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ARRIVING AT REASONABLE ALTERNATIVE DESIGN: THE REPORTERS' TRAVELOGUE

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Substantial commentary and controversy have been generated by the requirement in the new Restatement (Third) of Torts: Products Liability that plaintiffs in most (but not all) cases involving claims of defective product design show that a reasonable alternative design was available and that failure to adopt the alternative rendered the defendant's design not reasonably safe. Henderson and Twerski explain the origins of that requirement in American products liability case law and show that it is not only the majority position but also comports with widely shared views regarding the proper objectives of our liability system. Although consumer expectations cannot serve as a workable, stand-alone test for defective design (except in the important subset of design cases involving product malfunctions) the authors acknowledge the relevance of reasonable consumer expectations in a sensible risk-utility analysis. The authors close with a description of the Habush Amendment, included in section 2, which imposes the reasonable alternative design requirement. The authors defend its inclusion as principled and necessary, given the frequency with which courts have referred, in dicta, to the possibility that certain product designs present sufficiently low levels of social utility and high levels of risk that they should not be distributed at all.

The role of Reporters expounding on their own *Restatement* is awkward. The black letter and comments must speak for themselves. The work product is ultimately that of the American Law Institute (ALI). Once a *Restatement* has seen the light of day, it is in the public arena and no longer the Reporters' personal work product. Others will interpret the words and themes over the years. The Reporters' views regarding the meaning and intent of the *Restatement* are no more authoritative than those of any other reader. We will thus not address what the *Restatement* means, but rather describe the process of how the *Restatement* arrived at some of the positions it has

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taken. Whether one makes a trip to a given destination by train, bus, or plane has little relevance to the question of where, exactly, one ends up. Travelogues, however, may be of considerable interest to curious cognoscenti. In the following pages we hope to share with the reader a small part of what for us has been a personal odyssey. If in the process of telling the story we answer the project's critics in some measure, so be it. To respond is not the major thrust of this piece. Rather, this Article tells the story—nothing more, nothing less.

We did not begin this project uninformed about the law of products liability. In our separate and co-authored works written prior to 1992, we have set out our views on many, if not most, aspects of the subject. Some commentators have noted that many of our personal views did not find their way into the *Restatement*. That is as it should be. At the same time our views of what the case law says have influenced powerfully the positions that we have proposed. We are confident that our reading of the cases is, in substantial measure, both accurate and nuanced.

Some contend that we have been political brokers. We are told, often by the same critics, that we have been ideologically rigid. It is hard to see how we could be both savvy political brokers and rigid ideologues. We plead not guilty on both counts of the indictment. We have heard from a multitude of voices. Arguments have been presented with both passion and intellectual rigor. When we have been convinced that they are correct, we have modified our drafts accordingly. If responding to principled suggestions constitutes being political, we plead guilty. And if we maintained some positions because we believed them correct and supported by the case law, then we take pride in such rigidity. As we shall demonstrate, however, even when core concepts have remained intact the final work product has become more nuanced and more sensitive, both in the black letter and the comments.

Before telling our story, we must make one emphatic statement. We believe that the law of products liability requires a new *Restatement*, and we believe that the law can be restated. Some critics take the position that the case law gives voice to too many different strains to support a *Restatement*. Concepts such as risk-utility, consumer expectations, strict liability, negligence, warranty, and misrepresentation have found their way into the language of the law, leading critics to argue that there is no real law of products liability—just a set of disjunctive

ideas from which courts choose to decide cases. We categorically reject this dispirited, cynical view. Nearly half a century of products liability litigation and tens of thousands of reported cases have not left a legacy of chaos. No industrial giant could survive if such were the case. The major themes come across loud and clear. They are the heart and soul of the *Restatement (Third) of Torts: Products Liability*.

I. LIABILITY FOR DEFECTIVE DESIGN

A. Risk-Utility Balancing

The major theme that drives the *Restatement* test for design defect is risk-utility balancing. In short order, we shall demonstrate why risk-utility balancing leads inexorably to a requirement in most instances that the plaintiff show that a reasonable alternative design is available.¹ But first—why did we insist on a risk-utility test as the medium for determining defective design? Why did we not say simply that strict liability governs products that are designed defectively just as it governs products that contain manufacturing defects?

Under section 2(a) a product contains a manufacturing defect when it “departs from its intended design even though all possible care was exercised” in the preparation and marketing of the product.² If one seeks to determine whether a product contains a manufacturing defect, comparison between the intended design and the allegedly defective product unit will reveal whether the product is defective. On the other hand, in cases alleging defective design one cannot identify defect by referring to the manufacturer’s own design standards. Those very standards are under attack as being defective. One cannot mouth the words “strict liability” and hope to convey any message regarding how one should determine liability. In the context of product design, the term “strict liability” proves vacuous. To give any meaning to the liability standard, one must look outside the manufacturer’s own product design to discover an objective standard with which to determine defectiveness.

1. See *infra* Part II.

2. See RESTATEMENT (THIRD) OF TORTS: PRODUCTS LIABILITY § 2(a) (Tentative Draft No. 2, 1995) [hereinafter Tentative Draft No. 2].

The overwhelming majority of courts have opted for risk-utility balancing to determine whether a product is defectively designed.³ Many have recognized that the risk-utility test

3. See, e.g., *Tobin v. Astra Pharm. Prods., Inc.*, 993 F.2d 528, 536 (6th Cir. 1993) (noting that under Kentucky law "the test for whether a product is in a defective condition and unreasonably dangerous to the user is whether an ordinarily prudent manufacturer, being fully aware of the risks, would have placed the product on the market"); *General Motors Corp. v. Edwards*, 482 So. 2d 1176, 1191 (Ala. 1985) (requiring both a reasonable alternative design and that the "utility of the alternative design outweighed the utility of the design actually used"); *West v. Searle & Co.*, 806 S.W.2d 608, 611-13 (Ark. 1991) (holding that a risk-utility analysis is necessary in proving that a product was unavoidably unsafe as a defense to a defective design claim); *Armentrout v. FMC Corp.*, 842 P.2d 175, 182 (Colo. 1992) (delivering jury instructions that stated that a "product is unreasonably dangerous because of a defect in its design if it creates a risk of harm to persons which is not outweighed by the benefits to be achieved from such design"); *White v. Caterpillar, Inc.*, 867 P.2d 100, 105-06 (Colo. Ct. App. 1993) (reversing lower court decision on one claim because jury instruction "improperly directed the jury to consider whether the product 'created a risk of harm which would not ordinarily have been expected,' rather than whether the risks associated with [the product] outweighed its benefits" (citation omitted)); *Nacci v. Volkswagen of Am., Inc.*, 325 A.2d 617, 620 (Del. Super. Ct. 1974) (concluding that the proper test for defective design is "whether the design has created a risk of harm which is so probable that an ordinarily prudent person, acting as a manufacturer, would pursue a different available design which would substantially lessen the probability of harm"); *Warner Fruehauf Trailer Co. v. Boston*, 654 A.2d 1272, 1276 (D.C. 1995) (holding that "the plaintiff must 'show the risks, costs and benefits of the product in question and alternative designs,' and 'that the magnitude of the danger from the product outweighed the costs of avoiding the danger'" (quoting *Hull v. Eaton Corp.*, 825 F.2d 448, 453-54 (D.C. Cir. 1987))); *Radiation Tech., Inc. v. Ware Constr. Co.*, 445 So. 2d 329, 331 (Fla. 1983) (opining that the term "unreasonably dangerous" describes more accurately a manufacturer's or supplier's liability by balancing "the likelihood and gravity of potential injury" versus the product's utility, the availability of "safer products to meet the same need, the obviousness of the danger, public knowledge and expectation of the danger, the adequacy of instructions and warnings on safe use, and the ability to eliminate or minimize the danger without seriously impairing the product or making it unduly expensive"); *Banks v. ICI Ams., Inc.*, 450 S.E.2d 671, 673 (Ga. 1994) (stating that the court's review of case law "revealed a general consensus regarding the utilization in design defect cases of a balancing test whereby the risks inherent in a product design are weighed against the utility or benefit derived from the product"); *Wagatsuma v. Patch*, 879 P.2d 572, 583 (Haw. Ct. App. 1994) (explaining that to decide liability of a manufacturer for defective design, courts balance, *inter alia*, "the likelihood and gravity of the potential harm against the burden of precautions which would effectively avoid the harm"); *Miller v. Todd*, 551 N.E.2d 1139, 1141-42 (Ind. 1990) (requiring a plaintiff to "demonstrate that a feasible, safer, more practicable design would have afforded better protection"); *Jenkins v. Anchem Prods., Inc.*, 886 P.2d 869, 889-90 (Kan. 1994), *cert. denied*, 116 S. Ct. 80 (1995) (noting that "evidence of a safer alternative design is useful in a risk-benefit analysis"); *Guiggey v. Bombardier*, 615 A.2d 1169, 1172 (Me. 1992) (determining whether a product is defectively dangerous by balancing "the danger presented by the product against its utility"); *Ziegler v. Kawasaki Heavy Indus.*, 539 A.2d 701, 706 (Md. Ct. Spec. App. 1988) (finding the risk-utility test "the only appropriate test to be applied in the instant case because it allows 'full consideration of the relative merits of a product design'" (quoting Edward S. Digges, Jr. & John G. Billmyre, *Product Liability in Maryland: Traditional and Emerging Theories of Recovery*

and Defense, 16 U. BALT. L. REV. 1, 16 (1986)); Caron v. General Motors Corp., 643 N.E.2d 471, 476 (Mass. App. Ct. 1994) (noting that jury must engage in a risk-utility analysis in defective design cases); Prentis v. Yale Mfg. Co., 365 N.W.2d 176, 183 (Mich. 1984) (stating that the "overwhelming consensus among courts deciding defective design cases is in the use of some form of risk-utility analysis, either as an exclusive or alternative ground of liability"); Holm v. Sponco Mfg., Inc., 324 N.W.2d 207, 213 (Minn. 1982) (rejecting the latent-patent danger rule in design defect cases and substituting a "reasonable care" balancing test); Sperry-New Holland v. Prestage, 617 So. 2d 248, 254 (Miss. 1993) (noting that a plaintiff may "recover for any injury resulting from" a product if she can prove that "the utility of the product is outweighed by the danger that the product creates"); Rix v. General Motors Corp., 723 P.2d 195, 201 (Mont. 1986) (finding that a jury must engage in risk-utility balancing in design defect cases); Thibault v. Sears, Roebuck & Co., 395 A.2d 843, 846 (N.H. 1978) (stating that when "weighing utility and desirability against danger, courts should also consider whether the risk of danger could have been reduced without significant impact on product effectiveness and manufacturing cost"); Smith v. Keller Ladder Co., 645 A.2d 1269, 1270 (N.J. Super. Ct. App. Div. 1994) (stating that determining "whether a product has been defectively designed ordinarily involves a 'risk-utility analysis'"); Brooks v. Beech Aircraft Corp., 902 P.2d 54, 61-62 (N.M. 1995) (requiring juries to make a "risk-benefit calculation" when deciding defective design claims); Denny v. Ford Motor Co., 662 N.E.2d 730, 736 (N.Y. 1995) (noting that the strict products liability idea "requires a weighing of the product's dangers against its over-all advantages"); Carrel v. Allied Prods. Corp., No. 9-94-24, 1995 WL 423388, at *4 (Ohio Ct. App. July 11, 1995) (noting that under the statutory risk-utility test a plaintiff must prove "that the product design is in a defective condition because the benefits of the challenged design do not outweigh the risks inherent in such design"); Tansy v. Dacomed Corp., 890 P.2d 881, 886 (Okla. 1994) (noting that one element of a design defect claim is whether a product's "benefits justify its risks"); Hoyt v. Viteck, Inc., 894 P.2d 1225, 1231 (Or. Ct. App. 1995) (holding that whether "a product is defectively designed . . . is a question . . . for the court to consider by balancing the product's utility against the magnitude of the risk associated with its use"); Azzarello v. Black Bros. Co., 391 A.2d 1020, 1026 (Pa. 1978) (noting that one consideration in design defect cases is when the product's utility outweighs its dangers); Castrignano v. E.R. Squibb & Sons, 546 A.2d 775, 781 (R.I. 1988) (adopting a "risk-benefit test" to determine liability of prescription drug manufacturers); Claytor v. General Motors Corp., 286 S.E.2d 129, 132 (S.C. 1982) (considering "the usefulness and desirability of the product, the cost involved for added safety, the likelihood and potential seriousness of injury, and the obviousness of danger" when deciding design defect claims); Bragg v. Hi-Ranger, Inc., 462 S.E.2d 321, 328 (S.C. Ct. App. 1995) (noting that South Carolina courts balance the utility of the risk in the design versus the risk's magnitude to decide design defect claims); Turner v. General Motors Corp., 584 S.W.2d 844, 847 (Tex. 1979) (holding that in strict liability cases involving design defects "[t]he jury may be instructed in general terms to consider the utility of the product and the risks involved in its use"); Anderson v. Weslo, Inc., 906 P.2d 336, 340 (Wash. Ct. App. 1995) (noting that the risk-utility test is one way to analyze defective design claims); Morningstar v. Black & Decker Mfg. Co., 253 S.E.2d 666, 682-83 (W. Va. 1979) (testing allegedly defective products by a risk-utility balancing test).

Some states have enacted statutes requiring risk-utility balancing for design defect claims. See, e.g., 735 ILL. COMP. STAT. ANN. 5/2-2104 (West Supp. 1996) (providing that "the design shall be presumed to be reasonably safe unless, at the time the product left the control of the manufacturer, a practical and technically feasible alternative design was available that would have prevented the harm without significantly impairing the usefulness, desirability, or marketability of the product"); LA. REV. STAT. ANN. § 9:2800.56 (West 1991) (adopting a risk-utility standard and providing that a product is designed unreasonably dangerously if, "at the time the product left its manufacturer's

originates in negligence doctrine.⁴ Some courts have noted subtle differences between design-related risk-utility balancing under negligence as opposed to strict products liability doctrine.⁵ Those nuances are recognized in the new *Restatement*.⁶ The basic test for design defect, however, is grounded in the same classic risk-utility balancing that courts traditionally have used in determining negligence.

Some critics urge that the *Restatement* should give equal status to a consumer expectations test for design defect liability.⁷ They argue that this test constitutes a true strict liability

control," a safer, alternative design for the product existed and the "likelihood that the product's design would cause the claimant's damage and the gravity of that damage outweighed the burden on the manufacturer of adopting such alternative design and the adverse effect, if any, of such alternative design on the utility of the product"); MISS. CODE ANN. § 11-1-63(b) (Supp. 1996) (providing that a product is not defectively designed if claimant's harm "was caused by an inherent characteristic of the product which is a generic aspect of the product that cannot be eliminated without substantially compromising the product's usefulness or desirability"); OHIO REV. CODE ANN. § 2307.75(E) (Anderson 1995) (providing that a product is not defectively designed if a plaintiff's injury resulted from "an inherent characteristic of the product which is a generic aspect of the product that cannot be eliminated without substantially compromising the product's usefulness or desirability"); TEX. CIV. PRAC. & REM. CODE ANN. § 82.005 (West Supp. 1997) (providing that plaintiff must prove the existence of a "safer alternative design" that "would have prevented or significantly reduced" claimant's risk of injury "without substantially impairing the product's utility").

4. See, e.g., *Prentis*, 365 N.W.2d at 184 (opining that the "risk-utility balancing test is merely a detailed version of Judge Learned Hand's negligence calculus"); *Denny*, 662 N.E.2d at 735 (explaining that "the risk/utility balancing test is a 'negligence-inspired' approach, since it invites the parties to adduce proof about the manufacturer's choices and ultimately requires the fact finder to make a judgment about [the manufacturer's] judgment" (quoting Sheila L. Birnbaum, *Unmasking the Test for Design Defect: From Negligence [to Warranty] to Strict Liability to Negligence*, 33 VAND. L. REV. 593, 610, 648 (1980))).

5. Several courts have indicated that strict liability holds the seller to the expert standard of knowledge available to the relevant manufacturing community at the time the product was manufactured. See, e.g., *Anderson v. Owens-Corning Fiberglas Corp.*, 810 P.2d 549, 559 (Cal. 1991) (stating that in the strict liability context a "manufacturer is liable if it failed to give warning of dangers that were known to the scientific community at the time it manufactured or distributed the product"); *Woodill v. Parke Davis & Co.*, 402 N.E.2d 194, 198 (Ill. 1980) (commenting that if "knowledge existed in the industry of the dangerous propensity of the manufacturer's product" a manufacturer may be liable for failure to warn adequately of the danger); *Owens-Illinois, Inc. v. Zenobia*, 601 A.2d 633, 641 (Md. 1991) (holding that "a manufacturer of a product is held to the knowledge of an expert in the field").

6. See Tentative Draft No. 2, *supra* note 2, § 1 cmt. a. This distinction makes irrelevant whether the particular defendant, because of inadequate resources, was excusably ignorant of a reasonably knowable risk. This view is adopted in the *Products Liability Restatement*. See *id.*

7. See, e.g., Roland F. Banks & Margaret O'Connor, *Restating the Restatement (Second)*, Section 402A—*Design Defect*, 72 OR. L. REV. 411, 420 (1993) (arguing that the "consumer expectations test for determining a design defect is so much a part of the

test. The *Restatement* takes the position that consumer expectations do not, standing alone, determine defectiveness.⁸ Although they are an important factor in risk-utility balancing, consumer expectations are too amorphous to operate as an independent test for design defect.

Critics disagree with our reading of the case law on this important issue.⁹ We believe that these critics are wrong. Both the reported decisions and a predominant number of commentators agree that the majority rule requires design defect cases to be governed by risk-utility balancing. Courts, in adopting the risk-utility test for design defect, have said that they are following the strong majority rule.¹⁰ A large body of scholarly commentators have stated that it is and should be the governing test for liability.¹¹

existing products liability law that it must be retained as part of any new restatement"); Joseph W. Little, *The Place of Consumer Expectations in Product Strict Liability Actions for Defectively Designed Products*, 61 TENN. L. REV. 1189, 1193-94 (1994) (lamenting the elimination of "the concept of strict liability from product design law"); Marshall S. Shapo, *In Search of the Law of Products Liability: The ALI Restatement Project*, 48 VAND. L. REV. 631, 666 (1995) (writing that a "lack of recognition of the importance of product portrayal and product image leads to a lack of appropriate emphasis on the expectations that consumers reasonably develop about products").

8. See Tentative Draft No. 2, *supra* note 2, § 2 cmt. f.

9. See, e.g., Frank J. Vandall, *The Restatement (Third) of Torts, Products Liability, Section 2(b): Design Defect*, 68 TEMP. L. REV. 167, 173 (1995) (arguing that cases cited by the Reporters "do not support their proposition that an overwhelming majority of jurisdictions rely on risk-utility balancing in design-defect cases").

10. See, e.g., *Banks v. ICI Ams., Inc.*, 450 S.E.2d 671, 673 (Ga. 1994) (conducting "an exhaustive review of foreign jurisdictions" that "revealed a general consensus regarding the utilization in design defect cases" of a risk-utility balancing test); *Prentis v. Yale Mfg. Co.*, 365 N.W.2d 176, 183 (Mich. 1984) (noting that the "overwhelming consensus among courts deciding defective design cases is in the use of some form of risk-utility analysis"); *Sperry-New Holland v. Prestage*, 617 So. 2d 248, 255 (Miss. 1993) (commenting that throughout "the country, the test generally employed to determine liability for product defects is the 'risk-utility' test").

11. The list begins with the late Deans Prosser and Wade. See WILLIAM L. PROSSER ET AL., *HANDBOOK ON THE LAW OF TORTS* §§ 32, 96, at 149, 644 (4th ed. 1971) (defining the standard of conduct in negligence as a balancing of "the risk, . . . probability and extent of the harm, against the value of the interest the actor is seeking to protect, and the expedience of the course pursued" and writing that in the area of design defect a manufacturer's liability appears to be "essentially a matter of negligence"); John W. Wade, *On the Nature of Strict Tort Liability For Products*, 44 MISS. L.J. 825, 837-38 (1973) (listing factors to be balanced in a risk-utility analysis). It includes Professors David Fischer, W. Page Keeton, David Owen, Gary Schwartz, and Judge Richard Posner. See David A. Fischer, *Products Liability—The Meaning of Defect*, 39 MO. L. REV. 339, 358-59 (1974) (arguing that "courts should consider, in light of the facts of the particular case, the merits of the policies underlying strict liability and balance [those] considerations against countervailing factors"); W. Page Keeton, *Products Liability-Design Hazards and the Meaning of Defect*, 10 CUMB. L. REV. 293, 313 (1979) (proposing that a product be determined defectively designed "if a reasonable person would

A brief word about section 402A and the role of the consumer expectations test: the black letter of section 402A makes no

conclude that the magnitude of the danger . . . outweighs the utility of the design"); W. Page Keeton, *Product Liability and the Meaning of Defect*, 5 ST. MARY'S L.J. 30, 39 (1973) ("But if defect is to be a requirement, it is submitted that there is no way to avoid a risk-benefit analysis in passing upon designs."); William M. Landes & Richard A. Posner, *A Positive Economic Analysis of Products Liability*, 14 J. LEGAL STUD. 535, 553-54 (1985) (endorsing use of risk-utility analysis in design defect cases); David G. Owen, *Defectiveness Restated: Exploding the "Strict" Products Liability Myth*, 1996 U. ILL. L. REV. 743, 754-55 (opining that "negligence is the ideal standard for product design responsibility" because it is "predicated on the idea that proper decisions involve selecting the proper balance of expected advantages and disadvantages, of expected benefits and costs"); David G. Owen, *Risk-Utility Balancing in Design Defect Cases*, 30 U. MICH. J.L. REFORM 239, 239 (1997) (stating that "[c]ourts and commentators increasingly comprehend that ascertaining design defectiveness in products liability cases requires some kind of 'risk-utility' balancing"); Gary T. Schwartz, *Foreword: Understanding Products Liability*, 67 CAL. L. REV. 435, 464 (1979) (commenting that there "can be little doubt about the correctness of the risk-benefit standard for design defect"); Gary T. Schwartz, *New Products, Old Products, Evolving Law, Retroactive Law*, 58 N.Y.U. L. REV. 796, 803 (1983) (noting that "most of the modern design defect cases rely on a risk-benefit liability standard that seems to be a strong assertion of the negligence formula set forth in 1947 by Learned Hand in his effort to codify traditional negligence reasoning" (footnote omitted)). Two academics turned practitioners, writing while still in academic life—Sheila Birnbaum and Victor Schwartz—supported the risk-utility test for design defect and rejected the consumer expectations test. See Birnbaum, *supra* note 4, at 649 ("Imposing a negligence standard for design defect liability is in many cases only to define in a coherent fashion what litigants are in fact arguing and what jurors are in essence analyzing. . . . [I]t is time for courts to adopt . . . a pure negligence/risk-utility test in design defect cases."); Victor E. Schwartz, *The Uniform Product Liability Act—A Brief Overview*, 33 VAND. L. REV. 579, 586 (1980) (writing that the Uniform Act has adopted a standard for design defect cases that "balances risk against utility"); cf. 1 M. STUART MADDEN, *PRODUCTS LIABILITY* § 6.23, at 128-30 (2d ed. Supp. 1995) (describing "The Retreat of the Consumer Expectations Test"); Mary J. Davis, *Design Defect Liability: In Search of A Standard of Responsibility*, 39 WAYNE L. REV. 1217, 1236-37 (1993) (commenting that the consumer expectations "test has proved unworkable for a variety of reasons"); Michael D. Green, *The Schizophrenia of Risk-Benefit Analysis in Design Defect Litigation*, 48 VAND. L. REV. 609, 625 (1995) ("The way in which consumer expectations may be relevant to a risk-benefit test is, like the obvious aspect of dangers, through their impact on the frequency and severity of injury and, therefore, constitute a relevant second tier concern"); William Powers, Jr., *A Modest Proposal to Abandon Strict Products Liability*, 1991 U. ILL. L. REV. 639, 647 (writing that "in most product cases—especially cases not involving manufacturing defects—consumer expectations do not provide a meaningful test of defect and therefore do not provide an adequate ground for strict products liability").

Finally, for whatever weight one chooses to give it, in numerous writings prior to our appointment as Reporters we found risk-utility to be the only viable test for design defect. See James A. Henderson, Jr. & Aaron D. Twerski, *A Proposed Revision of Section 402A of the Restatement (Second) of Torts*, 77 CORNELL L. REV. 1512, 1532-34 (1992); James A. Henderson, Jr. & Aaron D. Twerski, *Stargazing: The Future of American Products Liability Law*, 66 N.Y.U. L. REV. 1332, 1334 (1991).

mention of consumer expectations.¹² Two comments, however, do. Comment g, entitled "Defective Condition," provides: "The rule stated in this Section 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."¹³ Comment i, entitled "Unreasonably Dangerous," states:

The rule stated in this Section applies only where the defective condition of the product makes it unreasonably dangerous to the user or consumer. Many products cannot possibly be made entirely safe for all consumption, and any food or drug necessarily involves some risk of harm, if only from over-consumption. Ordinary sugar is a deadly poison to diabetics, and castor oil found use under Mussolini as an instrument of torture. That is not what is meant by "unreasonably dangerous" in this Section. 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. Good whiskey is not unreasonably dangerous merely because it will make some people drunk, and is especially dangerous to alcoholics; but bad whiskey, containing a dangerous amount of fusel oil, is unreasonably dangerous Good butter is not unreasonably dangerous merely because, if such be the case, it deposits cholesterol in the arteries and leads to heart attacks; but bad butter, contaminated with poisonous fish oil, is unreasonably dangerous.¹⁴

12. Section 402A provides:

(1) One who sells any product in a defective condition unreasonably dangerous to the user or consumer or to his property is subject to liability for physical harm thereby caused to the ultimate user or consumer, or to his property, if

(a) the seller is engaged in the business of selling such a product, and

(b) it is expected to and does reach the user or consumer without substantial change in the condition in which it is sold.

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

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

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

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

13. *Id.* § 402A cmt. g.

14. *Id.* § 402A cmt. i.

The simple explanation for the drafters' reliance on a consumer expectations test in section 402A comments g and i is that the drafters were not addressing design defect litigation. In 1963 the major focus of attention was the overruling of privity and the imposition of strict liability in manufacturing defect cases. Other scholars have made this observation,¹⁵ and it is confirmed by the writings of Dean Prosser published several years after the promulgation of section 402A. In the fourth edition of his hornbook Prosser wrote:

The development and recognition of strict liability has had a natural tendency to reduce the number of actions founded on negligence There are . . . two particular areas in which the liability of the manufacturer, even though it may occasionally be called strict, appears to rest primarily upon a departure from proper standards of care, so that the tort is essentially a matter of negligence.

One of these involves the design of the product, which includes plan, structure, choice of materials, and specifications. There is no doubt whatever that the manufacturer is under a duty to use reasonable care to design a product that is reasonably safe for its intended use, and for other uses which are foreseeably probable. The question turns on what is reasonable care and what is reasonable safety. The maker is not required to design the best possible product, or one as good as others make, or a better product than the one he has, so long as it is reasonably safe.¹⁶

The drafters did not contemplate strict liability based on a consumer expectations test for design defects. The consumer expectations test was used as a test to impose liability only for manufacturing defects.¹⁷ In this context, the consumer expectations test is an acceptable test for liability.¹⁸ Section 2(a) adopts

15. See W. Page Keeton, *Products Liability—Liability Without Fault and the Requirement of a Defect*, 41 TEX. L. REV. 855, 856–57 (1963); Dix W. Noel, *Recent Trends in Manufacturers' Negligence as to Design, Instructions or Warnings*, 19 SW. L.J. 43, 43 (1965); George L. Priest, *Strict Products Liability: The Original Intent*, 10 CARDOZO L. REV. 2301, 2308 (1989).

16. PROSSER ET AL., *supra* note 11, § 96, at 644–45.

17. See *id.* § 99, at 659.

18. See Tentative Draft No. 2, *supra* note 2, at § 2(a). Section 2(a) provides that "a product contains a manufacturing defect when the product departs from its intended design even though all possible care was exercised in the preparation and marketing of the product." Many jurisdictions define liability for manufacturing defects likewise.

a test used more frequently by courts that defines a manufacturing defect as one that departs from the manufacturer's

See, e.g., LA. REV. STAT. ANN. § 9:2800.55 (West 1991) (authorizing liability if the "product deviated in a material way from the manufacturer's specifications or performance standards for the product or from otherwise identical products manufactured by the same manufacturer"); MISS. CODE ANN. § 11-1-63 (Supp. 1996) (authorizing liability if the product "deviated in a material way from the manufacturer's specifications or from otherwise identical units manufactured to the same manufacturing specifications"); N.J. STAT. ANN. § 2A:58C-2 (West 1987) (authorizing liability if the product "deviated from the design specifications, formulae, or performance standards of the manufacturer or from otherwise identical units manufactured to the same manufacturing specifications or formulae"); OHIO REV. CODE ANN. § 2307.74 (Anderson 1991) (authorizing liability if the product "deviated in a material way from the design specifications, formula, or performance standards of the manufacturer, or from otherwise identical units manufactured to the same design specifications, formula, or performance standards"); WASH. REV. CODE ANN. § 7.72.030(2)(a) (West 1992) (authorizing liability if the "product deviated in some material way from the design specifications or performance standards of the manufacturer, or deviated in some material way from otherwise identical units of the same product line"); see also *Singleton v. International Harvester Co.*, 685 F.2d 112, 115 (4th Cir. 1981) (applying Maryland law and holding that "[i]n manufacturing defect cases, the plaintiff proves that the product is defective by simply showing that it does not conform to the manufacturer's specifications"); *Caterpillar Tractor Co. v. Beck*, 593 P.2d 871, 881 (Alaska 1979) (articulating the test of manufacturing defect as "deviation from the [manufacturer's] norm"); *Barker v. Lull Eng'g Co.*, 573 P.2d 443, 454 (Cal. 1978) (defining manufacturing defect as when a defective product "differs from the manufacturer's intended result or from other ostensible identical units of the same product line"); *Banks v. ICI Ams., Inc.*, 450 S.E.2d 671, 673 (Ga. 1994) (noting that in a manufacturing defect case "it is assumed that the design of the product is safe and had the product been manufactured in accordance with the design it would have been safe for consumer use"); *Prentis v. Yale Mfg. Co.*, 365 N.W.2d 176, 182 (Mich. 1984) (stating that in manufacturing defect litigation, "the product may be evaluated against the manufacturer's own production standards, as manifested by that manufacturer's other like products"); *Rix v. General Motors Corp.*, 723 P.2d 195, 200 (Mont. 1986) ("Under a manufacturing defect theory, the essential question is whether the product was flawed or defective because it was not constructed correctly by the manufacturer."); *Thibault v. Sears, Roebuck & Co.*, 395 A.2d 843, 846 (N.H. 1978) (finding that a "defect is an accidental variation caused by a mistake in the manufacturing process . . . where the product does not 'conform to the great majority of products manufactured in accordance with that design'" (quoting James A. Henderson, Jr., *Judicial Review of Manufacturers' Conscious Design Choices: The Limits of Adjudication*, 73 COLUM. L. REV. 1531, 1543 (1973))); *Voss v. Black & Decker Mfg. Co.*, 450 N.E.2d 204, 207 (N.Y. 1983) (noting that a product may be defective because of a mistake in the manufacturing process); *Caprara v. Chrysler Corp.*, 417 N.E.2d 545, 552 (N.Y. 1981) (Jasen, Jones, and Meyer, JJ., dissenting) (describing a manufacturing defect as follows: a "defectively manufactured product is flawed because it is misconstrued without regard to whether the intended design of the manufacturer was safe or not"); MODEL UNIF. PROD. LIAB. ACT § 104(a) (1979) ("In order to determine that the product was unreasonably unsafe in construction, the trier of fact must find that . . . the product deviated in some material way from the manufacturer's design specifications or performance standards, or from otherwise identical units of the same product line."); W. PAGE KEETON ET AL., PROSSER AND KEETON ON THE LAW OF TORTS § 99, at 695 (5th ed. 1984) (commenting that a manufacturing flaw causes the product to be more dangerous than it was designed to be).

intended design. At several points in the comments, the *Products Liability Restatement* notes that whenever a product fails because of a manufacturing defect, a consumer's expectations with regard to product performance are disappointed.¹⁹ It is a far cry from this limited use of the consumer expectations test to its imposition in design litigation. In design cases, consumers have a right to expect reasonably designed products. Ultimately, however, there is no escape from the issue of what is a reasonable design and that takes us full circle back to risk-utility balancing.

The reference to consumer expectations in section 402A comment i served another function. It allowed the consumer expectations test to serve as a defense or as a shield against the imposition of liability. At the time section 402A was drafted the "patent danger rule" was the governing rule in the country.²⁰ Furthermore, there was—and continues to be—a belief that common products whose dangers are known to almost all users should not be subject to products liability under any theory.²¹

In the tumultuous years that followed the adoption of section 402A, courts flirted with the consumer expectations test as a

19. See Tentative Draft No. 2, *supra* note 2, § 2 cmts. a, b; see also *id.* § 3 cmt. b (noting that "manufacturing defects cause products to fail to perform their manifestly intended functions").

20. *Campo v. Scofield*, 95 N.E.2d 802, 803 (N.Y. 1950), was the leading case advocating the patent danger rule. *Pike v. Frank G. Hough Co.*, 467 P.2d 229, 235 (Cal. 1970), was the first case to reject the patent danger rule. New York disavowed the rule in *Micallef v. Miehle Co.*, 348 N.E.2d 571, 576-77 (N.Y. 1976). The overwhelming majority of courts now clearly have rejected it. See Tentative Draft No. 2, *supra* note 2, § 2 reporters' note cmt. c, at 92-93 (listing jurisdictions that have rejected the patent danger rule).

21. See, e.g., *Jones v. White Motor Co.*, 401 N.E.2d 223, 233 (Ohio Ct. App. 1978) (rejecting the patent danger rule but noting that while "there may be cases where as a matter of law . . . there may be no duty because of an obvious peril . . . this [defectiveness] generally is a jury issue"); *Jackson v. Corning Glass Works*, 538 A.2d 666, 669 (R.I. 1988) (noting that the danger of stacking Corning Ware and glass lids in a pyramid was so obvious that verdict should be directed for defendant).

In a recent case, Judge Robert Keeton found that the obviousness of risks may in certain circumstances bar an action on duty grounds. See *Kearney v. Philip Morris, Inc.*, 916 F. Supp. 61 (D. Mass. 1996), an action brought against a cigarette manufacturer after several people died in a house fire that occurred when an intoxicated resident of the home dropped a lit cigarette on the couch and fell asleep. Plaintiffs alleged that the cigarette design was defective because an alternative low ignition propensity design that would have prevented the fire in question could have been adopted. See *id.* at 63. The court found that defendant cigarette manufacturer breached no duty to the plaintiff. See *id.* at 69. In his analysis, Judge Keeton acknowledged that Massachusetts has rejected the patent danger rule and utilizes risk-utility analysis to decide design defect cases. See *id.* at 71. The Judge said that Massachusetts courts have in various contexts "refused to extend the scope of liability of manufacturers to injuries resulting from common, everyday products whose obvious dangers are known to be associated with the use of the product." *Id.* at 73.

test for liability in design defect litigation.²² To attribute its legitimate parentage to the drafters of section 402A would be error. As we have seen, the father of section 402A, William Prosser, did not see it playing that role. Ultimately courts came to understand that the consumer expectations concept was too simplistic to work well for complex design defect litigation.²³

The judicial retreat from a consumer expectations test in recent years has been significant. Courts that formerly used the test either have abandoned it entirely or cut it back so severely that its applicability is very limited.²⁴ Indeed, its use by several courts as a defense against liability is disturbing. Plaintiffs, in some jurisdictions, have been barred from presenting reasonable alternative designs that could have prevented injury on the ground that, because its risks were obvious, the product met consumer expectations.²⁵ Some have noted that insistence upon the consumer expectations test as a sword for the imposition of liability would make it more likely that the test would also be used as a shield against the imposition of liability.²⁶ We do not view the consumer expectations test as plaintiff-friendly. This view is shared by practitioners on both sides of the bar.²⁷

22. The most famous case adopting the test was *Barker v. Lull Engineering Co.*, 573 P.2d 443, 446 (Cal. 1978). For other decisions adopting the test, see *Caterpillar Tractor Co. v. Beck*, 593 P.2d 871, 884-85 (Alaska 1979); *Ontai v. Straub Clinic & Hospital, Inc.*, 659 P.2d 734, 740 (Haw. 1983); *Lester v. Magic Chef, Inc.*, 641 P.2d 353, 361 (Kan. 1982); *Rahmig v. Mosley Machinery Co.*, 412 N.W.2d 56, 68 (Neb. 1987); *Woods v. Fruehauf Trailer Corp.*, 765 P.2d 770, 774 (Okla. 1988).

23. Cf. sources cited *supra* notes 3, 12.

24. See, e.g., *Soule v. General Motors Corp.*, 882 P.2d 298, 308 (Cal. 1994) (limiting consumer expectations test in design defect cases); *Nichols v. Union Underwear Co.*, 602 S.W.2d 429, 432 (Ky. 1980) (rejecting consumer expectations test in design defect cases); *Sperry-New Holland v. Prestage*, 617 So. 2d 248, 252-53 (Miss. 1993) (rejecting consumer expectations test and adopting risk-utility test); *Holman ex rel. Ray v. BIC Corp.*, 925 S.W.2d 527, 530 (Tenn. 1996) (noting that consumer expectations test can only be applied to "products about which an ordinary consumer would have knowledge").

25. See, e.g., *Todd v. Société Bic, S.A.*, 21 F.3d 1402, 1412 (7th Cir. 1994) (holding that, under Illinois law, risk-utility test does not apply to a "simple but obviously dangerous product"), *cert. denied*, 115 S. Ct. 359 (1994); *Kelley ex rel. Kelley v. Rival Mfg. Co.*, 704 F. Supp. 1039, 1043 (W.D. Okla. 1989) (finding a Crock-Pot not "unreasonably dangerous" because risk of being burned by hot food is obvious).

26. See 1 MADDEN, *supra* note 11, § 6.23 (Supp. 1995) (noting that one jurisdiction tests "an 'unreasonably dangerous' product condition" by requiring that "a product be shown to be dangerous to an extent beyond what would be expected by an ordinary consumer").

27. See, e.g., Philip H. Corboy, *The Not-So-Quiet Revolution: Rebuilding Barriers to Jury Trial in the Proposed Restatement (Third) of Torts: Products Liability*, 61 TENN. L. REV. 1043, 1088 (1994). Corboy, a plaintiffs' lawyer, opines:

The consumer expectations test will not be missed by many trial practitioners who found that, with respect to many products, it is difficult for plaintiffs to show that

B. The Proper Role of Consumer Expectations

Having so staunchly defended the role of risk-utility balancing, one might question the subheading of this section. Indeed we often get the impression that some critics of the *Restatement* stopped reading after perusing the black letter of section 2(b). We would echo the words of the late Harvard University Professor Austin Scott: "Read on, my dear student. Read on."

1. *Consumer Expectations as a Factor in Risk-Utility*—Section 2 comment f of the *Restatement* provides an exegesis on the role of consumer expectations. Comment f provides:

Consumer expectations: general considerations. Under § 2(b), consumer expectations do not constitute an independent standard for judging the defectiveness of product designs. Courts often use the term "reasonable consumer expectations" as an equivalent of "proof of a reasonable, safer design alternative," since reasonable consumers have a right to expect product designs that conform to the reasonableness standard in § 2(b). However, except as stated in Comment g, consumer expectations, as such, are not determinative of defectiveness. That concept does not take into account whether the proposed alternative design could be implemented at reasonable cost, or whether an alternative design would provide greater overall safety. Nevertheless, consumer expectations about product performance and the dangers attendant to product use affect how risks are perceived and relate to foreseeability and frequency of the risks of harm, both of which are relevant under § 2(b). See

ordinary consumers entertain any specific expectations at all. Additionally, the consumer expectations test leads to confusion in a large number of cases, such as workplace accidents and injuries to bystanders, where the plaintiff who was injured is not the consumer who purchased the product. Moreover, in the hands of some courts, the consumer expectations test serves as a vehicle for applying the open and obvious danger rule, which often allows manufacturers to escape liability despite the egregious dangers posed by their products. For these very reasons, many courts have already abandoned the consumer expectations test.

Id. (footnotes omitted); see also Banks & O'Connor, *supra* note 7, at 420 (advocating retention of the consumer expectations test in the *Restatement*).

Comment e. Such expectations are often influenced by how products are portrayed and marketed and can have a significant impact on consumer behavior. Furthermore, products liability law derives in part from the law of warranty where consumer expectations have special significance. Thus, although consumer expectations are not determinative of whether a product is defectively designed, they constitute an important factor in determining the necessity for, or the adequacy of, a proposed alternative design.²⁸

As the foregoing comment makes clear, consumer expectations are of great importance in any sensible risk-utility balancing. How consumers perceive a product design is an essential factor in determining the risk level of the design. As that risk level rises, the product seller is faced with the task of evaluating the adequacy of the design in light of the elevated risk. No calculus for foreseeability of risk would be worth very much without taking into account consumer perceptions and expected patterns of product use.

What happens if, despite a manufacturer's successful accomplishment of a reasonable design, injured consumers still insist that they expected the product to perform more safely than it did? Our first response to such a question is to remind the reader that section 2(c) imposes liability for failure to warn. The duty to warn attaches most forcefully at the point where a product encompasses all that can be expected from reasonable design. Any doubt on this issue should be laid to rest by comment k to section 2, which provides:

Relationship between design and instruction or warning. Imposing liability for unsafe designs and for inadequate instructions or warnings both aim at achieving higher levels of safety in the use and consumption of products. Instructions and warnings accompanying the product are relevant to the question of defective design and in some cases adequate instructions and warnings will suffice to render the product nondefective. However, instructions and warnings may be ineffective because it reasonably can be foreseen that users of the product cannot be adequately reached, are likely to be inattentive, or are insufficiently motivated to follow the instructions or heed the warnings. *Thus, when a*

28. Tentative Draft No. 2, *supra* note 2, § 2 cmt. f.

safer design can reasonably be implemented, adoption of the safer design is preferable to a warning that leaves a residuum of risk. When an alternative design to avoid risks cannot reasonably be implemented, adequate instructions and warnings will be sufficient to render the product reasonably safe.²⁹

What if the product is reasonably designed, and the warnings and instructions are reasonably adequate? Is it not possible that a product could nevertheless disappoint actual consumer expectations? The answer, of course, is that it is possible. No one suggests, however, that actual consumer expectations be the test for liability. Such a test would be totally subjective and unworkable. It is, of course, possible to frame an objective test that asks whether a product disappointed reasonable consumer expectations. Reasonable consumers, however, can only expect products that are reasonably designed and accompanied by reasonable warnings. No reasonable consumer has a right to expect a product with a design that would have avoided injury to her but would have created risks of equal or greater magnitude to others using the product. There is no way out of this dilemma. If a product is reasonably designed and is accompanied by reasonable warnings, the law has accomplished reasonable safety. That is all that a manufacturer can deliver and that is all that the law should demand.

2. Consumer Expectations and the Section 3 Inference of Defect—Consumer expectations come into play in a special genre of products liability cases. Case law in every jurisdiction recognizes that a plaintiff can establish product defect without identifying the type of defect.³⁰ This class of cases once flew

29. *Id.* § 2 cmt. k (emphasis added).

30. See, e.g., *Henderson v. Sunbeam Corp.*, No. 93-6391, 1995 WL 39022, at *1 (10th Cir. Feb. 1, 1995) (applying Oklahoma law and commenting that circumstantial evidence "has always been considered an acceptable . . . means of proof" in a products liability case); *Stewart v. Ford Motor Co.*, 553 F.2d 130, 139 (D.C. Cir. 1977) (allowing plaintiffs "to ask the jury to infer that the accident was caused by some unknown defect"); *Lindsay v. McDonnell Douglas Aircraft Corp.*, 460 F.2d 631, 637 (8th Cir. 1972) (applying Missouri law and holding that fire and crash of aircraft lost at sea did not require proof of specific defect); *Kridler v. Ford Motor Co.*, 422 F.2d 1182, 1185 (3d Cir. 1970) (applying Pennsylvania law and holding that a plaintiff in a strict liability suit "does not have to establish a particular defect as the proximate cause of the accident"); *Sanders v. Quikstak, Inc.*, 889 F. Supp. 128, 131 (S.D.N.Y. 1995) (holding that in certain circumstances "a plaintiff need not prove a specific defect in the product at issue" and that "a jury may infer that an accident occurred because of a defect when the plaintiff has proven that the product did not perform as intended and has excluded all

under the banner of *res ipsa loquitur*. In products liability litigation some courts prefer to characterize this kind of case as involving liability based on "malfunction"³¹ or simply "circumstantial inference of defect."³² The *Restatement* attempts to capture this theory of liability in section 3. This section provides:

causes of the accident not attributable to the defendant"); *Dietz v. Waller*, 685 P.2d 744, 747-48 (Ariz. 1984) (holding that "no specific defect need be shown if the evidence, direct or circumstantial, permits the inference that the accident was caused by a defect"); *Harrell Motors, Inc. v. Flanery*, 612 S.W.2d 727, 729 (Ark. 1981) (stating that "proof of the specific defect is not required when common experience tells us that the accident would not have occurred in the absence of a defect"); *Cassisi v. Maytag Co.*, 396 So. 2d 1140, 1153 (Fla. Dist. Ct. App. 1981) (holding it "immaterial that the plaintiffs failed to identify the specific cause of the malfunction since . . . the malfunction itself . . . is evidence of the product's defective condition at both the time of the injury and the time of the sale"); *Stewart v. Budget Rent-A-Car Corp.*, 470 P.2d 240, 243 (Haw. 1970) (observing that the "user's testimony on what happened is another method of proving that the product was defective"); *Garrett v. Nobles*, 630 P.2d 656, 659 (Idaho 1981) (opining that "a plaintiff need not prove a specific defect in order to carry his burden of proof"); *Farmer v. International Harvester Co.*, 553 P.2d 1306, 1311 (Idaho 1976) (noting that "[a] *prima facie* case may be proved by direct or circumstantial evidence of a malfunction of the product"); *Holloway v. General Motors Corp.*, 271 N.W.2d 777, 783 (Mich. 1978) (allowing plaintiffs' action without requiring proof of the specific defect in the product); *Western Sur. & Cas. Co. v. General Elec. Co.*, 433 N.W.2d 444, 447 (Minn. Ct. App. 1989) (stating that "[i]n a strict products liability action, a plaintiff may use circumstantial evidence to prove the existence of a defect"); *Landahl v. Chrysler Corp.*, 534 N.Y.S.2d 245, 246 (App. Div. 1988) (holding that a "plaintiff in a products liability action need not establish the precise nature of the defect in order to make out a *prima facie* case"); *Cincinnati Ins. Co. v. Volkswagen of Am., Inc.*, 502 N.E.2d 651, 655 (Ohio Ct. App. 1985) (noting that under Ohio law a plaintiff may use circumstantial evidence to show existence of a defect); *Anderson v. Chrysler Corp.*, 403 S.E.2d 189, 194 (W. Va. 1991) (ruling that "circumstantial evidence may be sufficient to make a *prima facie* case in a strict liability action . . . so long as the evidence shows that a malfunction in the product occurred that would not ordinarily happen in the absence of a defect").

31. See, e.g., *Knight v. Otis Elevator Co.*, 596 F.2d 84, 89 (3d Cir. 1979) (finding that under Pennsylvania law plaintiff need not prove the existence of a specific defect if plaintiff can show that the product malfunctioned in the absence of abnormal use and reasonable secondary causes); *Marcus v. Anderson/Gore Homes, Inc.*, 498 So. 2d 1051, 1052 (Fla. Dist. Ct. App. 1986) (noting that "[w]hen a product malfunctions during normal operations, a legal inference arises that the product is defective"); *Farmer*, 553 P.2d at 1312 (finding that "[p]roof of malfunction is circumstantial evidence of a defect in a product since a product will not ordinarily malfunction within the reasonable contemplation of a consumer in the absence of a defect"); *Stackiewicz v. Nissan Motor Corp.*, 686 P.2d 925, 928 (Nev. 1984) (holding that "proof of an unexpected, dangerous malfunction may suffice to establish a *prima facie* case for the plaintiff of the existence of a product defect"); *Harkins v. Calumet Realty Co.*, 614 A.2d 699, 705 (Pa. Super. Ct. 1992) (explaining that the malfunction theory "permits a plaintiff to prove a defect in a product with evidence of the occurrence of a malfunction and with evidence eliminating abnormal use or reasonable, secondary causes" (quoting *Rogers v. Johnson & Johnson Prods., Inc.*, 565 A.2d 751, 754 (Pa. 1989))).

32. See sources cited *supra* note 30.

It may be inferred that the harm sustained by the plaintiff was caused by a product defect, without proof of the specific nature of the defect, when:

(a) the incident resulting in the harm was of a kind that ordinarily would occur only as a result of product defect; and

(b) evidence in the particular case supports the conclusion that more probably than not:

(1) the cause of the harm was a product defect rather than other possible causes, including the conduct of the plaintiff and third persons; and

(2) the product defect existed at the time of sale or distribution.³³

Admittedly, section 3 is applied most often when a product fails catastrophically because of a manufacturing defect. Typically the product is destroyed in the accident, and the plaintiff is forced to rely on an inference of defect based on the factors set forth in section 3. But section 3 is not limited to manufacturing defects alone. Indeed, the black letter permits an inference of defect without specifying the particular defect. Comment b discusses the applicability of section 3 to design litigation. It notes that although the rules of the section

most often apply to manufacturing defects, occasionally a product design causes the product to malfunction in a manner identical to that which would ordinarily be caused by a manufacturing defect. Thus, an aircraft may inadvertently be designed in such a way that, while flying within its intended performance parameters, the wings suddenly and unexpectedly fall off, causing harm. In theory, of course, the plaintiff in such a case should be able to show how other units in the same production line were designed, leading to a showing of the reasonable alternative design under § 2(b). As a practical matter, however, when the incident involving the aircraft is one that ordinarily would occur only as a result of product defect, and evidence supports the conclusion that the cause of the harm was a product defect existing at time of sale rather than other causes, it is not necessary for the plaintiff to prove with precision whether the failure resulted from a manufacturing

33. Tentative Draft No. 2, *supra* note 2, § 3.

defect or from a fatal shortcoming in the design of the product. Section 3 allows the trier of fact to conclude that, either because of a manufacturing defect or a design defect, the inference of defect is warranted. The plaintiff need not specify the type of defect responsible for the product malfunction.³⁴

Interestingly, section 3 parallels closely the California Supreme Court's most recent pronouncement on the subject. In *Soule v. General Motors Corp.*,³⁵ the California court was asked to reexamine the role of the consumer expectations test in design defect litigation. In an earlier case, *Barker v. Lull Engineering Co.*,³⁶ the court recognized both consumer expectations and risk-utility balancing as alternative methods of establishing a design defect.³⁷ In *Soule*, the court explained that consumer expectations could not play a role in a design defect case where the issue of the adequacy of the design was complex. The court said that "the consumer expectations test is reserved for cases in which the *everyday experience* of the product's users permits a conclusion that the product's design violated *minimum* safety assumptions, and is thus defective *regardless of expert opinion about the merits of the design*."³⁸ In an interesting footnote the court sets forth the kind of case in which it would allow consumer expectations to be dispositive of the issue of defect. The court wrote:

For example, the ordinary consumers of modern automobiles may and do expect that such vehicles will be designed so as not to explode while idling at stoplights, experience sudden steering or brake failure as they leave the dealership, or roll over and catch fire in two-mile-per-hour collisions. If the plaintiff in a product liability action proved that a vehicle's design produced such a result, the jury could find forthwith that the car failed to perform as safely as its ordinary consumers would expect, and was therefore defective.³⁹

34. *Id.* § 3 cmt. b.

35. 882 P.2d 298 (Cal. 1994).

36. 573 P.2d 443 (Cal. 1978).

37. *See id.* at 455-56.

38. *Soule*, 882 P.2d at 308.

39. *Id.* at 308 n.3.

A finding of defect under section 3 would be permissible under the facts hypothesized by the *Soule* court.⁴⁰ No violence would be done by saying that a product which fails under section 3 fails to meet consumer expectations. Courts frequently say that in cases in which a *res ipsa loquitur* style inference is established the product failed to meet consumer expectations.⁴¹ The first element of a section 3 case is that "the incident resulting in the harm was of a kind that ordinarily would occur only as a result of product defect."⁴² In other words, consumers would not expect the product to cause injury when put to its manifestly intended use. When coupled with the other elements of a classic *res ipsa loquitur* case, utilizing consumer expectations language to express the result is not untoward. The *Restatement* eschews use of that language in the black letter because the classic *res ipsa loquitur* formulation more accurately expresses the basis of liability.

40. See Tentative Draft No. 2, *supra* note 2, § 3 cmt. b, illus. 6. Illustration 6 provides this example:

Mary purchased a new automobile. She drove the car 100 miles without incident. One day she stopped the car at a red light and leaned back to rest until the light changed. Suddenly the seat back collapsed backward causing Mary to hit the accelerator and the car to shoot out into oncoming traffic. Mary suffered harm in the ensuing collision. Mary's expert witness concludes that the seat back assembly was defective either because the particular bolt was improperly tightened or the bolt holding the seat back was improperly designed to perform its intended function. The expert cannot determine, however, which possible defect actually caused the accident. The evidence is sufficient to reach the trier of fact on the issue of defect under this Section. Mary need not establish whether the product was defectively manufactured or defectively designed.

Id.

41. See, e.g., *Cassisi v. Maytag Co.*, 396 So. 2d 1140, 1146 (Fla. Dist. Ct. App. 1981) (noting that "evidence of the nature of an accident itself may, under certain circumstances, give rise to a reasonable inference that the product was defective because the circumstances of the product's failure may be such as to frustrate the ordinary consumer's expectations of its continued performance"); *Doyle v. White Metal Rolling & Stamping Corp.*, 618 N.E.2d 909, 916 (Ill. App. Ct. 1993) (finding that plaintiff may create an inference that a product was defective with evidence that "there was no abnormal use of the product," "no reasonable secondary cause of the injury," and "the product failed to perform in the manner reasonably to be expected in light of its nature and intended function"); *Tulgetske v. R.D. Werner Co.*, 408 N.E.2d 492, 496 (Ill. App. Ct. 1980) (holding that plaintiff can make out strict liability claim by proving that product failed to perform in a manner reasonably to be expected in light of its intended function); *Cincinnati Ins. Co. v. Volkswagen of Am., Inc.*, 502 N.E.2d 651, 655 (Ohio Ct. App. 1985) (observing that "the reasonable expectations of a buyer of a motor vehicle is that the main electrical cable harness of such vehicle will not start a fire").

42. Tentative Draft No. 2, *supra* note 2, § 3.

We note only that when courts utilize consumer expectations language to justify a classic *res ipsa loquitur* case they are not necessarily espousing a test for defect which differs substantially from that set forth in section 3. Let us be clear. We are not saying that *Soule* operates in lock step with section 3 of the *Restatement*. We do note, however, that a court that previously championed the consumer expectations test has trimmed its sails rather substantially in a manner that closely resembles the *Restatement* test for defect.⁴³

II. THE REJECTION OF MACRO RISK-UTILITY BALANCING AND THE BIRTH OF COMMENT D

Driven to risk-utility balancing as the test for design defect by the inexorable force of logic and by the overwhelming body of case law, we confronted one remaining question. Should risk-utility balancing be utilized not for the purpose of deciding whether a product should have been designed more safely, but rather whether it should have been marketed at all?

In our pre-Reporter lives, we had pondered this question in a lengthy article and had concluded first that courts had rejected decisively the idea of liability without defect based on risk-utility balancing and second that such product-category liability was untenable both theoretically and practically.⁴⁴ We will not rehash those arguments in this Article. Suffice it to say that, with regard to some products, there was little disagreement within the ALI that these conclusions were sound. Courts have not been willing to declare such products as cigarettes⁴⁵ and handguns⁴⁶ as defectively designed when there

43. See *Soule*, 882 P.2d at 308.

44. See James A. Henderson, Jr. & Aaron D. Twerski, *Closing the American Products Liability Frontier: The Rejection of Liability Without Defect*, 66 N.Y.U. L. REV. 1263, 1321, 1331 (1991).

45. See, e.g., *Kotler v. American Tobacco Co.*, 731 F. Supp. 50, 52-53 (D. Mass. 1990), *aff'd*, 926 F.2d 1217 (1st Cir. 1990), *cert. granted and judgment vacated*, 505 U.S. 1215 (1992), *on remand*, 981 F.2d 7 (1st Cir. 1992) (resolving appellate jurisdiction issues rather than products liability law); *Gianitsis v. American Brands, Inc.*, 685 F. Supp. 853, 859 (D.N.H. 1988); *Miller v. Brown & Williamson Tobacco Corp.*, 679 F. Supp. 485, 488-89 (E.D. Pa. 1988).

46. See, e.g., *Shipman v. Jennings Firearms, Inc.*, 791 F.2d 1532, 1533-34 (11th Cir. 1986) (stating that "Florida law will not apply the theories of strict products liability and negligence to a gun manufacturer who produces and distributes weapons that perform as intended and designed"); *Perkins v. F.I.E. Corp.*, 762 F.2d 1250,

was no reasonable alternative available. Although some academic critics support imposing design liability for this genre of products based on the fact that the products' overall misery index outweighs the benefits and pleasure that people derive from them,⁴⁷ there was no groundswell of support in any of the advisory groups or indeed at the Annual Meeting of the ALI for product category liability.

Some did argue, however, that courts should be able to declare products such as egregiously dangerous toys defective

1272-74 (5th Cir. 1985) (applying Louisiana law and stating that no Louisiana court "has ever applied a general risk/utility analysis to a well-made product that functioned precisely as it was designed to do"); *Armijo v. Ex Cam, Inc.*, 656 F. Supp. 771, 773 (D.N.M. 1987) (stating that "this Court believes that New Mexico courts would follow the overwhelming weight of authority which rejects strict products liability as a theory for holding handgun manufacturers liable for the criminal misuse of their products"), *aff'd*, 843 F.2d 406 (10th Cir. 1988); *Hilberg ex rel. Hilberg v. F.W. Woolworth Co.*, 761 P.2d 236, 240 (Colo. Ct. App. 1988) (applying statute allowing recovery only upon a showing of an actual defect in the gun), *overruled on other grounds by Casebolt v. Cowan*, 829 P.2d 352 (Colo. 1992); *Riordan v. International Armament Corp.*, 477 N.E.2d 1293, 1298-99 (Ill. App. Ct. 1985) (finding no liability under either the consumer expectations test or the risk-utility test); *Knott v. Liberty Jewelry & Loan, Inc.*, 748 P.2d 661, 663-65 (Wash. Ct. App. 1988) (finding no liability under state statute, negligence or strict liability).

In *McCarthy v. Sturm, Ruger & Co.*, 916 F. Supp. 366 (S.D.N.Y. 1996), a wrongful death action on behalf of victims who were killed in Colin Ferguson's highly publicized murderous shooting spree on the Long Island Railroad was brought against the manufacturer of the "Black Talon" bullets used by Ferguson. "Black Talon ammunition incorporates a hollow-point bullet that is designed to expand upon impact exposing razor-sharp edges at a 90-degree angle to the bullet. The expansion dramatically increases the wounding power of the bullets." *Id.* at 368. Plaintiffs argued that the bullets were designed defectively in that they caused more damage than would have been caused by an ordinary bullet. *See id.* at 370. The claim was thus one for enhanced injury. The heart of plaintiffs' claim of design defect was that Black Talon bullets failed the risk-utility test, which is the governing test for defect in New York. *See id.* at 371. In granting the defendant's motion to dismiss, the court stated, "Risk/utility analysis is inappropriate because the risks arise from the function of the product, not any defect in the product." *Id.* The court held that the plaintiffs' design arguments are better addressed to the legislature rather than common law courts. *See id.*; *accord Downs v. R.T.S. Sec., Inc.*, 670 So. 2d 434, 437-39 (La. Ct. App. 1996).

47. *See, e.g.*, Carl T. Bogus, *War on the Common Law: The Struggle at the Center of Products Liability*, 60 MO. L. REV. 1, 36-37 (1995) (arguing that because "product category liability has not been universally rejected" by courts, it should not be excluded from the *Restatement (Third)*); Carl T. Bogus, *Pistols, Politics and Products Liability*, 59 U. CIN. L. REV. 1103, 1104-05 (1991) (arguing that "a proper analysis of existing law would lead to a determination that strict liability should apply to handguns, but that, consciously or unconsciously, courts are misconstruing their own legal doctrines to avoid that result"); Ellen Wertheimer, *The Smoke Gets in Their Eyes: Product Category Liability and Alternative Feasible Designs in the Third Restatement*, 61 TENN. L. REV. 1429, 1454 (1994) ("Abolition of product category liability by the *Restatement (Third)* is neither intellectually justifiable, morally acceptable, or economically sound.").

even if reasonable alternative designs were not available.⁴⁸ They contended that when a product presents a high degree of danger and has little or no social utility, the requirement of an alternative design should be dispensed with as a requisite for establishing a *prima facie* case.

As Reporters, we were faced with a dilemma. The problem emanated from two sources. First, we found almost no authority directly imposing liability on this theory. A few courts who generally impose a requirement of reasonable alternative design do say in dicta (usually in footnotes) that instances might arise when a product is so dangerous and has so little utility that it might be defective even without proof of an alternative design.⁴⁹ We looked in vain, however, for cases in which such macro risk-utility balancing was actually utilized. Three state courts had indeed done so,⁵⁰ but those cases were subjected to rather swift

48. Several members of the American Law Institute Council advocated this position at the December 12, 1996 Council meeting.

49. See, e.g., *Wilson v. Piper Aircraft Corp.*, 577 P.2d 1322, 1328 n.5 (Or. 1978). The *Wilson* court said:

As pointed out above, the court's task is to weigh the factors bearing on the utility and the magnitude of the risk and to determine whether, on balance, the case is a proper one for submission to the jury. In this case we focus on the practicability of a safer alternative design and hold that the evidence was insufficient to permit the trial judge to consider that factor. Our holding should not be interpreted as a requirement that this factor must in all cases weigh in plaintiff's favor before the case can be submitted to the jury. There might be cases in which the jury would be permitted to hold the defendant liable on account of a dangerous design feature even though no safer design was feasible (or there was no evidence of a safer practicable alternative). If, for example, the danger was relatively severe and the product had only limited utility, the court might properly conclude that the jury could find that a reasonable manufacturer would not have introduced such a product into the stream of commerce. We hold here only that, given the nature of the product and of the defects alleged, it was improper to submit the issue of a defect in the engine design to the jury in the absence of appropriate evidence that the safer alternative design was practicable.

Id. at 1328 n.5; see also *Armentrout v. FMC Corp.*, 842 P.2d 175, 185 n.11 (Colo. 1992) (en banc) (noting that "evidence of a feasible design alternative is not always necessary," and citing *Wilson*); *Kallio v. Ford Motor Co.*, 407 N.W.2d 92, 97 n.8 (Minn. 1987) ("Conceivably, rare cases may exist where the product may be judged unreasonably dangerous because it should be removed from the market rather than be redesigned."); *Rix v. General Motors Corp.*, 723 P.2d 195, 201 (Mont. 1986) ("We do not rule upon the fact situation where a claim of design defect is made and where no alternative design is technologically feasible.").

50. See, e.g., *O'Brien v. Muskin Corp.*, 463 A.2d 298, 306 (N.J. 1983) (discussing application of risk-utility balancing test to aboveground swimming pool with vinyl bottoms). In *Halphen v. Johns-Manville Sales Corp.*, 484 So. 2d 110 (La. 1986), the court concluded that a manufacturer can be held to a strict liability standard for a product that fails to meet risk-utility norms because the dangers created by its use,

legislative reversal.⁵¹ We were reluctant to fashion a black letter rule on so slender a thread. Second, we confronted a difficult drafting problem. Assuming that we opted to allow for the possibility (yet unrealized) that design liability might ensue in such exceptional cases without proof of an alternative design, was it possible to draft a black letter rule that would not be so broad so as to include products such as motorcycles, adult lawn darts, or water skis. The problem was that once ensconced in black letter, we would be giving credence to a theory that the courts, in general, have rejected soundly. On the other hand, we did not want to reject summarily the possibility that liability

even if unforeseen at the time of manufacture, outweigh its utility. *See id.* at 114. If a product does meet risk-utility norms on its own and is only defective because there exists an alternative design, however, the manufacturer is held to a negligence-foreseeability standard. *See id.* at 115.

A third state appellate court may have imposed product-category liability on the theory that the overall danger of the product outweighs its benefits. In *Kelley v. R.G. Industries, Inc.*, 497 A.2d 1143 (Md. 1985), the court held that the manufacturers of "Saturday Night Specials" could be held liable for injuries suffered by innocent third parties at the hands of criminals. *See id.* at 1159. Although earlier in the decision the court rejected product-category liability based on risk-utility balancing, *see id.* at 1148, the court's imposition of liability on manufacturers for injuries caused by cheap handguns appears to condemn them because the overall utility of this genre of handgun to society is too low to justify their continued marketing. *See id.* at 1153-54.

51. *See* LA. REV. STAT. ANN. § 9.2800.59(A)(1) (West 1991) (overruling *Halphen*, 484 So. 2d 110); MD. ANN. CODE art. 27, § 36I (Supp. 1990) (overruling *Kelley*, 497 A.2d 1143); N.J. STAT. ANN. § 2A:58C-3(a) (West 1987) (overruling *O'Brien*, 463 A.2d 298).

Several states have passed somewhat narrower legislation that prohibits actions against firearm manufacturers for injuries resulting from the weapon's inherent danger. These statutes, however, continue specifically to allow claims based on either defective manufacture or defective design (i.e., the failure to institute an alternative design). *See* CAL. CIV. CODE § 1714.4(c) (West 1985) (stating that a "cause of action based upon the improper selection of design alternatives" is not foreclosed); COLO. REV. STAT. § 13-21-501 (1986) (stating that a claim must be based on "actual defect in design or manufacture" rather than "inherent potential" to cause injury); IDAHO CODE § 6-1410(3) (1990) (stating that the statute does not affect a "cause of action based upon the improper selection of design alternatives"); MONT. CODE ANN. § 27-1-720(3) (1995) (permitting a "cause of action based upon the improper selection of design alternatives"); NEV. REV. STAT. § 41.131(2) (1991) (stating that the section "does not affect a cause of action based upon a defect in design or production").

Although state legislatures have nullified judicial adoption of product category liability, such nullification has limited application in at least one jurisdiction. In *Dewey v. R.J. Reynolds Tobacco Co.*, 577 A.2d 1239 (N.J. 1990), the court held that the New Jersey statute changed existing "rules regarding the burden of proof and the imposition of liability." *See id.* at 1252. Thus, for cases filed prior to the statute's enactment, a risk-utility case theoretically could be established for products such as cigarettes. Because only six cigarette cases were pending in New Jersey at the time the legislation was enacted, the decision of the court allowing a risk-utility case to be made out when there is no alternative design available is only relevant to a handful of cases.

might be established in some instances based on the unusually high risk and almost worthlessness of the product.

A solution to this problem was offered by one of our advisers, a highly respected plaintiff's lawyer, Robert Habush. Because we were attempting to create an opening for possible future expansion in a limited manner, why not draft a comment that explained the idea? A new comment d was drafted and was introduced at the 1995 Annual Meeting as the Habush Amendment.⁵² It reads as follows:

d. Design defects: possibility of manifestly unreasonable design. Several courts have suggested that the designs of some products are so manifestly unreasonable, in that they have low social utility and high degree of danger, that liability should attach even absent proof of a reasonable alternative design. In large part the problem is one of how the range of relevant alternative designs is described. For example, a toy gun that shoots hard rubber pellets with sufficient velocity to cause injury to children could be found to be defectively designed within the rule of § 2(b). Toy guns that do not produce injury would constitute reasonable alternatives to the dangerous toy. Thus, toy guns that project ping pong balls, soft gelatin pellets, or water might be found to be reasonable alternative designs to a toy gun that shoots hard pellets. However, if consideration is limited to toy guns that are capable of causing injury, then no reasonable alternative will, by hypothesis, be available. In that instance, the design feature that defines which alternatives are relevant—the capacity to injure—is precisely the feature on which the user places value and of which the plaintiff complains. If a court were to adopt this characterization of the product, it could conclude that liability should attach without proof of a reasonable alternative design. The court would condemn the product design as defective and not reasonably safe because the extremely high degree of danger posed by its use or consumption so substantially outweighs its negligible utility that no rational adult, fully aware of the relevant facts, would choose to use or consume the product.⁵³

52. See 72 A.L.I. PROC. 201, 202 (1995) (remarks of Robert L. Habush, Attorney).

53. Tentative Draft No. 2, *supra* note 2, § 2 cmt. d.

Some critics view comment d as an unholy compromise.⁵⁴ Others view it as not going far enough and demand that it be stated as black letter law.⁵⁵ It would not be impossible to capture the general idea of comment d in black letter. On balance our present thinking is that it is unwise to do so. The advantage of the comment is that it is discursive and teaches by example. It also makes the point that, for the most part, a court could reach the same result by a sensible application of the reasonable alternative design requirement. If comment d constitutes being political, we take pride in such politics. It uses the more flexible medium of a comment to discuss a potential theory of liability that may have limited applicability without committing the ALI to a broader and more expansive theory of liability.

CONCLUSION

At the outset, we said that we believe that the law of products liability can be restated. In searching for a modality to express the rules we might have opted for a broader, more encompassing principle of liability. Why not simply express the liability rule in terms of general risk-utility balancing? To use such an approach would have been both unhelpful and inaccurate. As a general principle, it would tell us little as to how risk-utility balancing translates into a working rule in design litigation. Risk-utility balancing has a specific meaning in the product design context—a reasonable alternative design must be shown to have been available. One must prove that the danger was reasonably preventable. Furthermore, using the risk-utility principle as a liability rule would countenance macro risk-utility balancing, something that courts have rightly rejected.

Drafting the *Restatement* has been an exhilarating experience. The ALI has established a process for developing the *Restatement* that allowed for the involvement of a host of

54. See Harvey M. Grossman, *Categorical Liability: Why the Gates Should Be Kept Closed*, 36 S. TEX. L. REV. 385, 398–99 n.62 (1995) (arguing that such cases could be resolved through “traditional defect analysis without resorting to categorical liability”).

55. See sources cited *supra* note 47.

constituencies. We cannot, in one short commentary, chronicle the hundreds of changes and improvements to the draft suggested by all who have written to us or presented formal amendments at the Annual Meetings. The broadening of section 3 to include design defects and the inclusion of comment d are two examples of changes that came about as a result of extensive discussion. Once again, if their adoption is viewed as political we take pride in such politics.

