LIABILITY FOR MANUFACTURERS IN WASHINGTON: WHEN IS STRICT LIABILITY APPROPRIATE?

David K. DeWolf*
Keller W. Allen**

TABLE OF CONTENTS

INTRODUCTION 218
I. THE TREATMENT OF PRODUCT DEFECTS IN WASHINGTON PRIOR TO THE TORT REFORM ACT OF 1981 219
  A. *The Law Before 1969—Warranty Without Limitation* 219
  B. *1969—The Emergence of Strict Liability* 222
  C. *Design Defects and Section 402A* 224
II. THE PASSAGE OF THE WASHINGTON PRODUCT LIABILITY ACT . 225
  A. *The 1981 Tort Reform Act* 225
  B. *The Washington Supreme Court's Decision to Retain Strict Liability* 228
    1. *Couch v. Mine Safety Appliances* 228
    2. *Falk v. Keene Corp.* 229
    3. *Ayers v. Johnson & Johnson* 231
III. THE DIFFERENCE BETWEEN NEGLIGENCE AND STRICT LIABILITY 233
  A. *Negligence: "Plaintiff Expectations" v. the Risk-Utility Calculus* 233
  B. *Strict Liability for Manufacturing Defects* 235
  C. *Risk-Utility Analysis in Defining a Design Defect* 236
    1. The Hindsight Test and the Use of After-Acquired Knowledge 239
    2. "State of the Art" and the Significance of After-Acquired Knowledge 240

*Associate Professor of Law, Gonzaga University School of Law. B.A., Stanford University, 1971; J.D., Yale Law School, 1979.

**Associate, Winston & Cashatt, Spokane, Washington. B.A., Eastern Washington University, 1986; J.D., Gonzaga University School of Law, 1989.

D. *Consumer Expectations and Assigning Loss to an Innocent Party* 241
1. The Use of Tort Liability to Spread Losses 242
2. Loss Reduction: Incentives to Reduce Losses 242
IV. PROPOSAL: DISTINGUISHING KNOWN AND UNKNOWN RISKS . . . 244
A. *The Different Varieties of Hindsight* 244
1. Products That Reduce Rather Than Increase Risk 245
2. The Problem of Inherent Risk in Tort Law Generally . . . 247
B. *The Clarity of the Negligence Test* 248
V. CONCLUSION 249

INTRODUCTION

Product liability law has been a subject of intense debate and substantial legislative attention in the last two decades. Many states have proposed or passed product liability reform statutes;[1] President Bush has announced that he will propose product liability reform legislation.[2] As Victor Schwartz's article demonstrates, the continued viability of strict liability is one of the major issues addressed in product liability reform proposals. Schwartz distinguishes between strict liability and what he calls "super strict liability"; he then suggests the abandonment of "super strict liability," and a return to common sense, a trend he finds already evident in the court decisions and legislation of many jurisdictions.[3]

Alas, Washington is not among them. The Washington Supreme Court's interpretation of the Tort Reform Act of 1981, by continuing to apply strict liability to design[4] and warning[5] cases, appears to be in retrograde motion relative both to Schwartz's vision of common sense, and to the ideals

---

1. For a review of the literature on tort reform, see George L. Priest, *The Current Insurance Crisis and Modern Tort Law*, 96 YALE L.J. 1521 (1987); *see also* Celia E. Holuk & Donna L. Walker, Comment, *Products Liability—Tort Reform: An Overview of Washington's New Act*, 17 GONZ. L. REV. 357, 396 (1981/82).

2. Rhonda McMillion, *New Product Liability Bills: Congressional Effort to Supplant State Laws Resumes*, A.B.A. J., Mar. 1992, at 89.

3. Victor E. Schwartz, *The Death of "Super Strict Liability": Common Sense Returns to Tort Law*, 27 GONZ. L. REV. 179, 181-82 (1991/92).

4. Couch v. Mine Safety Appliances, 107 Wn.2d 232, 728 P.2d 585 (1988) (*see infra* notes 60-72 and accompanying text); Falk v. Keene Corp., 113 Wn.2d 645, 782 P.2d 974 (1989) (*see infra* notes 73-86 and accompanying text).

5. Ayers v. Johnson & Johnson, 117 Wn.2d 747, 818 P.2d 1337 (1991). *See infra* text accompanying notes 87-94.

articulated in the Tort Reform Act of "balance" in product liability cases.[6] Nonetheless, it is easy to exaggerate the significance of the strict liability standard, which differs from negligence largely in the use of "hindsight"—knowledge about the product acquired since the time the product was marketed.[7] This article suggests that sound public policy should continue to use the negligence standard as the primary benchmark of tort liability, but that hindsight *can* fairly be used when the product presents a risk unknown to the manufacturer—so long as that risk was also unknown to the consumer.

To develop this thesis, this article first traces the history of the development of strict liability prior to the adoption of the Washington Product Liability Act. Next, the statute itself is analyzed, revealing the legislature's apparent confusion about whether it wanted to include "hindsight" in the evaluation of design defect and warning cases. Then the focus shifts to an analysis of why negligence usually provides the best balance between consumer safety and efficiency but is neither fair nor efficient when dealing with risks unknown to the consumer—even if those risks were also unknown to the manufacturer. This article then recommends the use of the negligence test in all product design and warning cases, so long as the risks associated with the product were known to the manufacturer. However, where a risk was unknown to the manufacturer—and thus presumably unknown to the consumer as well—the jury should be instructed to impose liability on the manufacturer if a reasonable manufacturer would not have sold the product knowing of the additional risk.

I. THE TREATMENT OF PRODUCT DEFECTS IN WASHINGTON PRIOR TO THE TORT REFORM ACT OF 1981

A. *The Law Before 1969—Warranty Without Limitation*

Although the common law had been far from solicitous of claims by consumers based on product defect,[8] as early as 1913 Washington plaintiffs

6. Tort Reform Act of 1981, ch. 27, 1981 Wash. Laws 112, at § 1; *see* Philip A. Talmadge, *Product Liability Act of 1981: Ten Years Later*, 27 GONZ. L. REV. 153 (1991/92).

7. *See infra* notes 131-134 and accompanying text.

8. Starting with Winterbottom v. Wright, 10 M. & W. 109, 152 Eng. Rep. 402 (1842), courts required the plaintiff to establish that he was in privity with the manufacturer—a burden he could not meet if, for example, the product was sold through a dealer, or if the product injured someone other than the purchaser. *See generally* Robert L. Rabin, *The Historical Development of the Fault Principle: A Reinterpretation*, 15 GA. L. REV. 925, 936-39 (1981) (doctrinal barriers such as privity and status considerations often prevented recovery; fault was not a dominant principle in allocating loss); *but see* Gary T. Schwartz, *New Products, Old Products, Evolving Law, Retroactive Law*, 58 N.Y.U. L. REV. 796, 797-

were permitted to sue manufacturers for injuries caused by a defective product[9] under either an implied warranty or a negligence theory.[10] Although the cause of action was based upon warranty, its operation was quite unlike statutorily-created[11] sales warranties:[12] it had no requirement of a contract or privity between the parties; no necessity that the purchaser rely on the warranty; no requirement of notice of a breach of warranty within a reasonable time after learning of it; and no provision for disclaimer.[13] Recovery under this theory was allowed in cases where a manufacturer's product carried with it an unreasonable risk of harm to potential users,[14] regardless of whether the manufacturer had been negligent.[15]

Implied warranty was relied upon in a number of Washington cases between 1913 and 1969 involving a wide range of defective products. For example, in *Esborg v. Bailey Drug*,[16] the court held that a manufacturer of a hair coloring product could be liable if the plaintiff demonstrated that the product contained a harmful ingredient, that the ingredient was harmful to a reasonably foreseeable and appreciable number or class of potential users, and that she was innocently injured while using the product in the manner and for the purpose intended. As in other pre-1969 defective product cases, *Esborg* set forth the rule that a manufacturer could be liable for harm to a user of its product if the product carried with it an unreasonable risk of harm to potential

---

99 (1983).

9. Mazetti v. Armour & Co., 75 Wash. 622, 135 P. 633 (1913) (patron of plaintiff's restaurant became nauseous after eating defendant's meat product; when plaintiff sued to recover lost profits, the court held that an "implied warranty" extended to all who suffer damage, regardless of privity).

10. Ulmer v. Ford Motor Co., 75 Wn.2d 522, 526, 452 P.2d 729, 731-32 (1969).

11. Unlike sales warranties, which were generally a creature of statutes, such as the Uniform Sales Act, or later the UCC, the implied warranty that protected the consumer against defective products was court-created.

12. An example of a statutorily-created warranty was the former Washington Uniform Sales Act, WASH. REV. CODE §§ 63.04.010-.780 (1989), which was in existence prior to 1968. The Uniform Sales Act was repealed by the legislature effective June 30, 1967, and replaced with the Uniform Commercial Code. *Ulmer*, 75 Wn.2d at 525, 452 P.2d at 731.

13. *Ulmer*, 75 Wn.2d at 525, 452 P.2d at 733. In this respect, Washington law was well ahead of the national trend. Henningsen v. Bloomfield Motors, Inc., 161 A.2d 69 (N.J. 1960) became widely influential because of its use of contract doctrines for the benefit of the consumer, while stripping the contract of traditional remedies and disclaimers. *See* Holuk & Walker, *supra* note 1, at 363-64. Washington had permitted such an approach from the start.

14. *Ulmer*, 75 Wn.2d at 526, 452 P.2d at 731.

15. *Id.* at 529, 452 P.2d at 733.

16. 61 Wn.2d 347, 378 P.2d 298 (1963).

users. The fact that the product had been carefully manufactured was irrelevant.[17]

Another case where the implied warranty theory was applied was *Brown v. General Motors Corp.*[18] The plaintiffs, Brown and Morrison, were injured when their car veered off a highway into a ditch. The evidence at trial supported a conclusion that the accident was caused by the wheels of the car locking due to a manufacturing defect. The trial court gave the jury an implied warranty instruction, but refused Brown and Morrison's request for a negligence instruction. The jury returned a verdict for the manufacturer. On appeal, Brown and Morrison argued that the trial court erred in refusing to give a negligence instruction. The Washington Supreme Court rejected this argument, stating that because the implied warranty theory was an "*omen of liability without fault*,"[19] a negligence instruction would not have enhanced the plaintiffs' case. The court concluded that if a negligence instruction had been given, the plaintiff would have had to prove fault. This would have imposed an additional element for the plaintiff to satisfy which was not required under the implied warranty theory.

Implied warranty was recognized as a theory of recovery in a variety of other defective product cases before 1969. These included cases where injury was caused by contaminated food products,[20] dynamite,[21] and defective windshields.[22] The Washington Supreme Court concluded in each case that liability would be imposed under the implied warranty theory when a product was not safe for the purposes for which the consumer would ordinarily use it,[23] regardless of whether a manufacturer had been negligent or careful during the manufacturing process.[24] This was the standard governing defective product cases until 1969.

---

17. *Ulmer*, 75 Wn.2d at 526, 452 P.2d at 731.

18. 67 Wn.2d 278, 407 P.2d 461 (1965).

19. *Id.* at 284, 407 P.2d at 465 (emphasis added).

20. *See, e.g.*, Pulley v. Pacific Coca-Cola Bottling Co., 68 Wn.2d 778, 415 P.2d 636 (1966); Nelson v. West Coast Dairy Co., 5 Wn.2d 284, 105 P.2d 76 (1940).

21. Brewer v. Oriad Powder Co., 66 Wn.2d 187, 401 P.2d 844 (1965).

22. Baxter v. Ford Motor Co., 168 Wash. 456, 12 P.2d 409 (1932).

23. *Id.*

24. In *Pulley*, 68 Wn.2d at 778, 415 P.2d at 636, the appellate court held that it was proper to exclude evidence offered by the defendant, a bottler of soft drinks accused of placing a contaminated product on the market, that it exercised great care in its bottling process. Upon review, the supreme court ruled that the bottler's care or lack of care was not at issue.

B. *1969—The Emergence of Strict Liability*

Outside of Washington, the law of product liability was gradually shifting from a contract perspective—in which privity was required and disclaimers or remedy limitations would be enforced—to a tort perspective, in which liability would be imposed for a defect regardless of fault, and regardless of the plaintiff's contractual status. In 1962, the California Supreme Court decided *Greenman v. Yuba Power Products*,[25] which adopted strict liability in tort as the basis for recovery in defective product cases. Justice Traynor wrote that when a manufacturer places a product on the market, liability should be imposed against the manufacturer if the product proves to have a defect which causes personal injury to the plaintiff.[26] The *Greenman* decision was significant because it was the first to adopt a pure tort theory for recovery in defective product cases. Perhaps even more significantly, Justice Traynor's decision, and his participation in the drafting of the *Restatement (Second) of Torts*, led the way for a sea change in product liability law from a focus on contract to one based on tort.

In response to the growing nationwide interest in strict liability as a theory of recovery in defective product cases, the American Law Institute embarked on a project in the early 1960's to formulate a strict liability theory without using warranty terminology.[27] The Institute noted that the term "warranty" had become so associated with a contract of sale between a plaintiff and a defendant that warranty had become an obstacle to the recognition of strict liability where there was no contract.[28] Following a drafting process which spanned several years, the Institute in 1965 adopted Restatement section 402A, which provides:

> §402A. Special Liability of Seller of Product for Physical Harm to User or Consumer:
>
> (1) One who sells any product in a defective condition unreasonably dangerous to the user or consumer or to his property is subject to liability for physical harm thereby caused to the ultimate user or consumer, or to his property, if
>
> (a) the seller is engaged in the business of selling such a product, and
>
> (b) it is expected to and does reach the user or consumer without substantial change in the condition in which it is sold.

---

25. 377 P.2d 897 (Cal. 1962).
26. *Id.* at 900.
27. *See* Seattle-First Nat'l Bank v. Tabert, 86 Wn.2d 145, 147-48, 542 P.2d 774, 775 (1975).
28. RESTATEMENT (SECOND) OF TORTS § 402A cmt. m (1965).

(2) The rule stated in Subsection (1) applies although

(a) the seller has exercised all possible care in the preparation and sale of his product, and

(b) the user or consumer has not bought the product from or entered into any contractual relation with the seller.[29]

Section 402A was widely adopted by the great majority of jurisdictions, either through legislation or judicial decision,[30] thus bringing national trends in line with the substance of the law in Washington. However, Washington's law still sounded in contract, using the theory of "warranty" in place of "tort."[31]

In *Ulmer v. Ford Motor Co.*[32] the Washington Supreme Court remedied this situation, replacing the concept of implied warranty with section 402A as the basis of recovery against manufacturers for injuries caused by defective products. In *Ulmer* the plaintiff alleged she was injured by a manufacturing defect in her car. After a verdict for the defendant, Ulmer appealed. She claimed that the trial court erred in giving a jury instruction which required her to prove fault by the defendant in the manufacture of the car.

Ulmer maintained that the law in defective product cases had advanced to the point where implied warranty as a theory of recovery had become obsolete.[33] In analyzing Ulmer's argument that implied warranty should be discarded as a theory of recovery in defective product cases, the court noted that the contract underpinnings of warranty made it difficult to reconcile with tort cases because it was illogical to allow recovery in implied warranty while at the same time refusing to attach to it any of the customary incidents of a warranty.[34]

The *Ulmer* court agreed with the American Law Institute that elimination of warranty terminology was important to solidify the development of the law

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

30. *See* Holuk & Walker, *supra* note 1, at 365.

31. The significance of this difference is more than semantic. It turns out to have major significance for the determination of how "defects" will be analyzed. On the one hand, the decision might turn upon whether the consumer's reasonable expectations have been met—thus relying upon an image of a promise broken (which in turn is contractual), or the decision might turn upon whether the product created an unreasonable risk of harm based upon its relative safety (a tort-based standard).

32. 75 Wn.2d 522, 452 P.2d 729 (1969).

33. *Id.* at 528, 452 P.2d at 733.

34. *Id.* at 529, 452 P.2d at 733.

of strict liability.[35] Although the terminology of warranty was cast aside, the basic principles of the implied warranty theory were still present in the tort theory of strict liability.[36]

C. *Design Defects and Section 402A*

Although section 402A was firmly established both nationally and in Washington, it was not clear whether strict liability would apply to design defects as well as manufacturing defects.[37] The Restatement language does not exclude design defects, but its failure to address the peculiarities of design defect cases make the application of strict liability more problematic. Nor did the *Ulmer* decision commit the court one way or the other. In 1975, however, the Washington Supreme Court's decision in *Seattle First National Bank v. Tabert*[38] made it clear that strict liability under section 402A applied to design defect cases.[39]

In *Tabert* the plaintiffs sued for the deaths of a husband and wife who were killed when their Volkswagen van collided with the rear of a flatbed truck at less than twenty miles per hour, claiming the lack of front-end protection made the van unreasonably dangerous. The court agreed that the plaintiffs could maintain their cause of action, reasoning that while a manufacturing defect might be more easily identified or proved, a design defect may produce an equally dangerous product.[40] Because the end result of a manufacturing and design defect is often the same, the court held that strict liability should be imposed in design defect cases.[41] The court went on to emphasize that the focus in a product liability case is the product itself

---

35. *Id.* at 532, 452 P.2d at 735.

36. *Id.*

37. Nonetheless, some commentators are satisfied that it was intended to apply to all defect cases: "The text of § 402A does not explicitly state that it applies to design and warnings claims. But its comments, especially comments h, i, j, k, and p, make clear that the drafters intended that result. And courts ever since have read it this way." James A. Henderson, Jr. & Aaron D. Twerski, *Doctrinal Collapse in Products Liability: The Empty Shell of Failure to Warn*, 65 N.Y.U. L. REV. 265, 271 n.21 (1990).

38. 86 Wn.2d 145, 542 P.2d 774 (1975).

39. *Id.* at 149, 542 P.2d at 776.

40. *Id.* at 149-50, 542 P.2d at 776.

41. *Id.*

> A product may be just as dangerous and capable of producing injury whether its condition arises from a defect in design or from a defect in the manufacturing process. While a manufacturing defect may be more easily identified or proved, a design defect may produce an equally dangerous product. The end result is the same—a defective product for which strict liability should attach.

Id.

and the consumer's reasonable expectations of the product, not the behavior of the seller or manufacturer.[42] Nonetheless, the court's definition of the consumer expectations test depends upon the same balancing process that is used in determining negligence and strict liability under a risk/utility test, as will be more fully explored in the next section:

> In determining the reasonable expectations of the ordinary consumer, a number of factors must be considered. The relative cost of the product, the gravity of the potential harm from the claimed defect and the cost and feasibility of eliminating or minimizing the risk may be relevant in a particular case. In other instances the nature of the product or the nature of the claimed defect may make other factors relevant to the issue.[43]

II. THE PASSAGE OF THE WASHINGTON PRODUCT LIABILITY ACT

A. *The 1981 Tort Reform Act*

If a sense of stability and coherence was induced by the widespread adoption of Restatement section 402A, it was soon disrupted by the advance of the tort reform movement.[44] As in other states, the Washington legislature commenced a study in the mid-1970s to respond to complaints that the product liability system was creating a disproportionate burden on manufacturers and thereby driving up the cost of insurance, which in turn passed along higher prices for American products.[45] After several unsuccessful attempts, the legislature culminated its efforts to address these problems by enacting the Tort and Product Liability Reform Act of 1981 [hereinafter the 1981 Act].[46]

The Preamble of the 1981 Act states the purpose of the Act as the creation of "a fairer and more equitable distribution of liability among parties at fault":[47]

> It is the intent of the legislature to treat the consuming public, the product seller, the product manufacturer, and the product liability insurer in a balanced fashion in order to deal with these problems. [¶] It is the intent of the legislature that the right of the consumer to recover for injuries sustained as a result of an unsafe product not be unduly impaired . . . .[48]

---

42. *Id.* at 154, 542 P.2d at 779.
43. *Id.*
44. Holuk & Walker, *supra* note 1, at 370-71.
45. Philip A. Talmadge, *Washington's Product Liability Act*, 5 U. PUGET SOUND L. REV. 1 (1981); Tort Reform Act of 1981, ch. 27, 1981 Wash. Laws 112, at § 1.
46. Tort Reform Act of 1981, ch. 27, 1981 Wash. Laws 112, at § 1.
47. *Id.*
48. *Id.*

The 1981 Act borrowed much of its structure and its content from the Model Uniform Product Liability Act,[49] and followed its division of product liability standards into three different categories, depending upon whether the claim was based upon (1) a construction defect or breach of express warranty; (2) a design defect; or (3) a failure to warn. As to a construction defect or breach of warranty, the statute clearly provides for strict liability.[50] On the other hand, in describing claims based upon design defect or failure to warn, the statute provides the following description:

> A product manufacturer is subject to liability to a claimant if the claimant's harm was proximately caused by the *negligence* of the manufacturer in that the product was *not reasonably safe* as designed or not reasonably safe because adequate warnings or instructions were not provided.[51]

The statute's principal author believed that claims based upon either design or warning defects were to be judged by a negligence standard, rather than the strict liability standard specifically set forth for construction defects.[52] This belief is certainly bolstered by the language regarding warnings, which specifically refers to whether a reasonably prudent manufacturer would have warned about the risk.[53] On the other hand, the design defect description focuses not upon the manufacturer's conduct, but rather upon whether the *product* is "reasonably safe." The phrase "not reasonably safe" is in turn defined as follows:

> A product is not reasonably safe as designed if, at the time of manufacture, the likelihood that the product would cause the claimant's harm or similar harms, and the seriousness of those harms, outweighed the burden on the manufacturer to designing a product that would have prevented those harms

---

49. *See* Talmadge, *supra* note 45, at 7.

50. RCW 7.72.030(2) reads:

> A product manufacturer is subject to *strict liability* to a claimant if the claimant's harm was proximately caused by the fact that the product was not reasonably safe in construction or not reasonably safe because it did not conform to the manufacturer's express warranty or to the implied warranties under Title 62A RCW.

WASH. REV. CODE § 7.72.030(2) (1989) (emphasis added).

51. WASH. REV. CODE § 7.72.030(1) (1989) (emphasis added).

52. Talmadge, *supra* note 45, at 8; *see also* Talmadge, *supra* note 6, at 153.

53. WASH. REV. CODE § 7.72.030 (1)(c) (1989). However, as the Washington Supreme Court noted in Ayers v. Johnson & Johnson, 117 Wn.2d 747, 765, 818 P.2d 1337, 1346 (1991), the language regarding the reasonably prudent manufacturer refers to the duty of a manufacturer to warn *after* the product is marketed, and similar language does not appear for warnings that accompany the product.

and the adverse effect that an alternative design that was practical and feasible would have on the usefulness of the product.[54]

It is significant that the language of the statute refers to a determination of whether the product was reasonably safe *at the time of manufacture*, since that is the point at which the negligence standard is applied, as distinguished from the standard of strict liability, which takes advantage of hindsight.[55] However, if the legislature intended to make the standard based upon the traditional negligence test, as it seems to be doing in at least some parts of the warning section, why did it provide additional language in the design defect section that focuses upon whether *the product* was reasonably safe? This has often been cited as a distinction between strict liability and negligence: strict liability focuses on the product, whereas negligence focuses upon the care used by the human agency that produced the product.[56]

As an additional source of ambiguity concerning which standard to use, the statute later provides that "[i]n determining whether a product was not reasonably safe under this section, the trier of fact shall consider whether the product was unsafe to an extent beyond that which would be contemplated by the ordinary consumer."[57] This appears to return the standard for decision to something akin to the warranty approach, in which the trier of fact attempts to determine whether the product performed as would reasonably be expected by the consumer (thus fulfilling the implied warranty by the manufacturer, and meeting the consumer's reasonable expectations) or failed to perform (usually by proving to be more dangerous than the ordinary consumer would expect).[58] If the legislature intended a strict liability standard for design defects, it certainly included language that was suggestive of a negligence standard, and if it intended a negligence standard, it certainly included language that bore a strange resemblance to strict liability. What was in the legislature's mind?[59]

---

54. WASH. REV. CODE § 7.72.030(1)(a) (1989).

55. *See infra* note 106 and accompanying text.

56. "'Under the strict tort doctrine the emphasis is on the product and the danger it poses to the public, while under the negligence concept the emphasis is on the reasonableness of the conduct of the manufacturer.'" Haugen v. Minnesota Mining & Mfg. Co., 15 Wn. App. 379, 387, 550 P.2d 71, 76 (1976) (quoting LOUIS R. FRUMER & MELVIN I. FRIEDMAN, PRODUCTS LIABILITY § 16A[4], at 3-336.3 (1960)).

57. WASH. REV. CODE § 7.72.030(3) (1989).

58. The Washington Supreme Court in *Tabert* clearly thought that the consumer expectations test was consistent with a strict liability standard for design defects. *See supra* notes 38-43 and accompanying text.

59. As Senator Talmadge notes in his article, Talmadge, *supra* note 6, at 153-55, and as even the Washington Supreme Court noted in Ayers v. Johnson & Johnson, 117 Wn.2d 747, 763-64, 818 P.2d 1337, 1345 (1991), many members of the legislature *thought* they

B. *The Washington Supreme Court's Decision to Retain Strict Liability*

1. *Couch v. Mine Safety Appliances*

The first case to provide an answer to this question—or at least to announce how the Washington Supreme Court would read the statute—was *Couch v. Mine Safety Appliances*.[60] In August 1982, plaintiff decedent Lonnie Ray Couch was struck by a tree which had been felled by co-workers.[61] At the time of the incident, Couch was wearing an aluminum helmet he had purchased six months earlier for $13.50. He died two days later from complications attributable to the skull fracture he had received when struck by the tree. A wrongful death action was commenced against Mine Safety Appliance, the manufacturer of the helmet, by the decedent's wife.[62] The case was tried to a jury which returned a verdict for Couch for $600,000.[63]

The trial court declined to give one of Mine Safety's requested instructions, which would have required the jury to find that an alternative design was available at the time of manufacture before liability could be imposed.[64] The jury found the helmet was not "reasonably safe," that the unsafe condition was a proximate cause of injury to Couch, and that although Couch had been contributorily negligent, such negligence was not a proximate cause of his injuries.[65] Mine Safety appealed.

The principal question for the supreme court was whether the 1981 Act imposed a burden on the plaintiff to prove the existence of an alternative design as a separate element of her case. The court concluded that the statute, read in light of prior case law, did not impose such a burden.[66] In its analysis, the court noted that RCW 7.72.020(1) provided that the "previous existing applicable law of this state on product liability law is modified only to the extent set forth in this chapter."[67] Because of this provision, the court

were adopting the approach of the Uniform Product Liability Act, which bases both design defect and warning cases on a fault basis. Victor Schwartz agrees. Schwartz, *supra* note 3, at 181. However, the question remains as to whether this intention was expressed with adequate clarity in the language of the statute.

60. 107 Wn.2d 232, 728 P.2d 585 (1986).

61. *Id.* at 234, 728 P.2d at 586.

62. *Id.* at 235, 728 P.2d at 587.

63. *Id.*

64. *Id.*

65. *Id.*

66. *Id.* at 236, 728 P.2d at 587.

67. *Id.* at 239, 728 P.2d at 589.

determined that its previous decision in *Connor v. Skagit Corp.*[68] was still valid.[69] *Connor* held that in a design defect case, a plaintiff may establish that a product is unreasonably dangerous by means of factors other than the availability of alternative safe designs.[70]

The holding in *Couch* that alternative designs are not part of a plaintiff's burden of proof was the basis of the court's holding. But the court noted that the strict liability test of *Seattle First National Bank* was still the standard for design defect cases notwithstanding the reference to negligence in the design defect portion of the 1981 Act.[71] *Couch* also demonstrated that the Washington Supreme Court, in reviewing whether a particular provision of the 1981 Act was intended to change pre-existing law, was not inclined to find a change unless it was clearly set forth. This approach was apparent in *Falk v. Keene Corp.*,[72] where the court squarely addressed the question of whether the 1981 Act set forth a negligence or strict liability standard in design defect cases.

2. *Falk v. Keene Corp.*

John Falk's estate and his widow sued the Keene Corporation and other companies which manufactured asbestos insulation products to which Falk was allegedly exposed from 1947 to 1953.[73] Falk alleged that the exposure to the asbestos products caused him to develop cancer.[74] Falk claimed the companies were liable both because they failed to warn of dangers associated with the product, and because the products were defectively designed.

The trial court instructed the jury using the term "negligence" as the standard for liability under the 1981 Act in both design and warning cases.[75] The trial court refused to give Falk's requested instruction which set forth a strict liability standard for design defects. Falk contended that strict liability as set forth in *Seattle-First National Bank v. Tabert*[76] was still the law with respect to product design defects.[77] The jury returned a verdict in favor of the manufacturers, and Falk appealed. The court of appeals reversed, holding

---

68. 99 Wn.2d 709, 664 P.2d 1208 (1983)
69. *Couch*, 107 Wn.2d at 239, 728 P.2d at 589.
70. *Id.* at 237, 728 P.2d at 588.
71. *Id.* at 239-40, n.5, 728 P.2d at 589, n.5.
72. 113 Wn.2d 645, 782 P.2d 974 (1989).
73. *Id.* at 646, 782 P.2d at 975.
74. *Id.*, 782 P.2d at 976.
75. *Id.* at 648, 782 P.2d at 976.
76. 86 Wn.2d 145, 542 P.2d 774 (1975).
77. *Falk*, 113 Wn.2d at 648, 782 P.2d at 976.

that strict liability was still the standard for design defect claims despite the use of the term "negligence" in the design defect portion of the 1981 Act. The Washington Supreme Court granted review.

In addressing the question of whether negligence or strict liability was the standard in design defect cases, the court concluded that the Senate Select Committee on Tort and Product Liability Reform had intended to adopt the strict liability theory set forth in *Tabert*. The court found that the Select Committee had interpreted *Tabert* as articulating a test which more closely resembled negligence than strict liability.[78] This misinterpretation of *Tabert* by the Select Committee had caused the legislature to include a reference to negligence in the design defect portion of the Act.[79] The *Falk* court concluded that although the Select Committee had intended the *Tabert* standard to govern design defect cases, the Select Committee had apparently doubted that *Tabert* had adopted strict liability as a theory of recovery in design defect cases.[80]

Despite its conclusion that the Select Committee's assessment of *Tabert* explained why negligence appeared on the face of the 1981 Act to be the standard for liability in design defect cases, the court also concluded that there was no evidence that the legislature had adopted negligence as the standard for design defects. Instead, the court determined that the Select Committee's reliance on *Tabert* was a sign that it favored the strict liability analysis for design defect cases as set forth in *Tabert*.[81] The court found support for this conclusion by comparing the design defect portion of the 1981 Act to the provision which sets forth the law relating to the adequacy of post-manufacture warnings and instructions.[82] This portion of the statute provides:

> A product is not reasonably safe because adequate warnings or instructions were not provided after the product was manufactured where a manufacturer learned or where a reasonably prudent manufacturer should have learned about a danger connected with the product after it was manufactured. In such a case, the manufacturer is under a duty to act with regard to issuing warnings or instructions concerning the danger in the manner that a

78. *Id.* at 651-52, 782 P.2d at 978-79; SENATE JOURNAL, 47th Leg., Reg. Sess. 859 (Mar. 6, 1980).
79. *Falk*, 113 Wn.2d at 651, 782 P.2d at 978.
80. *Id.* at 653, 782 P.2d at 979.
81. *Id.*
82. *Id.*

> reasonably prudent manufacturer would act in the same or similar circumstances. This duty is satisfied if the manufacturer exercises reasonable care to inform product users.[83]

The court noted that this statute, unlike the design defect statute, sets forth a standard consistent with a traditional negligence approach. Because the legislature did not include language in the design defect portion of the statute similar to that in the warning and instruction portion, the court concluded that the legislature did not intend for negligence to be the standard for design defect claims.[84] The court held that strict liability still exists as a theory of liability in design defect cases, and that the reference to negligence in the design defect provision of the 1981 Act did not mean that negligence was the only standard of recovery in such cases.

The court recognized that the 1981 Act requires the trier of fact to consider evidence of industry custom and technological feasibility, and evidence of whether the product was in compliance with nongovernmental, legislative, or administrative regulatory standards,[85] but it did not recognize the link between this information and the negligence standard. In a typical strict liability case, the plaintiff takes pains to insure that the jury is *not* instructed regarding the custom of the industry or contemporary standards at the time the product was designed, for fear of leading the jury to convert the standard into an ordinary negligence case.[86]

3. *Ayers v. Johnson & Johnson*

The court's determination to keep strict liability alive was extended to cases alleging defective warnings. In *Ayers v. Johnson & Johnson*,[87] a fifteen-month-old boy suffered irreparable brain damage after aspirating baby oil manufactured by the defendant. The parents of the boy sued, alleging that the baby oil was defective because its container lacked a warning that aspiration would cause serious injury.[88] In affirming the reinstatement of a $2.5 million verdict,[89] the Washington Supreme Court unanimously held

---

83. WASH. REV. CODE § 7.72.030(1)(c) (1989).

84. *Falk*, 113 Wn.2d at 653, 782 P.2d at 979.

85. WASH. REV. CODE § 7.72.050(1) (1989); *Falk*, 113 Wn.2d at 654, 782 P.2d at 979-80.

86. *See* Boatland of Houston, Inc. v. Bailey, 609 S.W.2d 743 (Tex. 1980), *rev'g* 585 S.W.2d 805 (1979).

87. 117 Wn.2d 747, 818 P.2d 1337 (1991).

88. The original bottle contained no warning, thus leading Mrs. Ayers to conclude, after inspecting the bottle, that there was no danger worse than diarrhea. *Id.* at 750, 818 P.2d at 1339.

89. The trial judge granted a judgment notwithstanding the verdict, and then the court

that the Washington Product Liability Act retained strict liability not only for design defect cases, but also for product warning cases.[90] It further held that the type of risk suffered by the plaintiff need not be foreseeable in order to hold the manufacturer liable for a failure to warn against it; it is enough to impose liability if a "balancing" of the likelihood and seriousness of the potential harm, compared with the burden on the manufacturer to design a product that would have prevented those harms, establishes that the product was not reasonably safe.[91]

Although the court's decision in *Ayers* focuses on the difference between strict liability and negligence, and presents what some might find a tortured justification for the use of strict liability, it is instructive to contemplate what a difference it would have made in the *Ayers* case if a negligence standard had been used instead. The manufacturer's primary arguments on appeal were that there was inadequate evidence on the issue of causation[92] and foreseeability.[93] Thus, the central question posed for the jury—whether the slight risk of aspirating baby oil justified the imposition on the manufacturer of the burden of warning about it—would be the same even if negligence were used as the basis for liability. A jury that believed that the product should have had a warning label on it because of the risk, albeit slight, of such catastrophic consequences—and the jury's verdict reflects that it did believe that to be the case—would presumably have also found that a reasonably prudent manufacturer would have warned of that risk, and would have found on this evidence that such failure was a proximate cause of the plaintiff's injury. Even if the court were wrong in applying a strict liability standard, is this so bad given Dean Prosser's comment, early on in the controversy over negligence and strict liability, that: "an honest estimate might very well be that there is not one [product liability] case in a hundred in which strict liability would result in recovery where negligence does not."[94]

---

of appeals reinstated the verdict; the Washington Supreme Court affirmed the reinstatement. *Id.*

90. *Id.* at 761, 818 P.2d at 1344.

91. *Id.* at 763, 818 P.2d at 1345.

92. Johnson & Johnson described the plaintiffs' testimony that they would have followed a warning that explicitly described the consequences of aspirating the product as "rank speculation." *Id.* at 755, 818 P.2d at 1341.

93. Because of the remote likelihood of babies aspirating baby oil, Johnson & Johnson argued that the injury was unforeseeable, thus eliminating any duty on their part to warn. *Id.* at 757, 818 P.2d at 1342. In rejecting this argument, the court noted a medical journal article published in 1985 which discussed the risk of aspirating baby oil. *Id.* at 758, 818 P.2d at 1342-43.

94. William L. Prosser, *The Assault Upon the Citadel (Strict Liability to the Consumer)*, 69 YALE L.J. 1099, 1114 (1960). Of course, the mere fact that the legal

III. The Difference Between Negligence and Strict Liability

We are thus left with the question, what difference does it really make whether we apply strict liability or negligence, and when is one or the other appropriate? The 1981 Act and subsequent case law interpreting it display significant confusion over the relationship between strict liability and negligence.[95] Little progress can be made in deciding which standard to apply unless these two concepts are clearly distinguished.

A. *Negligence: "Plaintiff Expectations" v. the Risk-Utility Calculus*

Negligence is the touchstone concept of tort law.[96] Negligence is defined as "the failure to exercise ordinary care."[97] Ordinary care in turn is defined as "the care a reasonably prudent person would exercise under the same or similar circumstances."[98] Despite the familiarity of the negligence concept, and the intuitive way in which most juries apply the standard of reasonable care, there are two distinct approaches to conceptualizing reasonable care. To some extent these two approaches embody the "corrective justice" approach in tort law and the "economic efficiency" approach to tort law.[99] In an automobile case, for example, most cases are determined according to the rules of the road: drivers are expected to obey the rules of the road,[100] and when their failure to do so causes an injury, compensation is justified. In their fullest extension in the negligence per se doctrine,[101] the rules of the road generate expectations that other users of the

---

standard would make no difference in theory may not decide whether it will make a difference in practice. A glass has the same contents whether it is half-full or half-empty, but perceptions may be altered by the formulation of the standard.

95. *Falk*, 113 Wn.2d at 651-53, 782 P.2d at 978-79.

96. Henderson & Twerski, *supra* note 37, at 265 ("negligence dominates tort").

97. 6 WASHINGTON PRACTICE, WASHINGTON PATTERN JURY INSTRUCTIONS 97 (3d ed. 1989) (WPI 10.01).

98. *Id.* at 98 (WPI 10.02).

99. *See generally* Christopher Schroeder, *Corrective Justice and Liability for Increasing Risks*, 37 UCLA L. REV. 439 (1990). These two approaches also have philosophical roots in the difference between the Kantian and utilitarian approaches to morality. *See generally*, J. RAWLS, A THEORY OF JUSTICE (1971); for particular application of these principles to product liability, see Alan Schwartz, *Proposals for Products Liability Reform: A Theoretical Synthesis*, 97 YALE L.J. 353 (1988).

100. 6 WASHINGTON PRACTICE, WASHINGTON PATTERN JURY INSTRUCTION 465 (3d ed. 1989) (WPI 70.06) ("Every person using a public street or highway has the right to assume that other persons thereon will use ordinary care and will obey the rules of the road, and he has a right to proceed on such assumption until he or she knows, or in the exercise of ordinary care should know, to the contrary.").

101. In the famous case of Martin v. Herzog, 126 N.E. 814 (N.Y. 1920), Justice Cardozo rejected the notion that juries could disregard a statutory violation, since "[j]urors

road are entitled to rely upon. The emphasis is not so much on finding "fault" in some moral sense, but upon vindicating the justifiable expectations on the part of potential plaintiffs. Indeed, the tort law system has been envisioned as a system of reciprocal duties and entitlements that correspond to the rights inherent in the domain of real property.[102]

On the other hand, particularly where no fixed social expectation exists, negligence may be viewed as a failure to do what is economically efficient, judged by a risk-utility calculus. Learned Hand suggested this approach in *United States v. Carroll Towing*,[103] and an entire generation of scholars led by Richard Posner have attempted to explain tort law as simply a series of variations on the theme of economic efficiency.[104] Although Hand did not suggest that his test could be used in an arithmetical fashion, he thought that it was a useful way to think about whether the conduct in question was reasonable.[105] Moreover, and particularly important for the distinction between negligence and strict liability, reasonable care is judged by what the hypothetical reasonably prudent person would have been able to perceive *at the time* of the allegedly negligent act.[106] Learned Hand's test has been very influential because it admirably captures the need to balance safety costs with

---

have no dispensing power, by which they may relax the duty that one traveler on the highway owes under the statute to another." *Id.* at 815. The Washington legislature significantly retreated from the traditional approach to negligence per se as part of the Tort Reform Act of 1986. *See* Talmadge, *supra* note 6, at 159.

102. Guido Calabresi & A. Douglas Melamed, *Property Rules, Liability Rules, and Inalienability: One View of the Cathedral*, 85 HARV. L. REV. 1089, 1090 (1972).

103. 159 F.2d 169 (2d Cir. 1947). In *Carroll Towing* the defendant owned a barge that broke away from its moorings. Learned Hand found that

> the owner's duty, as in other similar situations, to provide against resulting injuries is a function of three variables: (1) The probability that she will break away; (2) the gravity of the resulting injury, if she does; (3) the burden of adequate precautions. Possibly it serves to bring this notion into relief to state it in algebraic terms: if the probability be called P; the injury, L; and the burden, B; liability depends upon whether B is less than L multiplied by P: i.e., whether $B < PL$.

Id. at 173.

104. Richard A. Posner, *A Theory of Negligence*, 1 J. LEGAL STUD. 29 (1972). Posner has recently argued that his position represents a synthesis of the utilitarian and the contractarian or Kantian approach to law: Richard A. Posner, *What Has Pragmatism to Offer Law?*, 63 S. CAL. L. REV. 1653 (1990).

105. William C. Powers, Jr. *The Persistence of Fault in Products Liability*, 61 TEX. L. REV. 777, 787 (1983). As the quotation from the case indicates, he only thought it useful to state the proposition in algebraic terms in order to bring the generic issue—how to conceptualize the negligence issue—into relief.

106. *Id.* at 788.

accident costs.[107] Moreover, in the case where the cost of a product can be adjusted to reflect the addition or subtraction of safety devices that are more economically efficient, the case for using economic efficiency as the criterion for decision making is particularly strong.[108]

B. *Strict Liability for Manufacturing Defects*

Despite the dominance of the negligence concept, there has always been room in tort law for liability without fault.[109] Applied to product liability, the doctrine of strict liability is most compelling where a product contained a manufacturing or construction defect; that is, the product as delivered was different from the specifications or standards established by the manufacturer.[110] The inquiry into whether the product was "defective" corresponds closely to the ordinary sense of a "defect"[111] in that the product wasn't supposed to be the way it was.[112]

In the adoption of strict liability for manufacturing defects, one could justify the imposition of liability without fault because fault could often be inferred, even if it could not easily be proved.[113] Indeed, in the seminal case

---

107. As Calabresi has noted, we do not want to eliminate all accidental injuries—only those that are not worth having. *See* Guido Calabresi, *The Decision for Accidents: An Approach to Nonfault Allocation of Costs*, 78 HARV. L. REV. 713 (1965).

108. Tort law does not always have this luxury. When two cars meet in an intersection, the court cannot rely on the opportunity for previous bargaining to create the optimum balance of the parties' interests. Deciding in favor of the most economically efficient outcome might allow the Mercedes driver to go faster than the Yugo driver because the Mercedes driver could demonstrate that his time is more valuable than the Yugo driver's.

109. Strict liability for abnormally dangerous activities and for nuisances has been an accepted part of tort law. *See generally*, George P. Fletcher, *Fairness and Utility in Tort Theory*, 85 HARV. L. REV. 537 (1972).

110. Schwartz, *supra* note 3, at 180.

111. One dictionary defines a defect as "an imperfection or weakness; fault; flaw; blemish . . . ." WEBSTER'S NEW WORLD DICTIONARY 369 (2d ed. 1972).

112. "It may now be true that defect, like obscenity in Justice Stewart's definition, will be discovered by sense impression. Unfortunately, 'I know it when I see it' will not suffice as a judicial standard for products liability." Aaron D. Twerski, *From Defect to Cause to Comparative Fault—Rethinking Some Product Liability Concepts*, 60 MARQ. L. REV. 297, 304-05 (1977).

113. One commentator suggests that modern strict liability owes as much to simplifying litigation as it does to changing substantive rules: "What seems fundamental [to the modern rule of strict liability] is the high correlation between product defect and manufacturer negligence, making the issue of negligence not worth the costs and uncertainties of litigation." Schwartz, *supra* note 8, at 810.

of *Escola v. Coca Cola Bottling Co.*[114] while Justice Traynor was suggesting strict liability for product defects his colleagues were suggesting that the plaintiff's case satisfied an appropriately generous interpretation of the *res ipsa loquitur* doctrine. Once it is determined that the product departed from manufacturing specifications, there are a number of plausible negligence claims: the manufacturer may have fallen short of reasonable care in the design of the machinery to produce the product; in the regulation of the production process; in the selection of the quality control process; or in the performance of the inspection. The plaintiff typically lacks the ability either to pinpoint the point in the causal chain where the defect arose, or to engage in the debate over the cost-effectiveness of greater care in the manufacturing process.[115] In any event, the plaintiff often has a legitimate expectation that the product will be free of defects, and that irrespective of negligence the plaintiff should be compensated for damages caused by a manufacturing defect.[116]

C. *Risk-Utility Analysis in Defining a Design Defect*

As noted above, Washington courts have held that design defects are essentially no different from manufacturing defects, reasoning that in either event the result is injury to the consumer.[117] However, there are important differences in the test by which one identifies a "defect." When a beverage bottle explodes during routine use, as it did in the *Escola* case,[118] the question of a manufacturing defect turns on whether the product departs from the standard established by the manufacturer for its performance. There is no such immediate template available for comparison in determining a design defect.[119] If the plaintiff had complained that the *design* of the bottle was defective, to what should the allegedly defective bottle be compared? To a stronger glass bottle? To a plastic bottle? To a noncarbonated beverage? Although the term "defect" is used to describe both flaws in the manufacture of the product and flaws in the design of the product, the analysis of a

---

114. 150 P.2d 436 (Cal. 1944).

115. *Id.* at 441 (Traynor, J., concurring).

116. No one disagrees that manufacturing defects should ordinarily entitle the plaintiff to recovery for damages caused by the defect. Whether couched in the form of a breach of warranty, or related to a public policy to create incentives to avoid injury, strict liability for construction or manufacturing defects has been accepted even by reform proposals designed to limit the scope of manufacturer liability.

117. *See supra* note 41 and accompanying text.

118. *See supra* note 114 and accompanying text.

119. Schwartz, *supra* note 3, at 180; Sheila L. Birnbaum, *Unmasking the Test for Design Defect: From Negligence [to Warranty] to Strict Liability to Negligence*, 33 VAND. L. REV. 593, 599 (1980).

"defect" in the design process is quite different. In the case of an alleged manufacturing defect, the consumer and seller have clear expectations of how the product is supposed to behave. There are often difficult questions in particular about whether in fact the injury was caused by a manufacturing flaw,[120] but assuming the manufacturing flaw can be pinpointed as a proximate cause of the injury, there are many good reasons to impose liability. On the other hand, where the alleged defect lies in the specifications of the product, there is no built-in point of comparison to a "non-defective" design; an expert can be hired to suggest that any one of hundreds of variations in the product would have made it less likely to cause the specific injury.

It is even harder to define what it is that the consumer expects in the way of product design. Few consumers expect products they use to cause them serious injury or death, yet many products cannot be made without containing such risks. Consumers may understand the concept of risk in the abstract, but are understandably surprised when the risk materializes and an accident happens to *them*. In *Tabert* the court recognized that a buyer of a microbus would not expect it to provide as much front-end protection as a Cadillac.[121] But at what point is the lack of front-end protection within the consumer's expectation? Must the consumer be shown to have understood and accepted the notion that a front-end collision might cause serious injury or death?

Early commentators on the "consumer expectations" test were critical of it for its vagueness. Dean Wade, for example, pointed out that "[i]n many situations . . . the consumer would not know what to expect, because he would have no idea how safe the product could be made."[122] The consumer expectations test has been repeatedly criticized as providing inadequate guidance for juries attempting to determine whether a particular design is "defective."[123] Is the expectation of the particular consumer relevant, or

---

120. In Pouncey v. Ford Motor Co., 464 F.2d 957 (5th Cir. 1972), for example, the plaintiff was injured by a radiator fan that shattered and struck him while he was pouring coolant into the car's radiator. *Id.* at 957-58. The issue at trial was whether the product contained a defect, and since the blade shattered suddenly it was difficult to tell. *Id.* at 958. The plaintiff presented expert testimony that the fan broke as a result of inferior metallurgy, whereas the manufacturer presented its own expert testimony that the fan broke as a result of a blade having been deformed by misuse. *Id.* The court held that it was an issue of fact whether the product contained a defect or not, and circumstantial evidence could be used to decide that issue. *Id.* at 961.

121. Seattle First Nat'l Bank v. Tabert, 86 Wn.2d 145, 154, 542 P.2d 774, 779 (1975).

122. John W. Wade, *On the Nature of Strict Tort Liability for Products*, 44 MISS. L.J. 825, 829 (1973).

123. George L. Priest, *Products Liability Law and the Accident Rate*, *in* LIABILITY: PERSPECTIVES AND POLICY 184, 210 (Robert E. Litan & Clifford Winston eds., 1988).

should the standard be based upon what consumers generally expect? What happens when a person is injured who had no part in the decision to purchase or use the product?[124] In response to this problem, some courts have suggested that the "consumer expectations" test is in fact a reciprocal of the "reasonable manufacturer" test: the consumer may expect a product that is as safe as a manufacturer could make it, subject to a balancing of risk and utility.[125] But if that is the approach taken, it is indistinguishable from a negligence test, at least in those cases where the risk was known at the time of design—which includes all but a handful of the cases alleging defective design.[126]

In the case of a manufacturing flaw, it is not a useful exercise to ask whether the defect could have been prevented with the exercise of reasonable care. In many cases the relevant evidence about how the defect arose is unavailable, and even if it were available, the existence of a defect alone is sufficient to impose liability.[127] However, when a car is engulfed in flames after a rear-end collision, the determination of whether the design was defective cannot be made until we know whether the cost of redesigning the car to prevent a post-collision fire was high or low.[128] Unlike the use of strict liability for abnormally dangerous activities, where the injury itself is compensable simply because of the defendant's choice to carry on the activity,[129] strict liability in the case of a design defect is based upon the

---

124. For example, in Ayers v. Johnson & Johnson, 117 Wn.2d 747, 818 P.2d 1337 (1991), the victim was a two-year-old who aspirated baby oil purchased by his parents. Are his expectations relevant? Determinable?

125. This was certainly the approach taken in *Tabert*, where the supreme court defined consumer expectations in terms that compared risk and utility. *See supra* note 43 and accompanying text.

126. In Falk v. Keene Corp., 113 Wn.2d 645, 782 P.2d 974 (1989), and in *Ayers*, 117 Wn.2d at 747, 818 P.2d at 1337, for example, the risk posed by the products (asbestos disease and brain damage, respectively) were well known to the manufacturers when the products were marketed. Thus, the addition of language about strict liability adds nothing to the resolution of the issue of whether the product was "reasonably safe." Instead, the jury should be asked to consider whether a reasonable manufacturer (weighing the risks of the product against the cost of safety measures to avoid the risk) would have used the design.

To be sure, some products turn out to have risks greater than what was originally anticipated (e.g., the risk to asbestos worker's wives from laundering their clothing). In such cases the jury should be allowed to pose the negligence question as though the *risks* were known to the manufacturer.

127. This is because, even under a risk-utility test, the burden of placing a defectively manufactured bottle on the reject pile is insignificant compared to the benefit of preventing the harm to be expected from the defect.

128. *See* Neil K. Komesar, *Injuries and Institutions: Tort Reform, Tort Theory, and Beyond*, 65 N.Y.U. L. REV. 23, 64-67 (1990).

129. Fletcher, *supra* note 109.

existence of a cost-effective alternative design that would have prevented the injury.[130]

1. The Hindsight Test and the Use of After-Acquired Knowledge

Instead of defining strict liability through the consumer expectations test, with its ambiguity and uncertainty, some commentators have suggested that strict liability can best be understood in relation to the traditional negligence test. When strict liability is applied to a case of product-caused injury, in effect the finder of fact is imputing to the manufacturer whatever is now known about the product's performance. The question is then asked, would a reasonably prudent person have put the product on the market knowing its actual condition?[131] For example, in the case of the Coke bottle in *Escola*, we would impute to the manufacturer the knowledge that the bottle was either cracked or overfilled—in any event, it did not meet the manufacturer's standards for resistance to explosion in normal use. With that knowledge, would a reasonably prudent person put the product into the stream of commerce? Obviously not; it would be put on the reject pile to be remanufactured. This test differs dramatically from the standard negligence test, since that test asks what a reasonably prudent person would have done *in those circumstances*. Since a reasonably prudent person would probably have no way of knowing that the bottle was overfilled or cracked, she would probably have put it in the stream of commerce. No negligence could be assigned to that decision. With the benefit of knowledge gained in hindsight, however, the plaintiff wins easily.

Design cases can be treated similarly. The question in a design defect case is whether a reasonably prudent manufacturer, knowing what we now know about the product and its performance, would have redesigned the product. In some cases the post-sale knowledge of performance makes a dramatic difference. For example, when it became known that acetaminophen capsules could be easily doctored to poison consumers, the capsules were quickly withdrawn and replaced by tamper-proof containers.[132] Although the design of the product may have been reasonable given what was known at the time the product was manufactured, by today's standards the product would be classified as defective. Similarly, the Rely tampon may have been produced by the best scientists in the world, using the most sophisticated

---

130. Of course, just how the evidence about a cost-effective design is relevant is the subject of much controversy, as is explored in this article.

131. Phillips v. Kimwood Mach., 525 P.2d 1033 (Or. 1974). This analysis was cited with approval in Seattle First Nat'l Bank v. Tabert, 86 Wn.2d 145, 542 P.2d 774 (1975); *see supra* notes 38-42 and accompanying text.

132. *See, e.g.*, Elsroth v. Johnson & Johnson, 700 F.Supp. 151, 153 (D.C. N.Y. 1988).

design techniques. However, once it was discovered that the product caused toxic shock, it was instantly withdrawn.[133] A difficult case of negligence using the knowledge available at the time of manufacture becomes an easy case of design defect if hindsight is the standard used.[134]

2. "State of the Art" and the Significance of After-Acquired Knowledge

If the "hindsight" test accurately describes the method by which strict liability is applied in a product defect case, then it is critical to determine whether the test to be used for design defects is the knowledge available at the time of manufacture or the knowledge available at the time of trial. Where nothing significant has been learned since the time of design and/or sale, then there will be no difference between using strict liability and using negligence.[135] For this reason, many courts and commentators have been tempted to treat strict liability and negligence as equivalent.[136] However, where significant new information has come to light either about product risks or about means of making the product safer, the manufacturer will fare much

---

133. Kehm v. Procter & Gamble Mfg. Co., 724 F.2d 613, 617 (8th Cir. 1983).

134. Powers, *supra* note 105, at 789 n. 43. However, many courts find it difficult to impose a true hindsight test, finding it inherently unfair. A good example is Boatland of Houston, Inc. v. Bailey, 609 S.W.2d 743 (Tex. 1980), *rev'g* 585 S.W.2d 805 (1979). *See infra* note 154 and accompanying text.

135. *See supra* note 94 and accompanying text. In *Grimshaw*, for example, Ford engineers knew precisely what would happen when the car was hit from the rear. In fact, it was the careful analysis of this data, coupled with a conscious trade-off of anticipated deaths for reduced cost that precipitated an enormous punitive damage liability. Grimshaw v. Ford Motor Co., 119 Cal. App. 3d 757, 174 Cal. Rptr. 348 (1981) (jury awarded $125 million in punitive damages, reduced by the trial judge to $3.5 million; reduced award affirmed on appeal). By definition, conduct that justifies the award of punitive damages will satisfy the standard of negligence.

136. "[I]t is no easy matter in design and warning cases to discover a difference between strict liability and negligence." Henderson & Twerski, *supra* note 37, at 272. It is sometimes difficult to determine who benefits most from the confusion:

> Some commentators . . . have presented a forceful argument that a distinction between negligence and strict liability should not be made in design cases. In a negligence action, they argue, the manufacturer has the duty to use reasonable care to see that the product is duly safe. This duty includes the responsibility of keeping up with scientific and technological developments in the field. Thus, if the design turns out not to be duly safe, a reasonable inference may be drawn that the manufacturer was negligent in using that design. In short, whether tried on a theory of negligence or strict liability, the same result would be reached in practically all cases. Why not recognize this fact, these commentators argue, and adopt a rule in all design cases that would require the plaintiff to prove that the manufacturer was negligent?

John W. Wade, *On the Effect in Product Liability of Knowledge Unavailable Prior to Marketing*, 58 N.Y.U. L. REV. 734, 748 (1983).

worse under strict liability than under negligence. Under strict liability the manufacturer will be held liable for injuries that could have reasonably been avoided using hindsight afforded by today's knowledge, even if reasonable care at the time of design or manufacture was consistent with reasonable care *based on what was known then.*[137]

In recognition of this difference, some courts have rejected strict liability for certain kinds of design defects. For example, in *Brown v. Superior Court,*[138] the California Supreme Court considered whether public policy considerations favored the imposition of strict liability for defectively designed drugs. It concluded it was counterproductive to penalize the manufacturer for producing a drug today that, in the light of medical knowledge assigned ten years later, does an inferior job of alleviating sickness or indeed, is downright dangerous.[139] Many commentators agree.[140]

Again, whereas a manufacturing flaw suggests "fault" somewhere in the manufacturing process, and represents a departure from the expectations of both parties,[141] using hindsight to identify a design "defect" may represent neither; it may simply be the result of improvements in technology that make an injury preventable.

D. *Consumer Expectations and Assigning Loss to an Innocent Party*

Nonetheless, even if the manufacturer can only be found liable by using hindsight, that does not by itself preclude a finding of liability. Fault, after all, has never been the sole criterion for assigning the burden of a loss.[142] Lest we feel overly sympathetic to the "innocent" manufacturer for being required to pay for an injury where no one could have expected him to prevent it,[143] we should remember that in such cases the plaintiff is often

---

137. In addition, jurors probably have an easier time passing judgment on an inanimate object—the product—than on the human being who created it. To say that a product is defective because it caused a preventable injury is easier than to say that the human being who designed it was negligent.

138. 751 P.2d 470 (Cal. 1988).

139. *Id.* at 479.

140. Henderson & Twerski, *supra* note 37, at 274 (footnote omitted); Birnbaum, *supra* note 119, at 627.

141. Schwartz, *supra* note 8, at 802 ("[M]anufacturing defects are usually a consequence of manufacturer negligence—negligent inspection or, of course, original employee negligence on the assembly line.").

142. *See supra* note 109 and accompanying text.

143. "[T]he possibility that a manufacturer might be held liable for the dangerous propensities of a product that were scientifically unknowable at the time of manufacture continues to raise serious questions about the basic fairness of the prudent manufacturer

just as innocent. Consider the super-absorbent tampons that killed scores of women and injured hundreds more:[144] is it any more telling that the manufacturer was not "at fault," than that the plaintiff was not at fault? Is it any more unfair to impose the loss upon the innocent women than upon the innocent manufacturer? In such situations we are forced to choose which of two innocent parties should be stuck with an injury for which neither is at fault.

The considerations that lead a court to consider imposition of liability without fault are often discussed under the heading of "risk distribution."[145] There are two distinct goals, however, that are served by imposing liability upon a manufacturer who is not at fault: (1) spreading the loss to a larger group of people—the "insurance" function; and (2) encouraging efficient use of resources by cost internalization.

1. The Use of Tort Liability to Spread Losses

One candidate for a tie-breaking factor is the relative ability of the party to spread the loss to others similarly situated. It has long been thought that, where public policy considerations are divided on whether to impose liability, it is generally better to impose liability on the defendant, since the defendant has the ability (usually through insurance, but also through the mechanism of higher prices) to spread the loss to a larger group within society. As Victor Schwartz points out in his article, this rationale has lost its appeal in view of the superiority of a more general program to insure against accidental harms.[146]

2. Loss Reduction: Incentives to Reduce Losses

Another policy consideration in the formulation of product liability law is the desire to reduce the sum of accident and safety costs.[147] It may be true that imposing the cost of "innocently" caused harms will drive up the cost of insurance, and thereby the cost of the product. On the one hand, it may be to society's benefit to discourage the development and sale of products that pose risks that cannot be eliminated even with the use of reasonable care. It may depend significantly upon the type of product and the

---

[hindsight] test." Birnbaum, *supra* note 119, at 627 (footnote omitted).

144. Kehm v. Procter & Gamble Mfg. Co., 724 F.2d 613 (8th Cir. 1983).

145. Schwartz, *supra* note 3, at 182.

146. *Id.* Significantly, the objection to using the tort system simply to provide loss spreading is at least as old as Oliver Wendell Holmes, who pointed out that "[u]niversal insurance, if desired, can be better and more cheaply accomplished by private enterprise." OLIVER W. HOLMES, THE COMMON LAW 96 (1881).

147. GUIDO CALABRESI, THE COSTS OF ACCIDENTS 26 (1970).

type of risk that it poses to the consumer. Some products society may happily live without; other products that are associated with injuries may actually reduce the risk of injury—even if incompletely,[148] and by withdrawing them from the market, or discouraging investment in improvements in such products, product liability creates perverse incentives.[149] The California Supreme Court in *Brown v. Superior Court*[150] made the case in the context of pharmaceutical drugs: increased liability, particularly when coupled with the inability to forecast advances in technology, will discourage manufacturers from producing new products, often in areas acutely needed by society. The application of a true "hindsight" test will have the greatest tendency to discourage product manufacturers where the technology is developing most rapidly, which will often be an area where the social need is greatest:

> [W]hen strict liability is imposed retroactively for risks about which the defendants could not have known at distribution, defendants can only charge the losses against earnings or capital, or go out of business. Either way, inefficiencies result. Later entrants to the market enjoy a decided advantage over earlier entrants who are saddled with obligations that they could not insure against or avoid by exercising reasonable care. A rule that penalizes longevity and contradicts fundamental rules of risk spreading by asking the impossible of manufacturers is counterproductive and likely headed for oblivion. Negligence, not strict liability, should, and eventually will, govern the time dimension issues in products liability litigation.[151]

Of course, where the loss is shifted back to the consumer, the disadvantages of that result must be considered. Consumers will be less likely to use products if they are forced to shoulder the costs in cases like the Rely tampon injuries. However, in some cases this will be appropriate. Just as defendants will adjust output when they are forced to internalize the costs

148. For example, the aluminum helmet sold to the plaintiff's decedent in Couch v. Mine Safety Appliances, 107 Wn.2d 232, 728 P.2d 585 (1988) (*see supra* text accompanying notes 60-72) did not cause a tree to fall upon him. The helmet was purchased in an attempt to ameliorate the risk from logging. If the cost of the accident is placed on the helmet manufacturer, the cost of helmets is increased, making them less available, and perhaps increasing rather than reducing the injuries arising from the decedent's occupation.

149. The effect of applying strict liability to design and warning cases thus can be distinguished from the effect of applying strict liability to manufacturing defects.

150. 751 P.2d 470 (Cal. 1988).

151. Henderson & Twerski, *supra* note 37, at 274 (footnote omitted). This effect would be most pronounced in those very industries (e.g., AIDS vaccines, toxic waste disposal) where scientific development is most rapid because societal need is the greatest.

associated with their activity, plaintiffs may choose a more appropriate mix of risk-taking activity if they are forced to bear the risk that the product may be more dangerous than first supposed.

IV. PROPOSAL: DISTINGUISHING KNOWN AND UNKNOWN RISKS

A. *The Different Varieties of Hindsight*

If after-acquired knowledge ("hindsight") is the crux of the difference between strict liability and negligence, it is important to observe that hindsight comes in at least two different varieties.[152] The first kind of hindsight consists of information about *risks* that were not anticipated at the time the product was initially designed. For example, the super-absorbent tampon was not known at the time of manufacture to cause toxic-shock syndrome; in hindsight the risk makes the product unreasonably dangerous. Similarly, the Tylenol capsule—apparently harmless when manufactured—proved to be unreasonably dangerous because it was possible to tamper with the contents of the capsule without detection.[153]

The second form of hindsight consists of technological breakthroughs that raise the standard for the production of a product. As an example, take the case of a outboard motor that causes a boat to circle around and strike the consumer after he has fallen into the water.[154] Later designs of the boat incorporated a "kill" switch that would stop the motor once the operator released control of it. The danger had not changed, nor should it have been a surprise to either the user or the manufacturer that such dangers were present. What had changed was the technological feasibility of using a safety device. The motor without the kill switch would then be considered unreasonably dangerous, creating strict liability, if a pure hindsight test is

---

152. Professor Wade suggested that there were three basic kinds of knowledge available after the product is marketed: (1) knowledge about dangers, hazards, or risks of normal use; (2) scientific or technological developments that may now render the product safer; and (3) knowledge about ways in which the product may be (mis)used or altered by users. Wade, *supra* note 136, at 751-52.

153. A manufacturer could legitimately argue that in the case of Tylenol capsules the act of placing poison in a capsule constituted a superseding cause of the injury. Traditionally a defendant could escape liability if the conduct of a subsequent actor "broke the chain of causation" between the original act—even if negligent—and the subsequent injury. For a discussion of the "superseding tortfeasor" concept, see RESTATEMENT (SECOND) OF TORTS § 440 (1965), which defines a superseding cause as "an act of a third person or other force which by its intervention prevents the actor from being liable for harm to another which his antecedent negligence is a substantial factor in bringing about."

154. Boatland of Houston, Inc. v. Bailey, 609 S.W.2d 743 (Tex. 1980), *rev'g* 585 S.W.2d 805 (1979).

applied.[155] However, the danger of injury or death has not risen above the consumer's initial expectation. Instead, the consumer's *standards* of what is an acceptable risk have risen because of the advances in technology. Similarly, advances in ski bindings may allow the skier's foot to release more quickly to avoid an injury, making previous ski bindings unreasonably dangerous.

Leaving aside the insurance or "spreading" considerations discussed above, the cost-internalization rationale would favor strict liability where post-manufacture experience generates a risk greater than those expected by the consumer. In such cases the consumer would be unable to weigh the risk in deciding whether to use the product or not. This is certainly the case in the super-absorbent tampon cases. At the same time, the manufacturer who is making a product with potentially unknown risks can reasonably be expected to bear the risk of unknown hazards in introducing the product. Products that are truly valuable to society will not be held off the market, because they will be able to pay their way; the most marked effect would be that manufacturers will have an incentive to develop products in ways that minimize the chance of creating a new and previously unknown risk.

On the other hand, a product that reasonably poses an existing risk should not be judged at a future date by the safety advances that newer products are able to incorporate. To do so would give the consumer, who has already bargained for the risk, a windfall at the expense of the manufacturer whose own technological advances may have made it possible today to reduce or avoid altogether the risk of injury.

1. Products That Reduce Rather Than Increase Risk

An additional comment should be made about the status of products like pharmaceutical drugs, that are inherently experimental, serve important societal goals, and carry significant risks. In *Brown v. Superior Court* the California Supreme Court refused to apply strict liability to pharmaceutical drugs, fearing that a standard higher than negligence would impede the development and marketing of new and potentially lifesaving drugs. In part this was a (well-justified) fear that, as discussed above, such a rule would have the effect of victimizing manufacturers in industries where technology was advancing most rapidly. However, another phenomenon at work in *Brown* needs to be recognized: the developers of pharmaceutical drugs are generally engaged in attempting to avoid injuries that, in the absence of the

155. That is, "assuming we knew then what we know now [i.e., the value of using "kill" switches to avoid boating accidents], would a prudent manufacturer sell an outboard motor without one?" The answer would probably be no.

drug, would occur anyway. Thus, they stand in a position different from, say, an automobile manufacturer whose product creates the injury in the first place. In terms of risk distribution, a court should ask whether the defendant's conduct has actually made the injury more likely; if so, the effect of imposing higher costs on the defendant will be to "price" the activity closer to its true market level. Thus, if fireworks manufacturers and users are made strictly liable for injuries from stray fireworks, the internalization of the cost of injuries will help society place a more appropriate price on using fireworks; if by adding the cost of injuries the public shifts to other ways of amusing itself, society has gained in efficiency.

By contrast, pharmaceutical manufacturers may find that the cost of paying for unknown future accidents based on a retroactive application of future technology makes it unprofitable to develop new drugs.[156] The result would be a net decline not only in the welfare of the manufacturer but of the consuming public as well. Again, however, the reason for this phenomenon in the case of pharmaceutical drugs is that the defendant's product is used in an effort to avoid an already-existing risk rather than creating a new one. If that rationale is acknowledged, it would apply not only to the *design* of new drugs and warnings, but would also apply to *manufacturing* flaws. If a new drug can only be made safe 95% of the time, and 5% of the time manufacturing flaws cause injury, and if reasonable care cannot eliminate the risk of a manufacturing flaw, it would make sense to use a negligence test, rather than strict liability, lest the imposition of strict liability make it unprofitable to manufacture the drug at all.[157]

---

156. The evidence presented to the court in *Brown* suggested precisely such an effect:

> If drug manufacturers were subject to strict liability, they might be reluctant to undertake research programs to develop some pharmaceuticals that would prove beneficial or to distribute others that are available to be marketed, because of the fear of large adverse money judgments. Further, the additional expense of insuring against such liability—assuming insurance would be available—and of research programs to reveal possible dangers not detectable by available scientific methods, could place the cost of medication beyond the reach of those who need it most.

Brown v. Superior Court, 751 P.2d 470, 478-79 (Cal. 1988).

157. The question of whether the drug should be used at all is answered by a simple negligence test: if the benefits from the drug 95% of the time outweigh the risk of injury in 5% of the cases, then a reasonable manufacturer would sell the drug and a reasonable consumer would buy it. The difference between selling an experimental pharmaceutical drug and selling an automobile lies in the expectation of the consumer; defects in cars are unexpected and unbargained for, whereas in an experimental drug the risk of potential defects can be knowledgeably weighed by patient and physician.

2. The Problem of Inherent Risk in Tort Law Generally

If the above rationale for pharmaceutical manufacturers is persuasive, it should be considered whether it applies more generally in the entire field of torts. Elsewhere in the tort system defendants are being held responsible when they try, unsuccessfully, to avoid a risk they had no part in creating. For example, many obstetricians are tempted to leave the field of obstetrics because of the tremendous liability they face for a mistake in the difficult choices they make in how best to deliver a baby.[158] Despite the fact that they did not choose to bring babies into the world by means of a harrowing journey through the birth canal, they are stuck with million-dollar verdicts if their efforts to improve upon Mother Nature fall short. By imposing liability without regard to who created the risk, the tort system encourages excessive Caesarean sections[159] and flight from the field of obstetrics. The same thing is true of a weather service that predicts coming storms;[160] social welfare agencies responsible for preventing child abuse and neglect;[161] psychiatrists who fail to protect the public against dangerous patients;[162] and police officers who decide on how to investigate crimes.[163] In each case the potential responsibility for a wrong decision is tremendous, and the tort system has struggled with a set of immunities and rules about a duty of care in order to treat them fairly. Across the board, however, there has been scant recognition of the significant difference between a defendant who created the risk by his conduct and the defendant whose efforts to ameliorate the risk have been unsuccessful. In the former cases, imposing an ever-higher standard of care will have the benefit of "pricing" activities more appropriately, and perhaps channeling social activity in a more productive direction. In the latter case, however, increasing liability will drive from the market those few who are trying to protect us. Unless they can be shielded

158. Andrew H. Malcolm, *Fear of Malpractice Suits Spurring Some Doctors to Leave Obstetrics*, N.Y. TIMES, Feb. 12, 1985, at A1.

159. Dorothy M. Allison, Comment, *Physician Retaliation: Can the Physician-Patient Relationship Be Protected?*, 94 DICK. L. REV. 965, 972 (1990).

160. Brown v. United States, 790 F.2d 199 (1st Cir. 1986) (Widows of lobster fisherman could not recover from the United States Weather Service for husbands' drownings because they failed to show justifiable reliance upon receiving accurate weather information to warn of unexpected storm.).

161. Babcock v. State, 116 Wn.2d 596, 809 P.2d 143 (1991) (state child protective services worker had only qualified immunity from suit based upon negligent placement of children).

162. Tarasoff v. Regents of Univ. of Cal., 551 P.2d 334 (Cal. 1976).

163. *Dahmer Victim's Mother Sues 3 Milwaukee Cops for Laxity*, CHI. TRIB., Nov. 26, 1991, at 4; *City Sued Over Murder*, NAT'L L. J., Aug. 19, 1991, at 6.

from responsibility for that portion of the injury that their conduct did not create, the tort system will continue to fail in its primary mission.[164]

B. *The Clarity of the Negligence Test*

One of the major benefits of replacing strict liability with negligence is that juries understand a negligence test more readily than the strict liability tests proposed by the Washington Supreme Court. It is indicative of the problem that neither the legislature nor the court could easily identify the difference between strict liability and negligence. It is foolish to think that juries will have an easier time than lawyers. As a consequence, the negligence standard should be used wherever possible to help juries decide whether to impose liability. Negligence obviously should not be the standard in the case of a construction defect; in those cases, as Victor Schwartz has pointed out, the jury has a clear standard for comparison—the nondefective product. On the other hand, for design defect or negligence cases, the jury should be told to assess liability on the basis of whether a reasonably prudent person in the manufacturer's position would have marketed the product. In deciding that question the jury should consider all relevant information that was known or should have been known to the manufacturer—the custom of other manufacturers, the literature regarding potential risks, the alternative designs that were available, etc. Moreover, they should be able to argue that a reasonable manufacturer would take into account actual consumers' expectations about product performance, including the potential for misuse of the product.

Plaintiffs will still be able to argue in most cases that the design or warning choices made by the manufacturer were negligent in view of the serious risks that generated the lawsuit, and the low cost in most cases of preventing the injury.[165] Strict liability (in the sense of using after-acquired knowledge) should continue to be applied in those cases where the product contains risks that could not be discovered through the use of reasonable care

---

164. For a discussion of the related issues of joint and several liability, see McLaughlin & Fisher, *Apportioning the "Indivisible": Comparative Liability*, 27 GONZ. L. REV. 207 (1991/92).

165. In fact, one can expect that a negligence standard usually creates a bias in favor of the plaintiff, for the following reason: The principal argument for the defendant for refusing to incorporate a relatively cheap safety measure (e.g., a warning label on a baby oil bottle or a nylon bladder inside a Pinto gas tank) is that the risk of accident was relatively remote compared to the cost of the suggested safety improvement. Unfortunately for the defendant, there is usually, but not always, living proof that the product *does* result in injury, sometimes gruesome injury. To try to convince a jury that such accidents aren't worth avoiding is difficult when the courtroom presents such a disproportionate (and pathos-inducing) sample of the users of the product.

prior to marketing of the product (e.g. the risk of toxic shock syndrome from a super-absorbent tampon). However, after-acquired knowledge about ways to make the product *safer*—to avoid risks already known to the manufacturer and consumer but which advancing technology allows us to prevent—would not be admissible.

V. CONCLUSION

Tort liability for product injuries should be based upon a balance of public policy considerations. On the one hand, consumers should be compensated for injuries that arise either from negligence on the part of the defendant, or from risks that were created by the product and previously unknown to the parties. On the other hand, manufacturers should be protected from liability for risks that they did not create, or could not reasonably be expected to anticipate, so long as they have used reasonable care. By using the negligence standard in most design and warning cases (with additional instructions in those few cases where unexpected risks surface), juries will be able to decide liability issues in a more predictable and equitable fashion. Now that the Washington Supreme Court has applied strict liability to design defect as well as warning cases, it is up to the legislature—once again—to strike a better balance between consumers and manufacturers.