the
danger is likely to be a good defense in and of itself only in the simplest of products. Even
with the most simple products, however, the better view is that a manufacturer may be
relieved of a duty to warn of the danger but should still be obliged to install practicable
safety devices which would substantially reduce the incidence of injury. This distinction
between simple and complex products is developed in Fanning v. LeMay, 38 Ill. 2d 209,

116. Perhaps the classic turning point was Justice Cardozo's opinion in Pokora v.
Wabash Ry., 292 U.S. 98 (1934), which decisively rejected Justice Holmes' stop-listen-
ing recognition that many of the wooden categories of the common law, while providing facile tests for determining liability, are ill-suited to the judicious resolution of major disputes arising out of complex sets of competing values. Certainty and predictability have clearly been sacrificed to some extent along the way, but the benefits in flexibility and dynamism gained in the process have led to an overall improvement in the administration of justice under the broader principles of accident law. The obligation to avoid exposing others to risks of harm which are unreasonable under all of the circumstances, the central touchstone of the law of torts, has been returned to with increasing frequency by courts struggling with the inadequacies of more specific rules of law.\footnote{117. See, e.g., Rowland v. Christian, 69 Cal. 2d 108, 443 P.2d 561, 70 Cal. Rptr. 97 (1968) (specific rules of landowner and occupier replaced with single duty of due care to all entrants); Sargent v. Ross, 113 N.H. 388, 308 A.2d 528 (1973) (Kenison, C.J.) (specific rules of landlord liability replaced with broad duty of due care). See generally, Love, Landlord's Liability for Defective Premises: Caveat Lessee, Negligence, or Strict Liability, 1975 Wis. L. Rev. 19 (1975).
118. The four factor judicial decision-making model is probably not an appropriate form for a jury charge. See note 52 supra.}

Courts should take cognizance of this general trend in addressing the difficult issues in products liability law and accordingly should avoid the temptation to overly "refine" the basic principles into particularized rules of law.

B. Jury Instructions

The use of properly framed jury instructions is vital to the proper administration of a strict tort liability case, both to outline the general nature of strict tort concepts and to assist the jury in avoiding confusion with the principles of negligence law.\footnote{118. The four factor judicial decision-making model is probably not an appropriate form for a jury charge. See note 52 supra.} When a plaintiff makes claims in both negligence and strict tort, the jury should be instructed that the determination of whether a seller was negligent depends upon whether its conduct in designing, producing or marketing the product is proved to have been unreasonable. Liability in strict tort should be distinguished as depending upon a determination that the product itself was in an unreasonably dangerous condition as sold, without regard to the conduct of the seller. It is an unfortunate fact that this difference between the two overlapping theories is largely obscured by the similar use in both negligence and strict tort of the phrases of

"unreasonable risk of harm" and "unreasonable danger" in defining liability."

Cognizant of this very real risk of confusion between the standards of negligence and strict tort liability, some appellate courts have disapproved jury instructions on strict tort liability containing any intimation that the reasonableness of the defendant's conduct should be considered in the determination of liability. For example, in *Eshback v. W.T. Grant's & Co.*, a strict tort case, the court held erroneous an instruction describing the concept of foreseeability in terms of the "reasonable man." The charge to the jury on foreseeability had stated: "An actor should recognize that his conduct involves a risk of causing an invasion of another's interest if he possesses such knowledge . . . that a reasonable man acting on such knowledge would infer that his acts create an appreciable danger of causing injury to another." The court held that these instructions "improperly introduced due care as a standard upon which the liability of the seller might depend." A similar concern was expressed by the court in *Lunt v. Brady Manufacturing Corp.*, an action in strict tort against the manufacturer of an agricultural machine. The appellate court reversed a judgment for the defendant because the trial judge had instructed the jury that "a machine is 'defective' and 'unreasonably dangerous' if it fails to 'guard against the dangers reasonably to be foreseen.'" Holding the instruction to be prejudicially erroneous, the court reasoned that it improperly focused upon "the conduct of the seller rather than on the product and the expectations of the consumer" and consequently had overtones of the negligence law concept of due care. So long as the instructions have not confused the doctrines of negligence and strict tort liability, however, most appellate courts have been surprisingly tolerant of varying charges on the nature of strict liability in tort. Thus some courts have approved the conservative approach of reading the black letter of section 402A to the jury, while others

119. Indeed, the particular phrase "unreasonably dangerous" has been used for many years to define negligence liability, see note 32 and accompanying text *supra*, and is central to the definition of liability in § 402A. See note 2 *supra*.
120. 481 F.2d 940 (3d Cir. 1973).
121. *Id.* at 942 n.3.
122. *Id.* at 942.
124. *Id.* at 307, 475 P.2d at 966.
125. *Id.*
have approved instructions defining strict tort liability solely in terms of "unreasonably dangerous" or of "defective condition."\footnote{127. E.g., Pyatt v. Engel Equip. Inc., 17 Ill. App. 3d 1070, 309 N.E.2d 225 (1974). See note 62 and accompanying text supra.}

The American Law Institute’s formulation of liability in the oblique phrase “defective condition unreasonably dangerous” reflects both the rather hasty atmosphere in which this language of section 402A was debated and adopted\footnote{128. See Cronin v. J.B.E. Olson Corp., 8 Cal. 3d 121, 501 P.2d 1153, 104 Cal. Rptr. 433 (1972); see notes 56-61 and accompanying text supra.} and the fact that initially the section was designed to cover only liability for the sale of defective foodstuffs.\footnote{129. See 38 ALI PROCEEDINGS 87-89 (1961). The final vote of the American Law Institute in 1961 to retain the “defective condition” language in § 402A came after a very minimal “debate” on this particular point, covering only three pages of the recorded proceedings. Id. The debate that did transpire strongly favored striking the “defective condition” language. Just as it was becoming clear that the inclusion of the phrase was confusing and generally misguided, President Tweed called for a vote on Professor Dickerson’s motion to strike the phrase because “[w]e have been two hours and twenty-two minutes on this section,” although the vast bulk of the discussion had been devoted to other aspects of the section. The motion failed, and the language unhappily was retained. 38 ALI PROCEEDINGS 89 (1961). See note 54 supra.}

The Restatement phrase on its face seems naturally to call for a bifurcated test of liability, requiring the plaintiff to establish, first, the “defectiveness” of the product and, second, that the “defect” rendered the product “unreasona-

\footnote{130. See 41 ALI PROCEEDINGS 349 (1964); 38 ALI PROCEEDINGS 50-71 (1961); Wade, supra note 7, at 830.}
bly dangerous." Some courts and commentators have in fact interpreted section 402A to require this type of two step process for establishing liability. Such a bifurcated approach to liability, however, requiring a plaintiff to prove both "elements" of strict tort, is unsound doctrinally and contradicts even the unified consumer expectations approach to liability expressed in the comments to section 402A itself.\(^{133}\)

The Supreme Court of California, in the *Cronin* case discussed above,\(^{134}\) properly rejected the two step test of liability. The occasion chosen for rejecting this bifurcated standard proved to be unfortunate, however, since the case involved a defect in the manufacturing process rather than an inadequate warning or product design. Of the two phrases, the court myopically selected the wrong one and approved a jury instruction defining liability solely in terms of whether "there was a defect in the manufacture or design of the equipment involved."\(^{135}\)

Other courts have chosen the opposite alternative, adopting the "unreasonably dangerous" phrase and rejecting the language "defective condition."\(^{136}\) One such decision was *Ross v. Up-Right, Inc.*\(^{137}\) in which Judge Wisdom sagely observed that "to speak in terms of 'defect' only causes confusion. . . . The key . . . is whether the product is 'unreasonably dangerous'."\(^{138}\) This is a sound beginning for a jury instruction, but it is both too bare a definition to be of much use to a jury and also too likely to be confused with ordinary negligence.

\(^{131}\) See, e.g., Ford Motor Co. v. Lonon, 217 Tenn. 400, 420, 398 S.W.2d 240, 249 (1966); Ulmer v. Ford Motor Co., 75 Wash. 2d 522, 532, 452 P.2d 729, 736 (1969); Dippel v. Sciano, 37 Wis. 2d 443, 460, 155 N.W.2d 55, 63 (1967).


\(^{133}\) See notes 29 & 30 and accompanying text supra.

\(^{134}\) See notes 55-61 and accompanying text supra.

\(^{135}\) 8 Cal. 3d 121, 128 n.5, 501 P.2d 1153, 1158 n.5, 104 Cal. Rptr. 433, 438 n.5 (1972). See notes 55-57 and accompanying text supra. "Defect" was also the liability test chosen by the Counsel of Europe's Committee of Experts in Article 3(1) of the 1975 Draft European Convention on Products Liability in Regard to Personal Injury and Death, defined in Article 2(c) in terms of what "a person is entitled to expect." The Draft Convention is set out in STAFF OF BUREAU OF DOMESTIC COMMERCE, STUDY ON PRODUCT LIABILITY INSURANCE—ASSESSMENT OF RELATED PROBLEMS AND ISSUES (March 1976) at 181 et seq. See Lorenz, Some Comparative Aspects of the European Unification of the Law of Products Liability, 69 CORN. L. REV. 1005, 1014 (1975).

\(^{136}\) See note 63 and accompanying text supra.

\(^{137}\) 402 F.2d 943 (5th Cir. 1968).

\(^{138}\) Id. at 947.
Five years after he had decided *Ross*, Judge Wisdom had another occasion to examine the nature of section 402A in *Welch v. Outboard Marine Corp.* in which he amplified the basis for liability: “A product is defective and unreasonably dangerous when a reasonable seller would not sell the product if he knew of the risks involved or if the risks are greater than a reasonable buyer would expect.” Three things are noteworthy about this definition. The first is the tenacity of the word “defective” which was yet to be scuttled five years after Judge Wisdom had himself declared it to be only cause for confusion.

The second and more laudable aspect of the *Welch* definition of strict tort liability is its use of the model of a reasonable seller with full knowledge of the product’s dangers. Other courts have also followed the suggestion of Professors Page Keeton and Wade and engrafted onto the unreasonable danger standard of liability the perspective of a reasonable seller with total prescience of the frequency and magnitude of harm which in fact will

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139. 481 F.2d 252 (5th Cir. 1973).
140. *Id.* at 254.
141. The notion that an actor should be attributed with full knowledge of the results of his actions in determining liability was proposed at an early date by Judge Andrews in his celebrated dissent in *Palsgraf v. Long Island R.R.*, 248 N.Y. 339, 162 N.E. 99 (1928): “I think the direct connection, the foresight of which the courts speak, assumes prevision of the explosion, for the immediate results of which, at least, the chauffeur is responsible.” *Id.* at 355, 162 N.E. at 104-05. See Adler, *Strict Products Liability: The Implied Warranty of Safety, and Negligence with Hindsight, as Tests of Defect*, 2 Hofstra L. Rev. 581, 587 (1974).
142. The standard was apparently first proposed by Professor Keeton in the warranty context in 1961. Keeton, *Products Liability—Current Developments*, 40 Tex. L. Rev. 193, 210 (1961). Professor Wade suggested four years later that the standard be used to determine defectiveness within the context of strict liability in tort: “[A]ssuming that the defendant had knowledge of the condition of the product, would he then have been acting unreasonably in placing it on the market?” Wade, *Strict Tort Liability of Manufacturers*, 19 Sw. L.J. 5, 15 (1965). See also Wade, *supra* note 7, at 839-40. Professor Keeton has underscored the significance of the notion and developed it on various occasions. See Keeton, *Products Liability and the Meaning of Defect*, 5 St. Mary’s L.J. 30, 38 (1973) (“It is unreasonably dangerous if a reasonable person would conclude that the magnitude of the scientifically perceivable danger as it is proved to be at the time of trial outweighed the benefits of the way the product was so designed and marketed.” (emphasis in original)). See also Keeton, *Products Liability—Inadequacy of Information*, 48 Tex. L. Rev. 398, 407 (1970); Keeton, *Manufacturer's Liability: The Meaning of "Defect" in the Manufacture and Design of Products*, 20 Syr. L. Rev. 559-68 (1969); Keeton. *Some Observations About the Strict Liability of the Maker of Prescription Drugs: The Aftermath of MER29*, 56 Calif. L. Rev. 149, 158 (1968). It should be observed that Professor Wade’s second factor appears to be inconsistent with this notion since it speaks in terms of the “likelihood” that the product will cause injury rather than in terms of the injuries which are in fact caused by the product’s condition. See note 41 and accompanying text *supra*. 
result from marketing the product in a particular condition. In a sense this approach shifts the attention away from the product and back to the seller once again, as in a negligence case, but it imbues the seller with complete knowledge of the product's future safety performance as it actually unfolds to the very date of trial. Another court has articulated this refined version of the unreasonable danger standard in these words: "The proper test of 'unreasonable danger' is whether a reasonable manufacturer would continue to market his product in the same condition as he sold it to the plaintiff with knowledge of the potential dangerous consequences the trial just revealed." As thus refined, the unreasonable danger model transforms the somewhat subjective risk-benefit approach of negligence law—which is bounded by the limits of reasonable foreseeability—into an objective evaluation of the true costs and benefits of the product as marketed in its particular condition. The reasonable-seller-with-full-knowledge test gives an important additional perspective to the meaning of "unreasonably dangerous" and should give the jury a sound and workable frame of reference for determining liability in many cases.

The final aspect of Judge Wisdom's delineation of the nature of strict tort liability in Welch is novel and may prove to be the ultimate solution to the search for a sound jury instruction. This is the description of liability from the alternative perspectives of either a reasonable seller with full knowledge of the product's hazards or of a reasonable consumer with ordinary expectations. Rather than splitting the test of liability into two requirements that the plaintiff must separately establish, Welch can be read

143. See Helene Curtis Indus., Inc. v. Pruitt, 385 F.2d 841, 850 (5th Cir. 1967); Dorsey v. Yoder Co., 331 F. Supp. 753, 759-60 (E.D. Pa. 1971), aff'd, 474 F.2d 1339 (3d Cir. 1973). The Supreme Court of Oregon has adopted this standard:

A dangerously defective article would be one which a reasonable person would not put into the stream of commerce if he had knowledge of its harmful character. The test, therefore, is whether the seller would be negligent if he sold the article knowing of the risk involved. Strict liability imposes what amounts to constructive knowledge of the condition of the product.


145. The application of such a standard would help to achieve the enterprise liability goal of insuring that manufacturers absorb all of the costs reasonably associated with the marketing of their products. See note 16 and accompanying text supra.
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as articulating a dual test that provides relief for the plaintiff who can establish a violation of either standard.\footnote{146}{Judge Wisdom expressed the belief that the two tests are essentially similar: “We see no necessary inconsistency between a seller-oriented standard and a user-oriented standard when, as here, each turns on foreseeable risks. They are two sides of the same standard.” 481 F.2d at 254.}

The Welch instruction has the doctrinal advantage of acknowledging the hybrid development of strict tort liability.\footnote{147}{Just as the principle of strict products liability has developed to provide relief to consumers through both contract and tort, it would appear reasonable to allow the Welch rationale to extend to cases where the independent application of each of the two standards would generate inconsistent results, i.e., where the injured consumer could establish a violation of one standard but not the other.}

It also has the practical advantage of supplying the jury with an additional frame of reference for liability determinations based upon the expectations of the reasonable consumer. While in a specific case a jury, as a composite group of individual consumers, might have only a vague notion of whether a reasonable manufacturer would market a particular product having various costs and utilities, they might have a strong basis for concluding that the particular type of product accident would violate the expectations of a reasonable user.\footnote{148}{This would quite likely be the case in manufacturing flaw cases involving hidden defects. See Fischer, Products Liability—The Meaning of Defect, 39 Mo. L. Rev. 339, 349 (1974). See also note 21 supra; cf. Kalven, The Dignity of the Civil Jury, 50 Va. L. Rev. 1055, 1067 (1964).}

Moreover, since the expectancy model works particularly well in resolving cases involving manufacturing flaws, the combined approach of Welch provides a single definition of the standard of liability which should work well in most types of products liability cases.\footnote{149}{A jury, given an instruction adopting this alternative means for recovery, should be clearly charged that the plaintiff is entitled to a favorable finding on the liability issue if he is able to demonstrate either that a reasonable seller with full knowledge of the potential harm would not have marketed the product or that the product as marketed did not comply with the ordinary expectations of the reasonable consumer. The risk that a juror would mistakenly interpret such an instruction as requiring the plaintiff to establish both bases of liability would thereby be minimized.}

V. CONCLUSION

Strict tort liability is presently in the midst of its adolescence, struggling hard to find an identity of its own separate from its tort and contract law parents. In order to maximally achieve the objectives of the strict tort doctrine, any beginning point for defining the standard of liability should include the core tort
notion of reasonableness. The reasonableness of the danger, determined upon a cost-benefit method of analysis, forms the nucleus of the four-factor model for liability determinations we have proposed for judicial decision-making. By measuring the reasonableness of the danger from the perspective of a reasonable seller with full knowledge of the product’s actual potential for harm, the unreasonable danger model of liability is refined to reflect more accurately the underlying concept of enterprise responsibility. A further improvement to the definition of liability which should facilitate jury determinations blends the seller and consumer tests of liability, allowing a plaintiff to prevail upon a showing of a violation by the seller of either standard.

Juries given the double vantage point of a *Welch* instruction upon which to consider the safety adequacy of particular products should be in a firm position to render intelligent verdicts. And courts applying the four-factor model to liability determinations should have a flexible framework for deciding cases upon a sound theory of strict products liability in tort.