

ARTICLES

THE RHETORIC OF STRICT PRODUCTS LIABILITY VERSUS NEGLIGENCE: AN EMPIRICAL ANALYSIS

RICHARD L. CUPP JR.* AND DANIELLE POLAGE**

In defective design and warning cases, courts and commentators increasingly are questioning the substantive distinction between negligence and strict liability causes of action. In 1998, the Restatement (Third) of Torts: Products Liability adopted a risk/utility analysis for defective design and warning claims that reflects a strong trend among jurisdictions in two ways. First, it advocated using the risk/utility test regardless of whether plaintiffs label their claims as negligence or strict liability (or, for that matter, implied warranty of merchantability). Second, the Restatement's risk/utility analysis draws from principles of reasonableness, making strict liability essentially subject to a negligence analysis. In light of courts' trend toward risk/utility and the Restatement's position, commentators increasingly have wondered whether a plaintiff's choice between negligence and strict liability in design and warning claims largely amounts to a rhetorical preference. In this Article, Professors Richard L. Cupp Jr. and Danielle Polage present an empirical study of mock jurors that tests whether employing negligence versus strict liability language influences jury decisions when a substantively identical risk/utility standard is used. The authors found support for the perhaps counterintuitive argument that negligence language may favor plaintiffs by drawing on emotionally "hot" notions of fairness and fault, as opposed to the "cold" technical concepts of strict liability. The study found that jurors hearing the case under negligence language were more likely to find the defendant liable, and that they awarded, on average, almost twice the amount of damages compared to their strict liability counterparts. Indeed, although several findings showed advantages to using negligence language or disadvantages to using strict liability language, the study found no obvious rhetorical advantages to using strict liability language. The study thus presents a powerful challenge to the notion that strict liability is generally a pro-plaintiff doctrine under courts' increasingly dominant approaches to design and warning cases.

* Professor of Law & Associate Dean, Academics, Pepperdine University School of Law.

** Assistant Professor of Psychology, Pepperdine University, Seaver College.

Since beginning work on this article in 1996, we have amassed a large and happy debt of gratitude to several colleagues, students, and organizations who provided invaluable assistance. Raymond Buchanan, Ph.D., a distinguished professor of Communications and a pioneer in jury research, generously assisted by critiquing ideas for the study's structure and its questionnaires, and by helping to oversee production of the videotapes used in the study. Professors Michael Green, David Owen, Michael Saks, and the recently departed, and sorely missed, Gary Schwartz also provided helpful feedback on ideas for structuring the study. Work on the study was funded in part by a Rick J. Caruso Research Fellowship and in part by research grants provided by the Pepperdine University School of Law. Los Angeles Superior Court Juror Services and Ventura County Jury Services graciously provided facilities and permission to utilize volunteers from their juror pools to participate in the study. Three hundred and six of these jurors volunteered their time. Professors

*"When I use a word . . . it means just what I choose it to mean—
neither more nor less."*

—Observation of Humpty Dumpty
in Lewis Carroll's *Through the Looking Glass*¹

As noted by Justice Anthony Kennedy, "meaning is the life of language."² Absent context, words alone are clumsy, imprecise communication tools. The "love" that a person has for a romantic partner differs dramatically (one hopes) from the same person's "love" of pizza. Adding context focuses listeners on the intended meaning. However, linguists point out that words carry some context with them.³ Images and ideas cannot be divorced from the specific words used to describe them: When different language is used to construct a concept, a different perception of the concept is inevitable.⁴ The difference may be slight or significant, but some variance in understanding is assured.⁵

The impact of specific language used to describe a concept is an increasingly important issue in products liability trials involving claims of defective design or failure to adequately warn of a danger. In de-

Michael Gradisher and Timothy Perrin graciously agreed to serve as actors in the videotapes. Finally, and far from least, students John Bamford, Tom Beelig, Brent Caslin, Patricia Cirucci, Amber Dean, Chris Frost, Jill Jones, Laurie Neff, Matt Panagiotis, Katherine Phillips, Ron Roach, and Morgan Stewart administered the videotapes and questionnaires to the jurors and provided outstanding research assistance. Responsibility for any errors belongs, of course, to the authors.

¹ Lewis Carroll, *The Annotated Alice: Alice's Adventures in Wonderland & Through the Looking Glass* 269 (C. Potter ed. 1960), quoted in 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, 278 n.49 (1990).

² *Masson v. New Yorker Magazine, Inc.*, 501 U.S. 496, 517 (1991).

³ For example, the word "red" automatically will be attached mentally to other words referring to things that can be colored, as "[n]either we nor our language can conceive of a 'colorless red object.'" Madelon E. Heatherington, *How Language Works* 137 (1980). Further, individual words are themselves inclusive of other concepts. For instance, the word "building" will include such concepts as "skyscraper," "office," and "school." See *id.* at 140.

⁴ Indeed, linguists assert that even commonly accepted synonyms are not identical replacements of one another. Rather, nearly all words have developed connotations that serve as distinguishing semantic features. See *id.* at 140-41.

⁵ "Our knowledge of the world underlies much of our capability to use language, and this knowledge of the world must, in turn, influence our selection of associative responses. Word associations undoubtedly are produced by mental operations that depend upon both knowledge of language and knowledge of the world." Sam Glucksberg & Joseph H. Danks, *Experimental Psycholinguistics: An Introduction* 59 (1975). Thus, words themselves will trigger both related-word associations and emotional associations. See *id.* at 49-59. Indeed, some linguists speculate that even sounds alone may influence meaning. For example, a mid-level vowel sound such as "uh" may convey a "heaviness" (e.g., tug, lump, bump) while a high-level vowel sound such as "ee" may be associated with "smallness" (e.g., wee, teenie, eenie). See Heatherington, *supra* note 3, at 134.

sign and warning cases, courts allow plaintiffs to utilize two quite different rhetorical constructs—the language of negligence and the language of strict liability—to define what is increasingly a nearly identical standard of liability. Plaintiffs' lawyers typically face a choice of describing the liability standard with negligence language, with strict liability language, or with both.⁶

This Article undertakes an empirical analysis of how jurors respond differently to negligence language versus strict liability language in products liability cases when the underlying standard of liability is essentially the same. Part I introduces the evolution of the “risk/utility” test as the increasingly dominant approach to analyzing design and warning cases both in negligence causes of action and in strict liability causes of action. It discusses why courts have retained separate causes of action for negligence and strict liability in these areas despite the growing use of basically the same analysis—for both. It also reviews theories asserted by scholars and practitioners regarding how the differing language might influence jurors. Part II introduces and describes the study conducted to test the responses of 306 volunteer jurors to negligence language versus strict liability language in a hypothetical design defect case. The study divided jurors into five groups and showed them different videotapes portraying the same hypothetical design defect trial, with some of the jurors hearing

⁶ The Restatement (Third) of Torts: Products Liability rejects allowing plaintiffs to utilize both negligence and strict liability, indicating that plaintiffs must choose only one of the approaches. Restatement (Third) of Torts: Products Liability § 2 cmt. n (1998) [hereinafter Restatement (Third)]. However, most courts allow the practice of pleading and arguing both negligence and strict liability. See Richard E. Speidel, *Warranty Theory, Economic Loss, and the Privity Requirement: Once More into the Void*, 67 B.U. L. Rev. 9, 29 (1987) (observing that plaintiffs are likely to plead alternative theories like negligence and strict liability in order to have better chance of recovering); Chris Williams, *The Statute of Limitations, Prospective Warranties, and Problems of Interpretation in Article Two of the UCC*, 52 Geo. Wash. L. Rev. 67, 108 (1983) (“Most product liability suits are pleaded in more than one count.”); Barbara Strong Goss, *Note, Subsequent Remedial Measures in Strict Liability: Later Opinions as Evidence of Defects in Earlier Reasoning*, 32 Cath. U. L. Rev. 895, 917 n.114 (1983) (commenting that in products liability cases, plaintiffs often plead negligence and strict liability alternatively); James L. Johnson, *Comment, Products Liability in Texas and a Proposal to Require Privity Within the Implied Warranty of Merchantability*, 38 Sw. L.J. 915, 915 (1984) (noting that plaintiff may pursue negligence, strict liability in tort, and implied warranty of merchantability in single lawsuit); George Pitcher, *Comment, The End of Oregon’s Reasonable Seller Test: A Real Change in Law or a Mere Change in Terminology?*, 32 Willamette L. Rev. 851, 859-60 (1996) (“[M]any products liability cases go to the jury on multiple theories of liability”); Michael A. Pittenger, *Note, Reformulating the Strict Liability Failure to Warn*, 49 Wash. & Lee L. Rev. 1509, 1510 n.6 (1992) (finding that plaintiffs often plead negligence and strict liability together); Shannon J. Skinner, *Recent Development*, 56 Wash. L. Rev. 307, 314 (1981) (“Negligence and strict liability theories are often pleaded in the alternative because of their overlapping elements.”).

the case argued under negligence language, some of them hearing the case argued under strict liability language, and a control group hearing only a description of the case's facts without any jury instructions or oral argument.

An analysis of the study's results begins in Part III. Among other things, it reports differences in jurors' willingness to award any damages, differences in the amount of damages awarded, and the degree to which jurors' decisions whether to award damages under the jury instructions provided matched their personal sense of what would be fair under the facts given. Part IV looks at how different words and phrases that courts use to describe legal responsibility concepts under the risk/utility test are interpreted and applied by jurors. It focuses on the jurors' reactions to the terms "negligence" and "acted reasonably," which frequently are used in connection with the risk/utility test in negligence jury instructions; "not reasonably safe," which frequently is used in connection with the risk/utility test in strict liability jury instructions; and "reasonable alternative design," which increasingly is used in connection with the risk/utility test in both negligence and strict liability cases.⁷ Finally, Part V examines the study's implications. It summarizes some of the study's most interesting findings, and it concludes that in the study negligence language achieved significantly better results for plaintiffs than did strict liability language.

I

RISK/UTILITY ANALYSIS AND THE RED QUEEN: HOW THE EVOLUTION OF STRICT PRODUCTS LIABILITY IS LEADING RIGHT BACK TO NEGLIGENCE

In Lewis Carroll's *Through the Looking Glass*, Alice and the Red Queen run as fast as they can, but "however fast they went, they never seemed to pass anything." Having stopped to catch her breath,

Alice looked round her in great surprise. "Why, I do believe we've been under this tree the whole time! Everything's just as it was!"⁸

Strict products liability evolved rapidly in the courts and law. Increasingly, however, scholars and commentators have questioned the distinction between strict liability and negligence in defective design and warning claims. Regardless of the label attached to the cause of ac-

⁷ See *infra* Part IV. The Restatement (Third) of Torts: Products Liability directs courts to instruct jurors that the plaintiff must produce a reasonable alternative design and, for the plaintiff to prevail, that the mix of risks and utilities in the reasonable alternative design must be superior to those in the manufacturer's chosen design. Restatement (Third), *supra* note 6, § 2(b).

⁸ Carroll, *supra* note 1, at 209-10.

tion, courts increasingly are using more or less the same standard—a risk/utility analysis essentially based on negligence principles.

The risk/utility test has been given many names and has been applied in many different ways.⁹ All variations of the risk/utility test involve a balancing of the cost, utilities, and dangers of a design or warning¹⁰ provided¹¹ to determine whether the product is defective.¹² Beyond this commonality, however, courts' application of the analysis varies significantly. For example, courts sometimes are willing to balance a product's risks and utilities absent any analysis of alternative designs or potential warnings.¹³ Further, in strict liability cases some courts say that they impute knowledge of risks unknowable at the

⁹ Some of these other names include the "risk-benefit" test, see, e.g., Michael D. Green, *Negligence = Economic Efficiency: Doubts*, 75 *Tex. L. Rev.* 1605, 1613 (1997) (stating that standard compares additional cost created by alternative design, in relation to existing design, with costs of injuries that alternative design could prevent); the "cost-benefit" test, see, e.g., David G. Owen, *Toward a Proper Test For Design Defectiveness: "Micro-Balancing" Costs and Benefits*, 75 *Tex. L. Rev.* 1661, 1692-98 (1997) (arguing that term "cost-benefit" is superior to "risk-utility" because it better describes balancing process of design defect determinations); the "cost-utility" test, see, e.g., Samuel J.M. Donnelly & Mary Ann Donnelly, *Commercial Law, 1996-97 Survey of New York Law*, 48 *Syracuse L. Rev.* 451, 454-55 (1998) (summarizing that standard balances utility of product against risk inherent in marketing product designed in manner at time of manufacture); and the "danger-utility" test, see, e.g., W. Page Keeton et al., *Prosser and Keeton on the Law of Torts* § 99, at 699 (5th ed. 1984) ("Under this approach, a product is defective as designed if, but only if, the magnitude of the danger outweighs the utility of the product.").

¹⁰ Although the concept of risk/utility balancing is discussed more frequently in design cases, warnings cases undergo a similar analysis regardless of whether the risk/utility label is attached. See *infra* notes 42-51 and accompanying text.

¹¹ Or a complete lack of warning. See, e.g., *Dambacher by Dambacher v. Mallis*, 485 A.2d 408, 411-12 (Pa. Super. Ct. 1984) ("[I]f the jury finds that when the tire left [the supplier's] control it lacked the warnings necessary to make it safe for its intended use, then the tire was defective.").

¹² See generally John W. Wade, *On the Nature of Strict Tort Liability for Products*, 44 *Miss. L.J.* 825, 837-38 (1973) (listing seven factors to be considered in determining whether product is defective); see also John E. Montgomery & David G. Owen, *Reflections on the Theory and Administration of Strict Tort Liability for Defective Products*, 27 *S.C. L. Rev.* 803, 818 (1976) (proposing four factors to use in risk/utility analysis); David G. Owen, *Risk-Utility Balancing in Design Defect Cases*, 30 *U. Mich. J.L. Reform* 239, 247 (1997) (discussing one formulation of risk/utility test that states factors in three steps); Marshall S. Shapo, *A Representational Theory of Consumer Protection: Doctrine, Function and Legal Liability for Product Disappointment*, 60 *Va. L. Rev.* 1109, 1370-71 (1974) (enumerating total of thirteen factors to determine whether product is defective); W. Kip Viscusi, *Wading Through the Muddle of Risk-Utility Analysis*, 39 *Am. U. L. Rev.* 573, 591-97 (1990) (proposing alternative risk/utility tests depending on contextual situation that product is used in or by whom it is used).

¹³ See, e.g., *Potter v. Chi. Pneumatic Tool Co.*, 694 A.2d 1319, 1333 (Conn. 1997) (declining to "adopt the requirement that a plaintiff must prove a feasible alternative design as a *sine qua non* to establishing a *prima facie* case of design defect"); *Kallio v. Ford Motor Co.*, 407 N.W.2d 92, 96-97 (Minn. 1987) (finding that evidence of safer alternative design is not necessarily required in all cases); *Wilson v. Piper Aircraft Corp.*, 577 P.2d 1322, 1328 n.5 (Or. 1978) (opining that there may be cases in which jury would be permitted to hold

time of manufacture when applying the risk/utility test.¹⁴ However, courts and commentators are increasingly rejecting or minimizing both of these variations on the risk/utility test and are depicting the standard more or less as described in 1998 by the Restatement (Third) of Torts: Products Liability.¹⁵

Parts I.A and I.B discuss the Restatement (Third)'s application of risk/utility analysis as the sole standard for design and warning cases. Part I.C then examines the struggle to distinguish negligence and strict liability claims, while Part I.D addresses the possible rhetorical advantages connected to each cause of action.

A. Risk/Utility in Design Defect Cases

The Restatement (Third) uses somewhat different language to describe design defect risk/utility balancing versus warning defect risk/utility balancing, but the approaches are quite similar. In most cases under the Restatement (Third)'s approach, products may not be found defective with regard to design in a vacuum—the plaintiff must present evidence of a “reasonable alternative design” for comparison with the design chosen by the manufacturer.¹⁶ Some exceptions are recognized.¹⁷ However, a court following the Restatement (Third)'s dominant approach to design defects would instruct a jury as follows:

A product is defective in design when the foreseeable risks of harm posed by the product could have been reduced or avoided by the adoption of a reasonable alternative design by the seller or other distributor, or a predecessor in the commercial chain of distribution,

defendant liable on account of dangerous design feature even though no safer design was feasible or there was no evidence of safer practicable alternative).

¹⁴ See, e.g., *Dart v. Wiebe Mfg., Inc.*, 709 P.2d 876, 881 (Ariz. 1985) (en banc) (“In a strict liability risk/benefit analysis . . . [t]he quality of the product may be measured not only by the information available to the manufacturer at the time of design, but also by the information available to the trier of fact at the time of trial.”); *Beshada v. Johns-Manville Prods. Corp.*, 447 A.2d 539, 547 (N.J. 1982) (“It is precisely the imputation of knowledge to the defendant that distinguishes strict liability from negligence.”); *Roach v. Kononen*, 525 P.2d 125, 129 (Or. 1974) (“[A] greater burden is placed on the manufacturer [in strict liability] than is the case in negligence because the law assumes he has knowledge of the article’s dangerous propensity which he may not reasonably be expected to have, had he been charged with negligence.”). See also *infra* notes 81-88 and accompanying text.

¹⁵ See Restatement (Third), *supra* note 6, § 2(b).

¹⁶ *Id.*

¹⁷ The Restatement (Third) allows that this test will not apply in all design defect cases. It recognizes exceptions when “common experience teaches that an inference of defect may be warranted under the specific facts,” when a statute or applicable regulation is violated, and when a product design is “manifestly unreasonable.” *Id.* § 2 cmts. b & e, §§ 3-4. However, the Restatement (Third) takes pains to emphasize that the risk/utility test requiring proof of a reasonable alternative design is the “primary” test for design defects. See *id.* § 2 cmt. d.

and the omission of the alternative design renders the product not reasonably safe.¹⁸

The Restatement (Third)'s formulation of risk/utility is intended for use regardless of whether the plaintiff's claim is labeled as negligence or as strict liability: "The rules are stated functionally rather than in terms of traditional doctrinal categories."¹⁹ Although plaintiffs may choose to "label" their claim as one based in negligence or as one based in strict liability, the Restatement's Reporters provided no alternative language to be used depending on the cause of action pleaded.²⁰ Unlike most courts, the Restatement (Third) limits plaintiffs to picking only one of the labels for their case, arguing that allowing plaintiffs to describe the same risk/utility test as both negligence and strict liability leads to juror confusion and inconsistent results.²¹

In most respects this "functional" approach to risk/utility balancing does not represent a hybrid between negligence and strict liability. Rather, substantively it is a triumph of negligence over strict liability. The Restatement (Third) describes its risk/utility analysis as a "reasonableness test" and treats it as equivalent to negligence.²² Indeed, the Reporters find the roots of the risk/utility test in Judge Learned Hand's famous formulation of reasonableness as a balancing of foreseeability of harm and gravity of harm versus burden of prevention.²³

The Restatement (Third)'s assertion that the risk/utility test is to be applied to most design defect claims and that it is functionally equivalent to negligence has generated vigorous dissent from some

¹⁸ *Id.* § 2(b).

¹⁹ *Id.* § 2 cmt. n ("Regardless of the doctrinal label attached to a particular claim, design and warning claims rest on a risk-utility assessment.").

²⁰ See *id.* In addition to negligence, the Restatement (Third) allows plaintiffs to choose from the "labels" of strict liability or implied warranty of merchantability in presenting their cases to juries. See *id.* The impact of presenting to jurors a risk/utility analysis using implied warranty of merchantability language, which generally is perceived as a form of strict liability, is not analyzed in this study.

²¹ See *id.* In support of this position, the Reporters contend that "[a] fair number of courts have taken the position that in a design or failure to warn case, it is redundant (and thus inappropriate) to allow the plaintiff to go to the jury on both negligence and strict liability." *Id.* § 2, reporters' note to cmt. n. However, most courts allow plaintiffs to use both negligence and strict liability causes of action when arguing design and warning cases to jurors concurrently. See *supra* note 6 and accompanying text.

²² See Restatement (Third), *supra* note 6, § 2 cmt. d; see also *id.* § 2, reporters' note to cmt. n ("The tests in §§ 2(b) and 2(c) require a reasonableness balancing approach.").

²³ See *United States v. Carroll Towing Co.*, 159 F.2d 169, 173 (2d Cir. 1947) (holding that negligence exists if foreseeability and gravity of potential harm outweigh burden of prevention); see also Restatement (Third), *supra* note 6, § 2, reporters' note to cmt. a. (quoting David G. Owen, *Defectiveness Restated: Exploding the "Strict" Products Liability Myth*, 1996 U. Ill. L. Rev. 743, 754-55).

academics and from some courts.²⁴ For example, whereas the Reporters cite thirty-six jurisdictions supporting use of a risk/utility test generally requiring proof of a reasonable alternative design,²⁵ another prominent scholar found “only one to three” such decisions,²⁶ and yet another writer counted only three jurisdictions supporting the proposition.²⁷ Dissenters often argue that many courts apply a consumer expectations test in design cases, finding designs defective if they are more dangerous than a reasonable consumer would expect.²⁸ The Re-

²⁴ For an illustration of a court’s rejection of the Restatement (Third)’s approach to design defects, see *Potter v. Chi. Pneumatic Tool Co.*, 694 A.2d 1319 (Conn. 1997). The *Potter* court not only rejected the Restatement (Third)’s standard, it also questioned the Reporters’ assertion that the standard represents the majority approach to design defect cases. See *id.* at 1331 (“Contrary to the rule promulgated in the Draft Restatement (Third), our independent review of the prevailing common law reveals that the majority of jurisdictions *do not* impose upon plaintiffs an absolute requirement to prove a feasible alternative design.”).

²⁵ See Restatement (Third), *supra* note 6, § 2, reporters’ note to cmt. d. The Restatement (Third) asserts that twenty-three jurisdictions explicitly require proof of a reasonable alternative design. Ten jurisdictions apply a risk/utility test and thereby implicitly require proof of a reasonable alternative design. Three jurisdictions apply a consumer expectations test based on risk/utility and thereby implicitly require proof of a reasonable alternative design in “most cases.” *Id.*

²⁶ Marshall S. Shapo, *In Search of the Law of Products Liability: The ALI Restatement Project*, 48 *Vand. L. Rev.* 631, 666 (1995) (“[O]nly one to three decisions . . . give unequivocal support—or come close to giving unequivocal support—to the proposition that a risk-utility test is the sole or predominant ground of reliance by American courts.”) (footnote omitted).

²⁷ See John F. Vargo, *The Emperor’s New Clothes: The American Law Institute Adorns a “New Cloth” for Section 402A Products Liability Design Defects—A Survey of the States Reveals a Different Weave*, 26 *U. Mem. L. Rev.* 493, 529 (1996) (calling it “gross exaggeration” that twenty-eight states require proof of reasonable alternative design, and claiming instead that only three states appear to adopt such standard).

²⁸ See Roland F. Banks & Margaret O’Connor, *Restating the Restatement (Second), Section 402A—Design Defect*, 72 *Or. L. Rev.* 411, 413-14 (1993) (asserting that “great majority of cases” hold that design defect determinations are governed by consumer expectations); Theodore S. Jankowski, *Focusing on Quality and Risk: The Central Role of Reasonable Alternatives in Evaluating Design and Warning Decisions*, 36 *S. Tex. L. Rev.* 283, 314 (1995) (“Some courts evince a stated reliance on section 402A by defining the test for product design defect as a product which is dangerous to an extent beyond that contemplated by the ordinary user or consumer”); Howard C. Klemme, *Comments to the Reporters and Selected Members of the Consultative Group, Restatement of Torts (Third): Products Liability*, 61 *Tenn. L. Rev.* 1173, 1174 (1994) (arguing that “well-known” design defect cases use consumer expectations test); Jerry J. Phillips, *Achilles’ Heel*, 61 *Tenn. L. Rev.* 1265, 1268 (1994) (“[A] consumer expectations standard of liability underpins . . . much of the current law of products liability today.”); Jerry J. Phillips, *The Unreasonably Unsafe Product and Strict Liability*, 72 *Chi.-Kent L. Rev.* 129, 142 (1996) [hereinafter Phillips, *Unreasonably Unsafe*] (“The strictures [of the Restatement (Third)] also greatly underplay the importance of consumer expectations for product defectiveness, including defective design.”); Elizabeth C. Price, *Toward a Unified Theory of Products Liability: Reviving the Causative Concept of Legal Fault*, 61 *Tenn. L. Rev.* 1277, 1316 (1994) (“[The] use of a risk-utility test as a substitute for the consumer expectations test cannot be historically justified.”); Shapo, *supra* note 26, at 665-68 (contending that con-

porters included in the Restatement (Third)'s Reporters' Notes a forty-seven page, state-by-state analysis of the case law in response to such challenges.²⁹ The Reporters' exertion of so much effort on the issue reflects its perceived significance, as does the effort exerted criticizing the Restatement (Third)'s position.³⁰ Regardless of the specific count of jurisdictions,³¹ the Restatement (Third)'s approach seems at the least to represent a trend. An increasing number of courts³² and

sumer expectations test should play role in design defect cases because product promotion greatly affects consumers' choices and because majority of jurisdictions have not clearly adopted risk/utility test); Marshall S. Shapo, *Products Liability: The Next Act*, 26 Hofstra L. Rev. 761, 762-67 (1998) (questioning Restatement (Third)'s rejection of consumer expectations test as separate standard of liability for design defect); Frank J. Vandall, *The Restatement (Third) of Torts, Products Liability, Section 2(b): Design Defect*, 68 Temp. L. Rev. 167, 170 (1995) (claiming that cases do not support new Restatement's risk/utility test for design defect and, instead, courts often embrace strict liability and consumer expectations test for design defect); Vargo, *supra* note 27, at 539 (stating that ten states use consumer expectations test for design defect); Andrew F. Popper, *Restatement Third Goes to Court*, Trial, Apr. 1999, at 54, 58 ("There are a number of states that use the consumer expectation test, perhaps more than mandate alternative design . . .").

²⁹ Restatement (Third), *supra* note 6, § 2, reporters' note to cmt. d. The Reporters' responses include, among others, a contention that some of the cases claiming to apply a consumer expectations test are in reality applying the risk/utility test. See *id.* at § 2, reporters' note to cmt. d, II(C) ("A few courts set forth the test for defective design using consumer expectations rhetoric, but then apply risk-utility balancing to determine whether reasonable expectations are met.").

³⁰ This includes, for example, one dissenting law review article that features 391 pages of state-by-state case law analysis. See Vargo, *supra* note 27, at 559-950.

³¹ The dramatic differences in case counts has led one observer to comment that reading the cases may be similar to interpretations of Rorschach ink blots—they may provide more insights into the reader than into what is being read. See Bill Wagner, *Reviewing the Restatement*, Trial, Nov. 1995, at 44, 46 ("During the debates, [a member] of the ALI commented only half jokingly that reading cases is like reading a Rorschach test—you sometimes see something in a case because it is what you were hoping to find.").

³² A number of courts explicitly have invoked the Restatement (Third)'s standard in requiring a reasonable alternative design. See *Hollister v. Dayton Hudson Corp.*, 5 F. Supp. 2d 530, 533 (E.D. Mich. 1998) (finding that Michigan risk/utility test is consistent with principles stated in Restatement (Third) § 2(b)); *Thornton v. Caterpillar, Inc.*, 951 F. Supp. 575, 579 (D.S.C. 1997) (noting Restatement (Third) standard and concluding that plaintiff's expert testimony is sufficient if it supports conclusion that reasonable alternative design could have been adopted at time of sale); *Hamilton v. Accu-Tek*, 935 F. Supp. 1307, 1322 (E.D.N.Y. 1996) (citing Restatement (Third)'s reasonable alternative design as appropriate standard of liability for design defect); *Green v. Gen. Motors Corp.*, 709 A.2d 205, 210 (N.J. Super. Ct. App. Div. 1998) ("[T]he prevalent view is that . . . the issue upon which most claims will turn is the proof by plaintiff of a 'reasonable alternative design . . . the omission . . . [of which] renders the product not reasonably safe.'" (quoting Restatement (Third), *supra* note 6, § 2(b) (Proposed Final Draft, April 1, 1997))); *Buonanno v. Colmar Belting Co.*, 733 A.2d 712, 717-18 (R.I. 1999) (invoking reasonable alternative design standard set forth in Restatement (Third)); *Uniroyal Goodrich Tire Co. v. Martinez*, 977 S.W.2d 328, 335 n.4 (Tex. 1998) ("[A] safer alternative [design] is a prerequisite to a finding of design defect Our approach . . . is reflected in the new Restatement."). Several jurisdictions supported this approach before the Restatement (Third) was drafted. See *General Motors Corp. v. Edwards*, 482 So.2d 1176, 1191 (Ala. 1985) ("In order to prove

writers³³ have agreed with the Reporters³⁴ that risk/utility balancing requiring a reasonable alternative design is usually the appropriate test in design defect cases, and that in these cases strict liability risk/utility balancing is substantively no different from negligence risk/utility balancing.³⁵ Regardless of the label, the underlying approach is increasingly one of simple negligence.

defectiveness, the plaintiff must prove that a safer, practical, alternative design was available to the manufacturer at the time it manufactured the automobile.”); *Nacci v. Volkswagen of Am., Inc.*, 325 A.2d 617, 620 (Del. Super. Ct. 1974) (concluding that proper test for liability is whether ordinarily prudent person acting as manufacturer would pursue alternative design to lessen risk of harm); *Rogers v. R.J. Reynolds Tobacco Co.*, 557 N.E.2d 1045, 1051 n.6 (Ind. Ct. App. 1990) (“A defective design is one which makes the product inadequate or unsafe relative to alternative design choices.”), *aff’d*, 745 N.E.2d 793 (Ind. 2001); *Jackson v. Warrum*, 535 N.E.2d 1207, 1220 (Ind. Ct. App. 1989) (“[T]he plaintiff must prove that a feasible safer alternative product design existed.”); *Uloth v. City Tank Corp.*, 384 N.E.2d 1188, 1193 (Mass. 1978) (stating that plaintiff presents case for jury if available alternative design is shown that would reduce risk without undue cost or interference with product performance).

³³ See James A. Henderson, Jr. & Aaron D. Twerski, *What Europe, Japan, and Other Countries Can Learn from the New American Restatement of Products Liability*, 34 *Tex. Int’l L.J.* 1, 19 (1999) (positing that risk/utility standard allows greater flexibility in court because it requires that plaintiff prove reasonable alternative design); David G. Owen, *Products Liability Law Restated*, 49 *S.C. L. Rev.* 273, 289 (1998) (“[M]ost courts now ascertain a design’s defectiveness according to some form of risk-utility balancing of the costs and benefits of adopting a proposed alternative design.”); William E. Westerbeke, *The Reasonable Alternative Design Requirement*, 8 *Kan. J.L. & Pub. Pol’y* 66, 66 (1998) (“The risk-utility formula provides sensible guidelines for the organization and weighing of evidence in an accident case. Thus, the risk-utility approach to the RAD [Reasonable Alternative Design] requirement may involve some uncertainty, but it is not too speculative to be inappropriate in design defect cases.”).

³⁴ The Reporters, Professors James Henderson and Aaron Twerski, promoted this perspective in several law review articles published before the Restatement (Third) project began. See Henderson & Twerski, *supra* note 1, at 272 (“After years of frustration, many courts have finally abandoned the search and declared that, for all intents and purposes, strict liability, as applied to generically dangerous product cases, was simply negligence by another name.”); 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) [hereinafter Henderson & Twerski, *A Proposed Revision*] (contending that courts should be required to employ risk/utility standard); James A. Henderson, Jr. & Aaron D. Twerski, *Stargazing: The Future of American Products Liability Law*, 66 *N.Y.U. L. Rev.* 1332, 1334 (1991) [hereinafter Henderson & Twerski, *Stargazing*] (“Only risk-utility balancing can serve as a workable standard for defining defect. . . . Risk-utility, without doubt, will emerge victorious as the liability standard in generic defect cases.”) (footnotes omitted).

³⁵ See *Sexton ex rel. Sexton v. Bell Helmets, Inc.*, 926 F.2d 331, 335 (4th Cir. 1991) (deciding that any design defect claim, whether based on negligent breach of duty of care or on strict liability, is dependent on proof of defect); *Garrett v. Hamilton Standard Controls, Inc.*, 850 F.2d 253, 257 (5th Cir. 1988) (applying Mississippi law in holding that “if a product is not unreasonably dangerous because of the way it was manufactured, it was not negligent to manufacture it that way”); *Sprinkle v. Bower Ammonia & Chem. Co.*, 824 F.2d 409, 413-14 (5th Cir. 1987) (applying Mississippi law in stating that negligence and strict liability theories “each present the essential question whether an inadequate warning

Because the risk/utility test is to be understood as negligence, the Restatement (Third) rejects the imputed-knowledge-of-risks variation at least nominally followed by many courts. This variation, sometimes referred to as the Wade/Keeton test, is intended to differentiate strict liability from negligence. It does so by assuming in strict liability cases that when the manufacturer marketed the product it was aware of all product risks actually involved in a product's use, including risks that were unknowable at the time of manufacture.³⁶ The Wade/Keeton test was proposed separately by the eminent scholars W. Page Keeton and John Wade in law review articles written near the beginning of strict liability's expansion into design and warning cases.³⁷ Many jurisdictions have found comfort in referring to the Wade/Keeton test in strict liability cases when posed with the difficult question of whether there is a difference between negligence risk/utility and strict liability risk/utility.³⁸ Although it is questionable whether this approach typi-

caused the plaintiff's injuries"); *Gauthier v. AMF, Inc.*, 788 F.2d 634, 637 (9th Cir. 1986) ("[M]ost Circuits have . . . held that there is no practical difference between strict liability and negligence in defective design cases . . ."); *Birchfield v. Int'l Harvester Co.*, 726 F.2d 1131, 1139 (6th Cir. 1984) ("[I]n a defective design case . . . [t]he test for an 'unreasonably dangerous' condition is equivalent to a negligence standard of reasonableness . . ."); *Werner v. Upjohn Co.*, 628 F.2d 848, 857 (4th Cir. 1980) (stating that distinction between strict liability and negligence should not produce different outcome in failure-to-warn cases); *Chestnut v. Ford Motor Co.*, 445 F.2d 967, 968 (4th Cir. 1971) (recognizing that standard of safety imposed on seller or manufacturer is essentially same whether theory is labeled negligence, strict liability, or warranty); *Ake v. Gen. Motors Corp.*, 942 F. Supp. 869, 874 (W.D.N.Y. 1996) ("[I]n a design defect case the two theories of liability [strict liability and negligence] are virtually identical."); *Mather v. Caterpillar Tractor Corp.*, 533 P.2d 717, 719 (Ariz. Ct. App. 1975) (upholding ruling that withheld negligence count from jury on grounds that it would be "superfluous" and confusing if included with strict liability count); *Lambert v. Gen. Motors Corp.*, 79 Cal. Rptr. 2d 657, 660 (Cal. Ct. App. 1998) ("Where liability depends on the proof of a design defect, no practical difference exists between negligence and strict liability . . ."); *Ogletree v. Navistar Int'l Transp. Corp.*, 500 S.E.2d 570, 572 (Ga. 1998) ("[T]he distinction between negligence and strict liability is not significant for the purposes of the risk-utility analysis."), *rev'd*, 522 S.E.2d 467 (Ga. 1999); *Jones v. Hutchinson Mfg., Inc.*, 502 S.W.2d 66, 69-70 (Ky. 1973) ("[T]he distinction between the so-called strict liability principle and negligence is of no practical significance so far as the standard of conduct required of the defendant is concerned."); *Lecy v. Bayliner Marine Corp.*, 973 P.2d 1110, 1111 (Wash. Ct. App. 1999) (seeing no practical difference between strict liability and negligence under facts of case and holding that finding of reasonably safe design in strict liability claim precludes finding of negligent design in negligence claim).

³⁶ See W. Page Keeton, *Products Liability—Inadequacy of Information*, 48 *Tex. L. Rev.* 398, 403-04 (1970); Wade, *supra* note 12, at 834-35.

³⁷ See generally Keeton, *supra* note 36; Wade, *supra* note 12. For a discussion of the expansion of strict liability from manufacturing-defect cases to design and warning cases, see *infra* notes 58-67 and accompanying text.

³⁸ See cases cited *supra* note 14 and accompanying text. See also *Gomulka v. Yavapai Mach. & Auto Parts, Inc.*, 745 P.2d 986, 989 (Ariz. Ct. App. 1987) (stating that in strict liability cases "it is immaterial whether the manufacturer knew or should have known of the risk accompanying a product's harmful characteristics at the time the product was put

cally provides plaintiffs a true benefit in practice,³⁹ use of this variation in strict liability cases theoretically gives plaintiffs an advantage over negligence when a risk was unknowable at the time of marketing but is later discovered.

B. Risk/Utility in Defective Warning Cases

Although courts more frequently use the phrase “risk/utility” in design cases than in warning cases, their typical approach to warning claims is not, at its core, much different, and thus it may be fairly described as a form of risk/utility analysis. Of course the issues being weighed differ, but both tests center on balancing pluses and minuses. In design cases the risks and utilities of the design chosen typically are balanced against the risks and utilities of an alternative design that could have been used. In warning cases the risks and utilities of the warning chosen (or the choice not to supply a warning) are balanced against an alternative warning that could have been provided.⁴⁰

on the market”); *Ziegler v. Kawasaki Heavy Indus. Ltd.*, 539 A.2d 701, 705 n.8 (Md. Ct. Spec. App. 1988) (“[I]t is not necessary to find that this defendant had knowledge of the harmful character of the [product] in order to determine that it was not duly safe.”) (internal citations omitted); *Suter v. San Angelo Foundry & Mach. Co.*, 406 A.2d 140, 150 (N.J. 1979) (“[W]hen the manufacturer presents his goods to the public for sale he accompanies them with a representation that they are suitable and safe for the intended use.”) (internal citations omitted); *Cepeda v. Cumberland Eng’g Co.*, 386 A.2d 816, 826 (N.J. 1978) (stating that in strict liability it is assumed that defendant knew of dangerous condition of product); *Brooks v. Beech Aircraft Corp.*, 902 P.2d 54, 63 (N.M. 1995) (“[S]trict liability imposes what amounts to constructive knowledge of the condition of the product.”) (internal citations omitted); *Phillips v. Kimwood Mach. Co.*, 525 P.2d 1033, 1037 (Or. 1974) (en banc) (“[In strict liability] a greater burden is placed on the manufacturer than is the case in negligence because the law assumes he has knowledge of the article’s dangerous propensity which he may not reasonably be expected to have”); *Lewis v. Coffing Hoist Div.*, 528 A.2d 590, 594 (Pa. 1987) (Having reached the conclusion that evidence of industry standards relating to the design of the control pendant involved in this case, and evidence of its widespread use in the industry, go to the reasonableness of the appellant’s conduct in making its design choice, we further conclude that such evidence would have improperly brought into the case concepts of negligence law.).

³⁹ See *infra* notes 80-88 and accompanying text.

⁴⁰ See Mary J. Davis, *Design Defect Liability: In Search of a Standard of Responsibility*, 39 *Wayne L. Rev.* 1217, 1247 (1993) (concluding that, in design cases, trier of fact uses risk/utility test to evaluate alternatives and risks of manufacturer); David G. Owen, *The Graying of Products Liability Law: Paths Taken and Untaken in the New Restatement*, 61 *Tenn. L. Rev.* 1241, 1246 (1994) [hereinafter Owen, *Graying*] (articulating proposition that most courts balance design and warning cases on risk/utility principles); Owen, *supra* note 33, at 285-86 (commenting that, in design and warning defect cases, most courts employ “risk-utility” test to determine whether dangers are “excessive or acceptable”); John H. Chun, Note, *The New Citadel: A Reasonably Designed Products Liability Restatement*, 79 *Cornell L. Rev.* 1654, 1661-62 (1994) (explaining that, in design defect cases, risk/utility test balances factors to determine if product is defective); Rebecca Tustin Rutherford, Comment, *Changes in the Landscape of Products Liability Law: An Analysis of the Restatement (Third) of Torts*, 63 *J. Air L. & Com.* 209, 233, 236 (1997) (asserting that, in design

The fundamental similarity between design and warning risk/utility tests is not difficult to explain: The warning defect test, like the design test, is rooted in the Learned Hand formula for negligence.⁴¹ Indeed, courts have shown less concern for distinguishing between strict liability and negligence in warning cases than in design cases. Several courts have acknowledged openly that the warning risk/utility test is a negligence analysis, regardless of the label applied.⁴²

The Restatement (Third)'s approach to warning cases reflects the substantive triumph of negligence over strict liability in this area. Under the Restatement (Third) standard:

A product is defective because of inadequate instructions or warnings when the foreseeable risks of harm posed by the product could have been reduced or avoided by the provision of reasonable instructions or warnings by the seller or other distributor, or a predecessor in the commercial chain of distribution, and the omission of the instructions or warnings renders the product not reasonably safe.⁴³

defect cases, test balances likelihood and magnitude of injury versus possible alternative design, and, in warning cases, there must be assessment of risks and utilities of warning given and other possible alternative warnings).

⁴¹ E.g., Owen, *Graying*, *supra* note 40, at 1251 (observing that Learned Hand's liability formula brought fame to risk/benefit formula); Gary T. Schwartz, *Deterrence and Punishment in the Common Law of Punitive Damages: A Comment*, 56 S. Cal. L. Rev. 133, 152 (1982) (suggesting that risk/benefit test was derived from Learned Hand's formula for negligence); Gary T. Schwartz, *Reality in the Economic Analysis of Tort Law: Does Tort Law Really Deter?*, 42 UCLA L. Rev. 377, 428 n.252 (1994) (equating Learned Hand test with risk/benefit test).

⁴² See *Anguiano v. E.I. DuPont de Nemours & Co.*, 44 F.3d 806, 811-12 (9th Cir. 1995) (claiming that "the question whether a manufacturer has a duty to warn under strict liability depends on the standards for determining a duty to warn under a negligence action"); *Forest v. E.I. DuPont de Nemours & Co.*, 791 F. Supp. 1460, 1464 (D. Nev. 1992) (holding, in failure-to-warn case, that plaintiff's negligence and strict liability claims must be considered together since standard in strict liability failure-to-warn claim is based in negligence); *Russell v. G.A.F. Corp.*, 422 A.2d 989, 991 (D.C. 1980) (*per curiam*) (pronouncing that strict liability and negligence impose same duty of ordinary care in failure-to-warn cases); *Olson v. Prosoco, Inc.*, 522 N.W.2d 284, 289 (Iowa 1994) (finding that in strict liability failure-to-warn cases, courts "cannot help but slip back into the type of analyses virtually identical to those employed in negligence cases"); *Bernier v. Raymark Indus., Inc.*, 516 A.2d 534, 540 (Me. 1986) ("A strict liability failure-to-warn case does resemble a negligence action because the reasonableness of the manufacturer's conduct is the critical issue."); *Smith v. E.R. Squibb & Sons, Inc.*, 273 N.W.2d 476, 480 (Mich. 1979) (holding that liability under either negligence or strict liability turns on adequacy of warning, which is governed by negligence standard of reasonableness); *Enright v. Eli Lilly & Co.*, 570 N.E.2d 198, 203 (N.Y. 1991) (asserting that failure-to-warn claim, though "couched in terms of strict liability, is indistinguishable from a negligence claim"); *Immormino v. J & M Powers, Inc.*, 698 N.E.2d 516, 517 (Ohio Ct. Com. Pl. 1998) ("The standard placed upon the defendant in a strict liability claim premised upon an inadequate warning is identical to the standard imposed in a negligence claim based upon inadequate warning.").

⁴³ Restatement (Third), *supra* note 6, § 2(c).

The Reporters refer to this as “a reasonableness test,” and note that it “parallels Subsection (b), which adopts a similar standard for judging the safety of product designs.”⁴⁴

As with design, the Restatement (Third)’s warning standard is intended for identical application in both negligence and strict liability cases. The rule is stated functionally rather than in the rhetoric of traditional causes of action.⁴⁵ As with design, plaintiffs are free to choose to “label” their warnings claims to the jury as either negligence or strict liability, even though the substantive approach is identical.⁴⁶

The Restatement (Third) instructs that although plaintiffs are free to choose one label for their claim, they are not permitted to use both labels together in describing the reasonableness test to the jury. As in design cases, the Reporters are concerned that allowing multiple causes of action using the same substantive test would lead to juror confusion and inconsistent results.⁴⁷ Also, as in design cases, the Reporters’ limitation is ignored in many jurisdictions; often, plaintiffs are free to present their warning defect claims to the jury under both a negligence cause of action and a strict liability cause of action.⁴⁸

Other than this difference, the Restatement (Third)’s approach to warning defects accurately reflects the standard used by most jurisdictions and has generated relatively little controversy.⁴⁹ A strong majority of jurisdictions agree that warning cases require factually sensitive inquiries into a broad range of factors and that this type of analysis is best captured in a simple negligence test.⁵⁰ Although some

⁴⁴ *Id.* § 2 cmt. i.

⁴⁵ See *id.* § 2 cmt. n, where the Restatement (Third) provides the following:

The rules are stated functionally rather than in terms of traditional doctrinal categories. Claims based on product defect at time of sale or other distribution must meet the requisites set forth in Subsection (a), (b), or (c), or the other provisions in this Chapter. As long as these requisites are met, doctrinal tort categories such as negligence or strict liability may be utilized in bringing the claim.

⁴⁶ See *id.*

⁴⁷ See *id.*

⁴⁸ See, e.g., *Butz v. Werner*, 438 N.W.2d 509, 513 (N.D. 1989) (holding that plaintiff did not have to elect between negligent failure to warn and strict products liability failure to warn); *Immormino v. J & M Powers, Inc.*, 698 N.E.2d 516, 517 (Ohio Ct. Com. Pl. 1998) (“[W]here there are allegations of failure to warn . . . plaintiff may plead both negligence and strict liability.”); *Whitehead v. Dycho Co.*, 775 S.W.2d 593, 596 (Tenn. 1989) (“[A] plaintiff may plead a claim of negligence on the part of the manufacturer in failing to warn . . . , or plaintiff may claim strict liability on the part of the defendant for any injury sustained as a result of the same failure, or he may do both.”) (internal citations omitted).

⁴⁹ This is particularly evident when viewed in contrast to the firestorm of controversy surrounding the Restatement’s design defect standard. See *supra* notes 26-37 and accompanying text.

⁵⁰ See *Owen*, *supra* note 33, at 286 & n.73 (stating that it has long been “open secret” that in warning cases, courts apply negligence principles); Phillips, *Unreasonably Unsafe*,

jurisdictions have experimented with it, attempting to distinguish strict liability in warning cases by imputing knowledge of risks has been broadly rejected.⁵¹ Even more than in design claims, imputing knowledge of risks approaches absolute liability in warnings claims where the risk was truly unforeseeable at the time the product was marketed. This is so in large part because warnings are extremely inexpensive to provide. If a later-discovered risk is at all significant, manufacturers will be hard-pressed to argue that they should not have provided an inexpensive warning even if they knew of the danger. Thus, the risk/utility test utilized in warnings cases is increasingly the same under both negligence and strict liability causes of action.

C. *The Struggle to Distinguish Negligence and Strict Liability in Design and Warning Cases*

If courts generally are using the same risk/utility test in both negligence and strict liability causes of action involving design or warning, an obvious question is why the theories are recognized as separate causes of action. The answer may stem from the exceptional rapidity of legal evolution in products liability over the past forty years.

As recently as the 1950s, products liability cases of any type were rare. However, *Henningsen v. Bloomfield Motors, Inc.*⁵² in 1960, and *Greenman v. Yuba Power Products, Inc.*⁵³ in 1962, followed quickly by the American Law Institute's (ALI) adoption of section 402A of the *Restatement (Second) of Torts: Products Liability* in 1964,⁵⁴ precipitated—or perhaps anticipated⁵⁵—a storm of litigation that grew with

supra note 28, at 139 (claiming that courts are “more prone to frame warning claims . . . in terms of negligence because courts have difficulty conceptualizing a duty to warn about the unknown”); William Powers, Jr., *A Modest Proposal to Abandon Strict Products Liability*, 1991 U. Ill. L. Rev. 639, 656 (pointing out that, in warnings cases, most courts openly use negligence test).

⁵¹ See Joseph A. Page, *Generic Product Risks: The Case Against Comment k and For Strict Tort Liability*, 58 N.Y.U. L. Rev. 853, 876-77 (1983) (noting that courts and commentators have failed to embrace hindsight approach articulated by Dean Wade and Dean Keeton); Vargo, supra note 27, at 543 (contending that Wade/Keeton test is heavily opposed by those in favor of negligence as only measure of liability); John W. Wade, *On the Effect in Product Liability of Knowledge Unavailable Prior to Marketing*, 58 N.Y.U. L. Rev. 734, 760 (1983) (concluding that, in warning cases, courts should apply negligence law; but unless they have already chosen to adopt strict liability they should decide issues in light of several factors).

⁵² 161 A.2d 69 (N.J. 1960) (liberalizing use of Uniform Commercial Code's implied warranty of merchantability in cases involving defective products and personal injury).

⁵³ 377 P.2d 897 (Cal. 1962) (creating new cause of action for strict liability in tort in defective products cases).

⁵⁴ Restatement (Second) of Torts (1965).

⁵⁵ Perhaps these decisions by influential courts and the adoption of strict products liability by the American Law Institute (ALI) generated the rapid expansion of products liability litigation. Or maybe they were merely at the cutting edge of a change that would

unparalleled speed. The nation's unprecedented wealth, an increasing societal emphasis on individual rights, a growing awareness of safety concerns, and the desire to include as many citizens as possible in our "great society"⁵⁶ were all likely factors contributing to the courts' desire for a rapid change in the law. Courts seemed to be in a hurry to ease injured consumers' path to recovery.

To most courts, section 402A's strict liability in tort appeared to provide the most favorable path toward increasing liability.⁵⁷ However, the early decisions did not put much emphasis on distinguishing among manufacturing defects, design defects, and failure to warn. An understandable lag developed between the speed with which courts were latching on to the concept of strict products liability and fleshing out its particulars. It seemed that courts were much more certain that they wanted to adopt strict liability in tort than they were about the details of what adopting strict products liability meant.

Most of the early cases applying strict liability in tort involved manufacturing defects rather than design defects or inadequate warnings. Some scholars point to this and other evidence to argue that section 402A intended to impose strict products liability only on manufacturing defects.⁵⁸ Based on this theory, Dean Prosser⁵⁹ and the ALI have assumed that design and warning cases would be litigated, if at all, under negligence principles.⁶⁰ Others argue that rather than focusing on manufacturing defects, section 402A and the early strict products liability cases simply were not thinking in terms of specific

have taken hold in the courts regardless. The answer is, of course, elusive and subject to debate. Perhaps the safest speculation is that the prestige of the California and New Jersey courts and the ALI, and the general societal trend toward increased concern for the safety of individual consumers, both played important roles in products liability's explosive growth.

⁵⁶ See Lyndon B. Johnson, Remarks at the University of Michigan (May 22, 1964), in 1963-64 Pub. Papers 704; see also Peter B. Edelman, Toward a Comprehensive Anti-poverty Strategy: Getting Beyond the Silver Bullet, 81 Geo. L.J. 1697, 1710-11 (1993) (explaining meaning and effect of President Johnson's "Great Society" speech).

⁵⁷ Of course, use of the implied warranty of merchantability grew concurrently with strict liability in tort. However, strict liability in tort's less doctrinally strained (and perhaps more exotic) approach to recovery received greater attention both in the courts and in the academy.

⁵⁸ See Henderson & Twerski, Stargazing, *supra* note 34, at 1333 & n.8; see also Davis, *supra* note 40, at 1233 & n.50; Henderson & Twerski, *supra* note 33, at 3-4; George L. Priest, Strict Products Liability: The Original Intent, 39 Def. L.J. 279, 293-94 (1990).

⁵⁹ Dean William Prosser served as the ALI's Reporter for section 402A. See Restatement (Second) of Torts intro. (1965).

⁶⁰ See Henderson & Twerski, Stargazing, *supra* note 34, at 1333 n.8. Professors Henderson and Twerski contend that *Greenman* did not make it clear whether it was addressing a design defect or a manufacturing defect. *Id.* at 1333 n.9.

types of defects.⁶¹ This position, which seems more tenable, holds that the early strict products liability cases approached defects generically, and that only later did courts begin to recognize that different types of defects might call for different types of analyses.⁶²

Regardless of whether the original orientation was toward manufacturing defects or whether it was simply unclear what types of defects would be included, the lack of specific focus on design defects in the early cases is likely a significant factor in the present overlap between negligence and strict products liability. Most of the early cases did not entail claims of defectiveness that could, even in retrospect, be classified as design claims.⁶³ Rather, the early cases generally fell within what we now describe as the manufacturing defect category; cases involving conscious design decisions did not become common until the early 1970s.⁶⁴

When the expansion⁶⁵ to design defects took place, most courts already had adopted a defectiveness test for strict products liability claims based on section 402A's consumer expectations analysis. This consumer expectations analysis attaches liability when a product is sold in a condition more dangerous than an ordinary consumer would expect.⁶⁶ The first decisions applying strict products liability to con-

⁶¹ See, e.g., Robert L. Rabin, Restating the Law: The Dilemma of Products Liability, 30 U. Mich. J.L. Reform 197, 203 (1997) (commenting, on whether *Greenman* was addressing design defect or manufacturing defect, that "[t]he court simply was not thinking in those terms").

⁶² See Gary T. Schwartz, New Products, Old Products, Evolving Law, Retroactive Law, 58 N.Y.U. L. Rev. 796, 819 (1983) (contending that all products liability decisions since 1963 may be viewed as working out implications of early landmark decisions, rather than as repudiating or superceding them). Others assert that the early strict liability cases conflict with later courts' and scholars' efforts to divide products liability claims into different types of defects and analyses. See Vandall, *supra* note 28, at 177 (suggesting that court in *Greenman* recognized "the difficulty inherent in distinguishing between types of defects" and asserting that making distinction between manufacturing and design defect is not defensible); Ellen Wertheimer, Calabresi's Razor: A Short Cut to Responsibility, 28 Stetson L. Rev. 105, 113-14 & n.25 (1998) (arguing that *Greenman* court did not analyze whether claim at issue involved design defect or manufacturing defect because only relevant question was whether some sort of defect existed).

⁶³ See Henderson & Twerski, *supra* note 33, at 4 (noting that early strict products liability claims typically were not based on design defects); see also Davis, *supra* note 40, at 1232-33; Owen, Graying, *supra* note 40, at 1243.

⁶⁴ See *supra* note 63 and accompanying text.

⁶⁵ Again, depending on one's interpretation, the expansion either contradicted the early cases' intended scope of strict liability or merely clarified the scope. See *supra* notes 61-65 and accompanying text.

⁶⁶ Restatement (Second) of Torts § 402A cmts. g & i. Comment i refers to "the ordinary consumer who purchases [the product]," and comment g refers to the "ultimate" consumer. The question of whether the expectations of the ultimate consumer or the ordinary consumer who purchases should govern the analysis is raised in W. Page Keeton et al., *Products Liability and Safety: Cases and Materials* 194 (2d ed. 1989).

scious design decisions typically utilized this consumer expectations test.⁶⁷ However, many courts quickly realized that using a consumer expectations test in design defect cases presents implications significantly different from those involved in applying the test to manufacturing-defect cases.

Unlike manufacturing-defect claims, which typically involve a single product that fails to conform to the manufacturer's intended standards, design defect cases implicate a manufacturer's entire product line.⁶⁸ Thus, the consequences of finding liability are more severe. Further, commentators have noted that in design cases, the polarities of the consumer expectations test may be extreme; the test might be overly harsh on some claimants and overly helpful to others. When product designs present obvious dangers, claimants cannot recover under consumer expectations even if the manufacturer easily could have prevented a great deal of harm at small economic and utility cost. Because reasonable consumers' expectations of danger are met in such cases, liability cannot attach regardless of how outrageously the manufacturer designed the product.⁶⁹ However, when a product design's danger is latent and unforeseen by consumers, the manufacturer may lose under the consumer expectations test regardless of how much effort was undertaken to make the product as safe as possible.⁷⁰ In this context, the test may assist consumers in prevailing at a higher level than is societally optimal. Finally, an increasing number of courts and commentators have argued that in many cases involving sophisticated product designs, consumers do not have precise expectations, rendering the test unworkable.⁷¹ As courts struggled with these

⁶⁷ James A. Henderson, Jr. & Theodore Eisenberg, *The Quiet Revolution in Products Liability: An Empirical Study of Legal Change*, 37 *UCLA L. Rev.* 479, 484 (1990).

⁶⁸ See *Banks v. ICI Americas, Inc.*, 450 S.E.2d 671, 673 (Ga. 1994); see also Lawrence H. Haber, *The Design Defect Test in New Jersey: An Unworkable Standard*, 10 *Hofstra L. Rev.* 1297, 1297-98 (1982); Chun, *supra* note 40, at 1660; R. Ben Hogan, III, *Risk/Utility or Consumer Expectation: What Should Be Alabama's Analysis for Product Liability Design Cases?*, 56 *Ala. Law.* 166, 166 (1995).

⁶⁹ See John Neely Kennedy, *The Role of the Consumer Expectation Test Under Louisiana's Products Liability Tort Doctrine*, 69 *Tul. L. Rev.* 117, 148 (1994) (illustrating how under consumer expectations test, manufacturer who easily could have redesigned product escapes liability if risk is within expectation of ordinary consumer).

⁷⁰ See *id.* at 149 (explaining that when danger is not obvious to consumer, test causes juries to require product to be safer than it needs to or can be).

⁷¹ See *Soule v. Gen. Motors Corp.*, 882 P.2d 298, 308 (Cal. 1994) (arguing that complex product may cause injury in way that does not engage its ordinary consumer's reasonable expectations about safe performance); see also *Collazo-Santiago v. Toyota Motor Corp.*, 937 F. Supp. 134, 140 (D.P.R. 1996) (refusing to give jury instruction for consumer expectations test in technical case in which court found that ordinary consumers would have no realistic expectations); *Potter v. Chi. Pneumatic Tool Co.*, 694 A.2d 1319, 1333 (Conn. 1997) (recognizing "that there may be instances involving complex product designs in

difficulties in applying consumer expectations to design, many began employing the risk/utility test instead.⁷²

In addition to these more concrete concerns with the use of the consumer expectations test in design defect cases, beginning in the early 1980s a conservative backlash against the rapid expansion of plaintiff-friendly rules in products liability cases likely contributed to the trend away from consumer expectations and toward risk/utility in design cases.⁷³ The risk/utility test allows manufacturers to defend themselves against the staggering liability that a finding of defective design could impose upon them by proving that their products are, on balance, reasonably safe.⁷⁴

Of course, this focus on balancing and reasonableness sounds similar to negligence because, as noted above, the test is at core simply a reformulation of Judge Learned Hand's famous negligence

which an ordinary consumer may not be able to form expectations of safety"); Ray ex rel. Holman v. BIC Corp., 925 S.W.2d 527, 531 (Tenn. 1996) ("[The] test can only be applied to products about which an ordinary consumer would have knowledge. By definition, it could be applied only to those products in which '*everyday experience* of the product's users permits a conclusion.'" (quoting *Soule*, 882 P.2d at 308)); John B. Farley et al., Recent Developments in Connecticut Products Liability Law: Breaking New Ground in Design Defect Cases, 73 Conn. Bus. J. 41, 47 (1999) (doubting whether, in some complex design cases, consumer will be able to form reasonable expectations); Hogan, supra note 68, at 169 ("Consumer[s] [do] not know what to expect because [they] have no idea how safe the product could be made . . .") (internal quotation omitted); William R. Pilat, Strict Liability and Design Defect: Do Texas Courts Provide Jury Instructions that Instruct?, 29 Hous. L. Rev. 633, 638-39 (1992) (questioning consumers' ability to develop expectations of how safely product can be manufactured); Powers, supra note 50, at 653 (arguing that in design cases, consumer expectations do not provide correct standard upon which to judge product because complexity involved fails to generate "concrete consumer expectations"); Aaron D. Twerski, From Risk-Utility to Consumer Expectations: Enhancing the Role of Judicial Screening in Product Liability Litigation, 11 Hofstra L. Rev. 861, 900-01 (1983) (contending that criticism of consumer expectations test boils down to difficulty in pinpointing what expectations are with regard to product); Chun, supra note 40, at 1675 (arguing that when consumer is unable to form reasonable expectations as to product, products will pass consumer expectation test).

⁷² See Hogan, supra note 68, at 168-69 (explaining trend in products liability design cases towards risk/utility test and away from consumer expectations test); Kennedy, supra note 69, at 138 (asserting that majority of jurisdictions employ risk/utility test over consumer expectations test).

⁷³ See Henderson & Eisenberg, supra note 67, at 488-89 (describing how courts in early to mid-1980s changed direction and moved away from pro-plaintiff stances); Owen, supra note 33, at 278 (observing that pro-consumer doctrine began to fail due to conservatism of 1980s); Pilat, supra note 71, at 648 (noting backlash against expansion of tort remedies since 1980s).

⁷⁴ See Aaron Gershonowitz, The Strict Liability Duty to Warn, 44 Wash. & Lee L. Rev. 71, 85 (1987) ("The risk/utility component of the rule provides two important benefits: It eliminates obvious dangers and justifies the manufacturer in exposing consumers to some dangers.").

formula.⁷⁵ As courts began adopting risk/utility, however, they were—and most remain—adamant that the strict liability version of risk/utility balancing in design cases is different from negligence risk/utility balancing in design cases.

One of the most frequently repeated distinctions is that even though both risk/utility tests focus on reasonableness, strict liability focuses on the reasonableness of the product, whereas negligence focuses on the reasonableness of the seller.⁷⁶ In theory a product manufacturer could act reasonably in designing a product, but its product could nevertheless be unreasonably dangerous. Perhaps, however, the key words in this formulation are “in theory.” In practice, manufacturers consciously choose how to design their products. Asking whether the product is reasonable tends to circle back to asking whether the manufacturer used due care in designing it.⁷⁷ The effort at distinguishing between reasonable products and reasonable manufacturers may be more of a weak excuse for articulating two tests than a true justification.

⁷⁵ See *supra* note 23 and accompanying text; see also Pilat, *supra* note 71, at 637 (noting that risk/utility test evolved from Judge Learned Hand’s formula).

⁷⁶ See *Chase Manhattan Bank v. Skidmore, Owings & Merrill*, 905 F. Supp. 107, 122 (S.D.N.Y. 1995) (distinguishing strict liability and negligence in that strict liability focuses on product, whereas negligence focuses on conduct of manufacturer); *Dart v. Wiebe Mfg., Inc.*, 709 P.2d 876, 880 (Ariz. 1985) (en banc) (same); *Voss v. Black & Decker Mfg. Co.*, 450 N.E.2d 204, 207 (N.Y. 1983) (differentiating strict products liability for design defect because plaintiff is not required to prove that manufacturer acted unreasonably in designing product). The validity of this distinction is falling under increasing criticism. See Keith Miller, *Design Defect Litigation in Iowa: The Myths of Strict Liability*, 40 *Drake L. Rev.* 465, 480 (1991) (doubting whether courts cause “anything other than confusion” when they apply both strict liability and negligence to design defect cases); John E. Simonett, *Dispelling the Products Liability Syndrome: Tentative Draft No. 2 of The Restatement (Third)*, 21 *Wm. Mitchell L. Rev.* 361, 363 (1995) (challenging idea that strict liability would reduce transactional costs: Since proof of design defect requires so many experts, it is essentially no different from negligence suit); Christine M. Moylan, *Comment, In Pursuit of the Appropriate Standard of Liability for Defective Product Designs*, 42 *Me. L. Rev.* 453, 464 (1990) (declaring skeptically that any difference between negligence and strict liability “is so subtle as to be incomprehensible for most juries”).

⁷⁷ See Miller, *supra* note 76, at 481 (maintaining that although strict liability and negligence are supposed to focus on different things, in application risk/utility test for strict liability is identical to risk/utility test used for negligence cases); Carole A. Cheney, *Comment, Not Just for Doctors: Applying the Learned Intermediary Doctrine to the Relationship Between Chemical Manufacturers, Industrial Employers, and Employees*, 85 *Nw. U. L. Rev.* 562, 570 (1991) (musing that although some courts claim they are imposing strict liability by focusing on product instead of manufacturer’s actions, test applied is usually fault based); Moylan, *supra* note 76, at 464 (wondering whether it may be difficult for jury to focus on product without considering manufacturer’s conduct as well); Kenneth M. Willner, *Note, Failures to Warn and the Sophisticated User Defense*, 74 *Va. L. Rev.* 579, 582-83 (1988) (offering view that strict liability, when applied in failure-to-warn cases, evaluates manufacturer’s conduct when formulating warning even though test should focus only on product).

As noted above,⁷⁸ courts also sometimes insist that strict liability risk/utility is different from negligence risk/utility in that knowledge of later-discovered risks is imputed in strict liability claims.⁷⁹ For example, suppose that at the time automobile tires were made the manufacturer could not reasonably foresee that the tires were designed in a way that could cause them to suffer blowouts at high speeds. Suppose further that after the tires hit the market this problem became apparent, causing injuries to numerous consumers. In a negligence risk/utility analysis, no design defect would exist because the risk was not reasonably foreseeable at the time of manufacture. Under strict liability, however, some jurisdictions assert they would impute knowledge of the risk. If the manufacturer is assumed to have known that the tires could blow out and did not correct the problem, the design likely would be defective under a risk/utility analysis. Thus, strict liability risk/utility could lead to liability more frequently than negligence risk/utility.

This effort at a distinction presents at least two serious difficulties. First, truly unforeseeable risks are rare. In the hypothetical above, whether tires easily blow out is a design concern governed by laws of physics that have been known for a long time. It is unlikely in the extreme that the manufacturer, held to the standard of an expert in the industry,⁸⁰ would be reasonably unaware of any risks that could

⁷⁸ See *supra* notes 36-38, 49-51 and accompanying text.

⁷⁹ For example, one court distinguished negligence from strict liability as follows: While liability in a negligence case rests on whether the defendant acted as a reasonable person would have, in light of what it knew or should have known, liability in a strict liability case rests on whether a prudent manufacturer, if it were aware of dangers involved in using its products as those dangers are now known . . . would have placed the products into the stream of commerce.

Carter v. Johns-Manville Sales Corp., 557 F. Supp. 1317, 1318-19 (E.D. Tex. 1983). See also *Habecker v. Clark Equip. Co.*, 942 F.2d 210, 215 (3d Cir. 1991) (explaining that strict liability for design defects is distinguishable from liability for negligence only if actual risks and benefits of design are evaluated in strict liability case without any reference to foreseeable risks and benefits); *Cipollone v. Liggett Group, Inc.*, 649 F. Supp. 664, 669 (D.N.J. 1986) (writing that under New Jersey strict liability law, manufacturer is imputed knowledge of defect in its product as well as knowledge of other design alternatives); *Robertson v. Gen. Tire and Rubber Co.*, 462 N.E.2d 706, 710 (Ill. App. Ct. 1984) (holding that jury instruction imposing knowledge requirement was improper in strict liability design defect claim but permissible in negligence claim); *Bilotta v. Kelley Co.*, 346 N.W.2d 616, 622 (Minn. 1984) ("The distinction between strict liability and negligence in design defect and failure-to-warn cases is that in strict liability, knowledge of the condition of the product and the risks involved in that condition will be imputed to the manufacturer, whereas in negligence these elements must be proven."); *Phillips v. Kimwood Mach. Co.*, 525 P.2d 1033, 1038-39 (Or. 1974) (en banc) (averring that strict liability and negligence could be distinguished in design defect cases by imposition of constructive knowledge).

⁸⁰ See *Krummel v. Bombardier Corp.*, 206 F.3d 548, 558 n.3 (5th Cir. 2000) (Dennis, J., dissenting) (holding manufacturer to expert standard of knowledge available to relevant manufacturing community when product was manufactured); *Martin v. Michelin N. Am.*,

lead to this problem.⁸¹ Truly unforeseeable risks generally arise only in cases involving toxins (such as asbestos) and drugs,⁸² and even in these categories they are uncommon. For example, asbestos manufacturers contend that they reasonably did not discover the dangers of asbestos until relatively recently.⁸³ If a risk were truly unforeseeable, condemning the entire product line by imputing knowledge of the risk places the manufacturer in a no-win situation. Courts often emphasize that strict liability is not the same as absolute liability.⁸⁴ Condemning an entire product line based on a risk the manufacturer was powerless to foresee or protect against comes close to an absolute rule of recovery. Thus, because of the hesitancy to impute knowledge of unforeseeable risks in cases where it makes a difference, applying the Wade/Keeton approach when strict liability is pleaded rarely will make a difference in the outcome of a case.

Inc., 92 F. Supp. 2d 745, 753 (E.D. Tenn. 2000) (requiring manufacturers to have expert standard of knowledge in relevant manufacturing community at time that product is put on market); Carlin v. Superior Court, 920 P.2d 1347, 1351 n.3 (Cal. 1996) (stating that manufacturer is to be held to knowledge and skill of expert in field at time of distribution, is obliged to keep abreast of any scientific discoveries, and is presumed to know results of all such advances); Asbestos v. Bordelon, Inc., 726 So. 2d 926, 953 (La. Ct. App. 1998) (“[T]he manufacturer is held to the same standard of knowledge, skill, and care as that of an expert, which includes duty to test, inspect, research, and experiment”); Vassallo v. Baxter Healthcare Corp., 696 N.E.2d 909, 923-24 (Mass. 1998) (deciding that manufacturer would be held to standard of knowledge of expert); Lewis v. Ariens Co., 729 N.E.2d 323, 327 (Mass. App. Ct. 2000) (same).

⁸¹ Restatement (Third), supra note 6, § 2, reporters’ note to cmt. m, (“[I]n a claim based on design defect arising from mechanical products, a plaintiff who establishes that the product was put to a foreseeable use need not prove that the seller should have known of the risks that would materialize from such foreseeable use.”).

⁸² As the Restatement (Third) comments:

In cases involving a claim of design defect in a mechanical product, foreseeability of risk is rarely an issue as a practical matter The issue of foreseeability of risk is more complex in the case of products such as prescription drugs, medical devices, and toxic chemicals.

Id. § 2, cmt. m.

⁸³ Plaintiffs in asbestos cases challenge this contention. See, e.g., Beshada v. Johns-Manville Prods. Corp., 447 A.2d 539, 542 (N.J. 1982) (noting substantial factual dispute about what defendant asbestos manufacturers knew and when they knew it).

⁸⁴ See Anderson v. Owens-Corning Fiberglas Corp., 810 P.2d 549, 552 (Cal. 1991) (“From its inception, . . . strict liability has never been, and is not now, *absolute* liability. . . . [U]nder strict liability the manufacturer does not thereby become the insurer of the safety of the product’s use.” (quoting Daly v. Gen. Motors Corp., 575 P.2d 1162, 1166 (Cal. 1978))); Myrlak v. Port Auth., 723 A.2d 45, 52 (N.J. 1999) (“Simply because a plaintiff is not required to prove fault in a strict liability case does not mean that absolute liability will be imposed upon a manufacturer.”); Weiner v. Am. Honda Motor Co., 718 A.2d 305, 308 (Pa. Super. Ct. 1998) (“It is not the purpose of strict liability . . . to impose absolute liability on the product’s manufacturer or supplier since those entities are guarantors, not insurers, of the product’s safety”); Webb v. Navistar Int’l Transp. Corp., 692 A.2d 343, 350 (Vt. 1996) (“Strict liability is not absolute liability; manufacturers are not insurers of user safety.”).

A second difficulty is that, despite their bold rhetoric, courts are seldom willing to apply the imputed knowledge approach in those rare cases where it actually makes a difference. Rather, the tendency is to emphasize that imputed knowledge differentiates strict liability from negligence only in those cases in which defendant likely knew or should have known of the risk even without imputed knowledge.⁸⁵ Since this includes the vast majority of cases, generally the asserted distinction goes unchallenged. However, observers have noted that in the atypical case in which imputing knowledge would make the defendant liable even though it had no way of knowing of the risk, courts tend to find the approach too harsh and back away from applying it.⁸⁶ Thus, the Restatement (Third)'s reporters describe the imputed knowledge variation on the risk/utility test as an "idea [that] has not worn well with time."⁸⁷

Indeed, later in their careers, Dean Wade and Dean Keeton, who originally proposed the approach as a way to differentiate strict liability from negligence, repudiated imputed knowledge as too onerous to defendants.⁸⁸ In current practice, the imputed knowledge approach is closer to a harmless myth that serves to ease courts' awareness of confusion than a true distinction between negligence and strict liability.

In any event, the trend seems to be moving away from efforts to maintain substantive distinctions between negligence and strict liability in design and warning claims. Instead, courts increasingly are downplaying most distinctions, particularly with regard to the risk/util-

⁸⁵ See Restatement (Third), *supra* note 6, § 2, reporters' note to cmt. m, ("[I]t is interesting that even those cases that support the imputation principle do so primarily in the context of mechanical defects. . . . [I]n cases where it significantly affects defendants' liabilities, [it] appears to have little support.").

⁸⁶ See *id.* (remarking that although some cases appear to indicate leaning toward imputation of knowledge of unknowable risks upon manufacturer, "the overwhelming majority of courts" have evaluated products on basis of what dangers could have been known at time of marketing); see also Henderson & Twerski, *A Proposed Revision*, *supra* note 34, at 1531-32 (commenting that "overwhelming majority of jurisdictions" refuse to impute knowledge known at time of trial to design and warnings cases); Aaron D. Twerski, *A Moderate and Restrained Federal Product Liability Bill: Targeting the Crisis Areas for Resolution*, 18 U. Mich. J.L. Reform 575, 607 (1985) (concluding that most courts claiming to apply strict products liability are not prepared to impose liability for information defendant could not have reasonably foreseen at time of distribution); Ellen Wertheimer, *Unknowable Dangers and the Death of Strict Products Liability: The Empire Strikes Back*, 60 U. Cin. L. Rev. 1183, 1206 n.76 (1992) (discussing courts' refusal to impose upon manufacturers knowledge of all dangers in product, whether they were unknowable at time of marketing or not). However, some recent cases illustrate that the improved knowledge of risk doctrine is not yet dead. See, e.g., *Sternhagen v. Dow Co.*, 935 P.2d 1139, 1139 (Mont. 1997) (holding, in strict products liability case involving inherently unsafe product, that manufacturer is presumed to know inherent dangers of product).

⁸⁷ Restatement (Third), *supra* note 6, reporters' note to § 2 cmt. m. .

⁸⁸ See Keeton et al., *supra* note 9, at 697 n.21; Wade, *supra* note 51, at 761-64.

ity test.⁸⁹ Most distinctions that are being retained might be loosely described as “procedural” in that they do not affect the risk/utility test, which is the substantive heart of most design and warning defect analyses. For example, many jurisdictions limit the defendant’s ability to utilize comparative fault principles under strict liability, but not under negligence.⁹⁰ Further, courts allow all sellers in the chain of distribution to be sued under strict liability,⁹¹ whereas under negli-

⁸⁹ Restatement (Third), *supra* note 6, § 2 cmts. m & n. As one scholar has observed: [W]hile purporting to apply “strict” liability doctrine to design and warnings cases, courts in fact have been applying principles that look remarkably like negligence. That is, most courts in most contexts have been basing the defectiveness determination in both design and warnings cases on the risk-utility principles of balance, reasonableness, and foreseeability.

Owen, *supra* note 33, at 286-87. See also David M. Bienvenu, Jr., *Subsequent Remedial Measures and the Louisiana Code of Evidence: Some Thoughts on Interpretation*, 51 La. L. Rev. 1069, 1075 (1991) (repeating Fourth Circuit’s statement that distinction between strict liability and negligence “lessens considerably in failure to warn cases since it is clear that strict liability adds little in warning cases” (quoting *Werner v. Upjohn Co.*, 628 F.2d 848, 858 (4th Cir. 1980))); Michael D. Green, *The Road Less Well Traveled* (and Seen): *Contemporary Lawmaking in Products Liability*, 49 DePaul L. Rev. 377, 380 (1999) (“[C]ourts have moved away from the consumer expectations test for design defects [and] employed a risk-benefit standard in its place, essentially turning design defect law into a negligence standard”); 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, 1277 nn.57 & 59 (1991) (noting courts’ struggle to differentiate strict liability from negligence and use of cost-benefit analysis in majority of courts); Owen, *supra* note 40, at 1251-52 (explaining that by adopting risk/utility test for design defects, courts were actually reverting back to negligence law for definition of strict liability); John M. Thomas, *Defining “Design Defect” in Pennsylvania: Reconciling Azzarello and the Restatement (Third) of Torts*, 71 Temp. L. Rev. 217, 233-34 (1998) (“[C]ost-benefit analysis lies at the core of the negligence analysis, just as it lies at the core of the defect analysis.”); Jack Berman, Note, *Beshada v. Johns-Manville Products Corp.: The Function of State of the Art Evidence in Strict Products Liability*, 10 Am. J.L. & Med. 93, 100 n.38 (1984) (observing trend for scholars to argue that liability standard under strict liability and negligence is essentially identical).

⁹⁰ See Restatement (Third), *supra* note 6, § 1 cmt. a; see also *Roy v. Star Chopper Co.*, 584 F.2d 1124, 1133 (1st Cir. 1978) (holding that contributory negligence is not defense in strict liability action under Rhode Island law); *Melia v. Ford Motor Co.*, 534 F.2d 795, 802 (8th Cir. 1976) (concluding that applying comparative negligence statute in strict liability case would be inappropriate); *Raines v. Day Mixing Co.*, No. 83-4114, 1986 WL 1558, at *4 (E.D. Pa. Jan. 30, 1986) (declaring that Pennsylvania law “will not permit the interjection of principles of comparative negligence into strict liability actions”); *Maduik v. Agency Rent-A-Car*, 953 P.2d 24, 27 (Nev. 1998) (mandating that “comparative negligence reductions do not apply when the claim is based on strict liability”); *Kirkland v. Gen. Motors Corp.*, 521 P.2d 1353, 1367 (Okla. 1974) (ruling that comparative negligence statutes have no application to actions based upon strict products liability); *Smith v. Smith*, 278 N.W.2d 155, 160-61 (S.D. 1979) (denying contributory negligence defense in strict liability claims); *Phillips v. Duro-Last Roofing, Inc.*, 806 P.2d 834, 836-37 (Wyo. 1991) (refusing to extend application of allocation and apportionment statute).

⁹¹ See Restatement (Third), *supra* note 6, § 1 cmt. e; see also *Torres v. Goodyear Tire & Rubber Co.*, 901 F.2d 750, 751 (9th Cir. 1990) (determining that under Arizona law, trademark licensor “significantly involved in the overall process by which the product

gence each defendant must be shown to have acted unreasonably. Thus, even when risk/utility is the test, under strict liability, distributors and retailers are in effect vicariously responsible for the manufacturer's decisions, at least in design defect cases.

A rarely decisive distinction sometimes noted by observers is that the risk/utility test may be easier on small manufacturers in negligence claims than in strict liability claims. Smaller manufacturers may have limited resources for discovering potential dangers in their products and for developing alternative designs. Thus, under negligence risk/utility balancing they may be acting reasonably, given their resources, even in producing some dangerous products without providing warnings or design protections. Since strict liability risk/utility balancing focuses on the reasonableness of the product rather than the reasonableness of the manufacturer, small manufacturers may be held responsible for dangers or design alternatives known or used in the relevant manufacturing community, even if the alternatives are not reasonably available to them.⁹² Although this distinction is theoretically valid, it

reaches consumers" could be held strictly liable); *Smith v. Fiat-Roosevelt Motors, Inc.*, 556 F.2d 728, 731-32 (5th Cir. 1977) (finding importer-distributor subject to strict liability for uncrashworthy car); *Oser v. Wal-Mart Stores, Inc.*, 951 F. Supp. 115, 118 (S.D. Tex. 1996) ("[U]nder the law of strict products liability, retailers as well as manufacturers can be liable for injuries caused by manufacturing and design defects, even when retailers are not involved in the manufacturing or design process but instead serve only as conduits for the product between manufacturers and the public."); *Stillie v. Am. Int'l, Inc.*, 850 F. Supp. 960, 962 (D. Kan. 1994) (imposing strict liability on seller in chain of distribution immediately following remanufacture); *Ghionis v. Deer Valley Resort Co., Ltd.*, 839 F. Supp. 789, 797 (D. Utah 1993) (denying summary judgment to defendant in strict liability claim against rental shop for ski equipment); *Curry v. Sile Distributions*, 727 F. Supp. 1052, 1054 (N.D. Miss. 1990) ("The duty to sell products free from defects which render them unreasonably dangerous extends to manufacturers, distributors and retailers alike."); *Lawrence v. Brandell Prods., Inc.*, 619 So. 2d 427, 428-29 (Fla. Dist. Ct. App. 1993) (asserting that sellers, distributors, and retailers can be held strictly liable); *Mobley v. S. Fla. Beverage Corp.*, 500 So. 2d 292, 293 (Fla. Dist. Ct. App. 1986) (supporting application of strict liability to retailers for defects over which it has no control); *Visnoski v. J.C. Penney Co.*, 477 So. 2d 29, 29 (Fla. Dist. Ct. App. 1985) (enforcing strict liability in context of nonmanufacturing sellers); *Giuffrida v. Panasonic Indus. Co.*, 607 N.Y.S.2d 72, 72 (N.Y. App. Div. 1994) ("Distributors of defective products, as well as retailers and manufacturers, are subject to potential strict products liability.");

⁹² See Restatement (Third), supra note 6, § 1 cmt. a; see also *Kearl v. Lederle Lab.*, 218 Cal. Rptr. 453, 459 (Cal. Ct. App. 1985) (contending that negligence is more protective of smaller manufacturers because "we can easily conceive of situations in which a manufacturer's cost of insuring against strict liability for injuries resulting from product design would 'place the cost of research development and eventual marketing of new [products] beyond that which manufacturers, especially smaller manufacturers, are willing to risk'" (quoting *Feldman v. Lederle Lab.*, 460 A.2d 203, 209 (N.J. Super. Ct. App. Div. 1983), rev'd, 479 A.2d 374 (N.J. 1984))), overruled by *Brown v. Superior Court*, 751 P.2d 470 (Cal. 1988); *Henderson & Twerski*, supra note 1, at 265 ("[C]ourts may believe that a 'reasonable manufacturer' standard would not be sufficiently demanding of the smaller manufacturer, who may be unable to invest heavily in research and development."); *Thais L.*

is likely rare that a small manufacturer's available knowledge of risks, or ability to develop reasonable alternative designs, would be far enough below industry standards to make a difference, particularly in the present era of unprecedented access to information via the Internet and online computer databases.

*D. Legal Scholars' Views on the Rhetorical Impact
of Negligence Language Versus Strict Liability Language
in Risk/Utility Analyses*

As addressed above, the Restatement (Third) firmly supports the trend toward using a substantively identical risk/utility test under negligence and strict liability in design and warning claims. Indeed, despite acknowledging the relatively few nonsubstantive distinctions, the Restatement (Third) describes the difference between negligence and strict liability in this context as a mere "rhetorical preference."⁹³ Because of the great respect afforded to the ALI and its projects, the Restatement (Third)'s position may, in addition to reflecting the trend, significantly further it.⁹⁴

Given that rhetoric is increasingly viewed as one of the only differences between negligence and strict liability in design and warning, an obvious question arises regarding which rhetorical formulation is preferable to plaintiffs and which is preferable to defendants. Plaintiffs generally have a choice whether to describe their risk/utility test in negligence terms, strict liability terms, or, in most jurisdictions, in both negligence and strict liability terms.⁹⁵ Does their choice between

Richardson, *The Proposed Amendment to Federal Rule of Evidence 407: A Subsequent Remedial Measure that Does Not Fix the Problem*, 45 Am. U. L. Rev. 1453, 1465 (1996) (repeating Restatement (Third) explanation that courts avoid being too forgiving of small manufacturers by focusing on products, not manufacturer conduct); Michael J. Töke, *Restatement (Third) of Torts and Design Defectiveness in American Products Liability Law*, 5 Cornell J.L. & Pub. Pol'y 239, 245 (1996) (same).

⁹³ Restatement (Third), *supra* note 6, § 1 cmt. a.

⁹⁴ See Curtis R. Reitz, *Symposium: Consumer Protection and the Uniform Commercial Code: Manufacturers' Warranties of Consumer Goods*, 75 Wash. U. L.Q. 357, 405 (1997) (predicting that Restatement (Third) "is likely to be influential in refining substance of tort law as determined by state courts"); Alvin B. Rubin, *Mass Torts and Litigation Disasters*, 20 Ga. L. Rev. 429, 444 (1986) (claiming that ALI not only codifies common law but also has greatly influenced law's development in every state); Shapo, *supra* note 26, at 636, 692 (reporting ALI director Herbert Wechsler's comment that first Restatement had "been a vital force in shaping the law of torts," and that Restatements collectively received 125,000 citations from courts, of which 51,000 were to Torts Restatements); Carl Tobias, *Common Sense and Other Legal Reforms*, 48 Vand. L. Rev. 699, 718 (1995) ("The [ALI's] issuance of the Restatement of Torts (Second) Section 402A in 1965 profoundly influenced the direction of products liability law . . .").

⁹⁵ Cf. Restatement (Third), *supra* note 6, § 2 cmt. n (warning that submitting multiple theories generates juror confusion and might result in inconsistent verdicts). Although the Restatement (Third) asserts that plaintiffs may choose only one theory of liability, most

the rhetorical frameworks of negligence versus strict liability have any impact on jurors? Not only is this question important, but given the demise of substantive distinctions, it may in many cases be the only important question in choosing a theory of liability. Observers have developed at least three theories regarding the impact of using negligence language versus strict liability language.

1. *Arguing That Use of Negligence Language Favors Plaintiffs*

Perhaps the dominant theory is that, all other things being equal, plaintiffs should prefer to present design and warning claims with negligence language rather than with strict liability language. This theory may be counterintuitive, or at least ironic, in that strict liability was developed as a means to ensure that plaintiffs would prevail more easily than under negligence.⁹⁶ However, a 1974 article by Paul D. Rheingold, a prominent practitioner, speculated that strict liability has not done much to benefit plaintiffs. He explained:

More plaintiffs would prefer to present their respective cases to a jury on a negligence, rather than on a strict liability, basis. In McLuenesque terms negligence is “hot” and strict liability is “cold.” It is easier to prevail by showing that the defendant did something wrong than that there is something technically defective about the product.⁹⁷

In other words, jurors might be more likely to award damages if they are focused on a moral failing by the manufacturer—a failure to act reasonably—than if their focus is directed to a technical legal doctrine that allows liability regardless of blameworthiness.

jurisdictions disagree, allowing plaintiffs to plead multiple products design and warning causes of action under negligence, strict liability in tort, and the implied warranty of merchantability. Cf. Marshall S. Shapo, *The Law of Products Liability* § 26.02 (2d ed. 1990) (commenting skeptically on broad judicial practice of “stacking” multiple doctrines and meshing alternative theories of liability in decisions).

⁹⁶ See *Greenman v. Yuba Power Prods. Inc.*, 377 P.2d 897, 901 (Cal. 1962) (“The purpose of [strict liability] is to insure that the costs of injuries resulting from defective products are borne by the manufacturers that put such products on the market rather than by the injured persons who are powerless to protect themselves.”); see also *Escola v. Coca Cola Bottling Co.*, 150 P.2d 436, 440 (Cal. 1944) (Traynor, J., concurring) (“[I]t should now be recognized that a manufacturer incurs an absolute liability when an article that he has placed on the market, knowing that it is used without inspection, proves to have a defect that causes injury to human beings . . . [e]ven if there is no negligence”); Dan B. Dobbs, *The Law of Torts* 970-71 (2000) (perceiving that in some cases manufacturer may not be found negligent, but under strict liability rules could be fully liable because defendant’s reasonableness is irrelevant); David G. Owen et al., 1 *Madden & Owen on Products Liability* 21 (3d ed. 2000) (writing that California Supreme Court announced remedy of strict liability in *Greenman* without necessity of proving negligence).

⁹⁷ Paul D. Rheingold, *The Expanding Liability of the Product Supplier: A Primer*, 2 *Hofstra L. Rev.* 521, 531 (1974).

Although empirical support was lacking, this proposition apparently gained the support of many legal scholars. At a 1994 symposium addressing the Restatement (Third), at that time a work in progress, a panel of distinguished products liability scholars was asked how jurors respond to the rhetoric of negligence versus the rhetoric of strict liability. One of the panelists referred to Mr. Rheingold's theory as establishing the rhetorical superiority of negligence, and none of the other panelists dissented.⁹⁸ Other scholars have also supported or noted support for the theory.⁹⁹

In 1996, one of the authors served as a juror in a design defect trial in Santa Monica, California, in which the plaintiff's case was argued under both negligence and strict liability theories. This experience provided an unusual opportunity to observe firsthand how one jury responded to the differing rhetoric, and the jurors' deliberations were analyzed in an article in the *Northwestern University Law Review*.¹⁰⁰ Although the author's observations were nonscientific and related to only one jury, the reactions of his fellow jurors seemed to support Mr. Rheingold's theory that negligence language is better for plaintiffs than strict liability language.

Despite being permitted to take the jury instructions, which included separate definitions of defectiveness under negligence language and strict liability language, into the deliberation room, the jurors seemed inclined to disregard that there were separate defini-

⁹⁸ Richard L. Cupp, Jr., *The "Uncomplicated" Law of Products Liability: Reflections of a Professor Turned Juror*, 91 *Nw. U. L. Rev.* 1082, 1094 n.45 (1997). Mr. Rheingold's theory is also presented in at least one leading products liability casebook. See David G. Owen et al., *Products Liability and Safety: Cases and Materials* 170 (3d ed. 1996).

⁹⁹ See, e.g., Anita Bernstein, *How Can a Product Be Liable?*, 45 *Duke L.J.* 1, 10 n.31 (1995) (providing "sampler of cases involving defective products where courts rejected or ignored strict products liability as descriptive label, yet had no trouble finding in favor of plaintiffs using negligence reasoning"); Jason S. Johnston, *Punitive Liability: A New Paradigm of Efficiency in Tort Law*, 87 *Colum. L. Rev.* 1385, 1386 n.4 (1987) (arguing that unlike simple negligence cases, complexity of design defect cases causes jury decisions to "degenerate into irrational, unpredictable, emotional reactions"); Martin A. Kotler, *Utility, Autonomy and Motive: A Descriptive Model of the Development of Tort Doctrine*, 58 *U. Cin. L. Rev.* 1231, 1234 (1990) ("[P]laintiffs' attorneys will attempt to prove fault, if possible on the facts, rather than engage in the niceties of a strict liability case."); William C. Powers, Jr., *The Persistence of Fault in Products Liability*, 61 *Tex. L. Rev.* 777, 808-09 (1983) (advising courts to implement strict liability with doctrinal rules because jurors are undoubtedly less familiar with concept of strict liability than with concept of fault); Frank J. Vandal, *Applying Strict Liability to Professionals: Economic and Legal Analysis*, 59 *Ind. L.J.* 25, 45 (1983) (sensing that "there is some feeling that damage verdicts in strict liability cases might be lower than in negligence cases").

¹⁰⁰ See Cupp, *supra* note 98, at 1084-86, 1105, 1107.

tions.¹⁰¹ Rather, the jurors seemed to focus much more on their own general sense of justice than on the language of the jury instructions.¹⁰² Deliberations centered around whether it would be “fair” to impose liability on the manufacturer, and the fairness discussion was unconsciously couched in the language of negligence, i.e., whether the manufacturer acted reasonably or unreasonably in the way it designed the product at issue.¹⁰³ Regardless of the instructions, most of the jurors only wanted to find liability if the manufacturer was at fault. Several of them seemed frustrated and upset by the strict liability concept of imposing liability without finding fault.¹⁰⁴

2. *Arguing That Use of Strict Liability Language Favors Plaintiffs*

Professors James Henderson and Aaron Twerski, the Reporters for the Restatement (Third), have supported a theory more closely in line with the original goals of strict products liability: They believe that strict liability language may be more helpful to plaintiffs than negligence language. Focusing on warnings claims, Professors Henderson and Twerski contend that using different language to describe negligence and strict liability is merely a “word game.”¹⁰⁵ Playing this word game, they believe, leads to mistakes:

So long as everyone understands that nothing more than a word game is being played, there is nothing inherently wrong in defining strict liability for product defects in negligence terms. Indeed, if everybody were likely to understand that much, it would do no real harm to call this “thunderbolt liability” or “gonzo liability.” However, people tend to give real meaning to differences in terminology; they forget that word games are being played. Thus, although mixing negligence and strict liability concepts is often a game of semantics, the game has more than semantic impact—it breeds confusion and, inevitably, bad law.¹⁰⁶

¹⁰¹ Id. at 1096. Indeed, the author was not even confident that the jury initially understood that differences existed between the negligence instructions and the strict liability instructions. Id.

¹⁰² Id.

¹⁰³ Id. at 1096-99.

¹⁰⁴ Id. at 1096.

¹⁰⁵ Henderson & Twerski, *supra* note 1, at 277. Describing it as a “stark reversal,” Professor David Owen points out the irony in Professors Henderson and Twerski’s criticizing the word game in this article but then employing the word game in the Restatement (Third). See Owen, *supra* note 23, at 749 n.32.

¹⁰⁶ Henderson & Twerski, *supra* note 1, at 277-78. Several courts and commentators agree with the assessment that using both negligence and strict liability language to describe the same substantive test promotes confusion. See, e.g., *Carlin v. Superior Court*, 920 P.2d 1347, 1381 (Cal. 1996) (Baxter, J., dissenting) (quoting Henderson & Twerski, *supra*, for proposition that mixing negligence and strict liability creates confusion and bad law); *Hauenstein v. Loctite Corp.*, 347 N.W.2d 272, 275 (Minn. 1984) (observing confusion

Further, Henderson and Twerski apparently perceive strict liability language, rather than negligence language, as more beneficial to plaintiffs in the word game: "Perhaps the only practical difference between negligence and strict liability cases is that juries occasionally will be harder on defendants when applying a strict liability instruction than they would be when holding them to the standard of an expert in the field."¹⁰⁷

Certainly it is conceivable that strict liability language might lead some jurors to find liability more readily than does negligence language. Even if the same substantive test is used, the words "strict liability" might support a notion that the defendant must be found liable regardless of the circumstances, whereas negligence might be perceived as forgiving of reasonable dangers in a product.¹⁰⁸ The term "strict liability" does not sound like a standard under which the defendant should find it easy to prevail.¹⁰⁹

caused by mixing negligence and strict liability in warnings case); Myron J. Bromberg, *The Mischief of the Strict Liability Label in the Law of Warnings*, 17 *Seton Hall L. Rev.* 526, 540 (1987) ("Strict liability for failure to warn has served to confuse judges and juries with no discernible benefits."); Michael A. Pittenger, *Reformulating the Strict Liability Failure to Warn*, 49 *Wash. & Lee L. Rev.* 1509, 1524-25 ("Both courts and commentators have argued that allowing plaintiffs simultaneously to plead two nearly identical theories of failure to warn, rather than being advantageous in some small way, only serves to complicate the litigation process and to confuse both judges and juries."); Wade, *supra* note 12, at 849-50 (claiming that use of both negligence and strict liability side-by-side generates confusion that "cannot really be justified").

Further, many lawyers believe that juror confusion generally benefits plaintiffs. See Walter W. Steele, Jr. & Elizabeth G. Thornburg, *Jury Instructions: A Persistent Failure to Communicate*, 67 *N.C. L. Rev.* 77, 99 (1988) (relating that many lawyers believe confusion in jury instructions benefits plaintiffs in personal injury cases). Steele and Thornburg identify the perceived source of the benefit as jurors reverting to their rough sense of justice when they do not understand the instructions, and that this weakens technical defenses. *Id.*

¹⁰⁷ Henderson & Twerski, *supra* note 1, at 276.

¹⁰⁸ Indeed, when one of the article's authors questions his torts students about whether as a plaintiff's attorney they would prefer their design defect risk/utility test to be described in negligence language or in strict liability language (a class exercise repeated every year), a large majority of them initially respond that strict liability language is better for the plaintiff.

¹⁰⁹ Several scholars have argued that strict liability does, or at least should, provide an advantage over negligence. See, e.g., Kevin M. Clermont & Theodore Eisenberg, *Do Case Outcomes Really Reveal Anything About the Legal System? Win Rates and Removal Jurisdiction*, 83 *Cornell L. Rev.* 581, 588 (1998) (commenting that legal criterion for strict liability highly favors plaintiffs); Richard Epstein, 2 *J. Legal Stud.* 151, 168-69 (1973) (emphasizing that strict liability creates presumption in favor of plaintiff because "there is no room to consider" defendant's intent or reasonableness); Peter H. Schuck, *Mass Torts: An Institutional Evolutionist Perspective*, 80 *Cornell L. Rev.* 941, 947 (1995) (claiming that particularly in area of products liability, tort liability favors plaintiffs); Wertheimer, *supra* note 86, at 1271 (stating that strict products liability was created in favor of plaintiff).

3. *Arguing That Plaintiffs May Benefit from Negligence Language in Stronger Cases and Strict Liability Language in Weaker Ones*

A third possibility is that the benefits of negligence versus strict liability depend on the strength of the plaintiff's case. One might speculate—as one of the authors did in a 1994 article in the *George Washington Law Review*¹¹⁰—that in a factually strong case, the plaintiff might benefit from using negligence language.¹¹¹ In factually strong design defect cases, for example, jurors are likely to appreciate that the manufacturers acted unreasonably in their design of the products at issue. In such cases, jurors likely are open to the moral language—the “hot” language¹¹²—of fault and blame present in negligence. When presented with argument and jury instructions affirming that blameworthiness is the foundation of liability, they are more likely to respond with higher damages than they might award if the case were described in the “cold,” unemotional language of strict liability.¹¹³ In factually strong cases, negligence language may give plaintiffs' lawyers an opportunity to fan the flames of jurors' natural desire to assign punishment for fault.

In contrast, strict liability language conceivably could render plaintiffs better results in cases that are factually weaker.¹¹⁴ When a case is factually weak, jurors are unlikely to attribute any blame to the defendant. They are unlikely to see any need for punishing the defendant, and the “hot” language of negligence may be lost on them. Indeed, its emphasis on fault as the basis for liability may greatly assist the defendant, since evidence of fault is weak.

If strict liability language is used, perhaps the plaintiff's attorney can steer the jury away from a fruitless search for blame. Where fault is difficult to find, the plaintiff's lawyer may benefit from being able to emphasize that fault is not at issue. The “cold” language of strict liability might offer a straw of hope that the jury could be convinced the law requires a finding of liability even though the defendant does not seem to have done anything wrong.

¹¹⁰ Richard L. Cupp, Jr., *Rethinking Conscious Design Liability for Prescription Drugs: The Restatement (Third) Standard Versus a Negligence Approach*, 63 *Geo. Wash. L. Rev.* 76, 108 (1994).

¹¹¹ See *id.* (speculating that jurors may award higher damages in negligence than in strict liability because they may want to punish manufacturer that they believe acted unreasonably); Cupp, *supra* note 98, at 1082 (same).

¹¹² See *supra* notes 101-04 and accompanying text.

¹¹³ *Id.*

¹¹⁴ See Cupp, *supra* note 98, at 1106.

If this semantic benefit of strict liability exists, it seems likely to make a difference only in relatively rare cases. Even under strict liability, the jury must still find that the product was unreasonably dangerous, and this is unlikely in cases where the manufacturer acted reasonably.¹¹⁵ Further, jurors may rebel at the notion that liability should attach in a case in which they see no fault—this may violate their sense of justice.¹¹⁶ Thus, if strict liability language benefits plaintiffs at all, it might be through confusion over what strict liability means. If a case is factually weak, and if the “flavor” of strict liability language manages to convey to the jurors the sense that liability should generally attach even to weaker cases, such language may give plaintiffs an occasional better result than negligence language. Of course, expanding liability through juror confusion is highly undesirable from a policy perspective. However, in some weak cases it may create an exception to the notion that negligence language benefits plaintiffs more than strict liability language.

II

A STUDY TESTING THE RHETORICAL IMPACT OF NEGLIGENCE LANGUAGE VERSUS STRICT LIABILITY LANGUAGE

The theories on juror reaction to negligence language versus strict liability language described above, while interesting, are little more than educated speculation. No empirical evidence previously has been compiled to support or contradict any of the theories. The question of how the rhetoric impacts jurors is of increasing importance in light of the Restatement (Third)'s declaration that in design and warning cases negligence and strict liability are substantively equivalent, its assertion that other than some procedural distinctions the differing theories only present a “rhetorical preference,”¹¹⁷ and the trend among courts to accept such reasoning.¹¹⁸

In an effort to provide some empirical evidence to address the question, a study of 306 persons performing actual jury service was undertaken. In the study, the volunteer jurors viewed videotapes of an abbreviated mock design defect case. Some of the jurors were told to base their judgment on a risk/utility test utilizing negligence language, others heard substantively the same test described with strict liability language, and others—a control group—were allowed to hear

¹¹⁵ See *supra* notes 79-80 and accompanying text.

¹¹⁶ See Cupp, *supra* note 98, at 1096-99.

¹¹⁷ See *supra* notes 93-94 and accompanying text.

¹¹⁸ See *supra* notes 32-38 and accompanying text.

only the facts of the case without any jury instructions or argumentation.¹¹⁹ All of the jurors were shown photographs of the product at issue and of a proposed reasonable alternative design.

The study volunteers were citizens summoned to jury duty at the Los Angeles County Superior Court in Santa Monica, California and the Ventura County Superior Court in Ventura, California.¹²⁰ With the cooperation of the courts' jury commissioners and staff, the jurors were approached immediately after completing jury duty and asked if they would be interested in volunteering to participate in the study. No money or other benefits were provided to the volunteers. Volunteers were shown one of five videotapes in rooms provided at the courthouses, and afterwards they were asked to complete a short questionnaire.¹²¹

The volunteers ranged in age from nineteen to eighty-two, with an average age of forty-seven.¹²² Fifty-five percent were female, and 45% were male. Reported family incomes ranged from under \$20,000 to over \$150,000, with an average income in the range of \$60,000 to \$70,000.¹²³ Juror pools in Los Angeles County and Ventura County are gathered from vehicle and voter registration lists.¹²⁴

Prior to their viewing one of the videotapes, the jurors were read a standardized instruction sheet. All of the volunteers were read nearly identical instructions,¹²⁵ with minor variations based on which

¹¹⁹ See *infra* Part II.B.

¹²⁰ Most of the juror volunteers participated in the study in the summer of 1997.

¹²¹ See *infra* notes 133-64 and accompanying text; *infra* Appendices I-IV.

¹²² The jurors' median age was also forty-seven.

¹²³ The median income range was also \$60,000 to \$70,000.

¹²⁴ Telephone Interviews by John R. Bamford, Research Assistant, with Peggy Yost, Court Programs Manager, Ventura County Superior Court (Aug. 23, 2001), and Fran Anderson, Assistant Division Chief, Los Angeles Superior Court (Aug. 30, 2001).

¹²⁵ For jurors seeing videotapes that included jury instructions on the law and oral argument, preliminary instructions were read aloud as follows (the text below includes written instructions, not read to the jurors, for the research assistants administering the study):

Thank you for participating in our jury study. I am about to read to you instructions regarding the study. Please listen to these instructions carefully, as I will not be able to answer any questions. You are about to watch a videotape in which a judge will read to you the facts of an imaginary lawsuit. You will then hear lawyers for the plaintiff and for the defendant presenting arguments. Following these arguments the judge will read jury instructions to you. You are one of the jurors in the trial of this lawsuit. Pay careful attention, as you would if you were a juror in an actual trial. You will notice while watching the videotape that the lawyers are reading from cue cards. Do not let this distract you. Rather, focus on the arguments the lawyers are making. After watching the videotape you will be given a questionnaire to fill out, and you will be given a copy of the jury instructions that the judge read. Answer the questions on the questionnaire as best as you can. Please do not talk during the videotape or while answering the questionnaire. Thank you.

videotape was being viewed.¹²⁶ The instructions briefly explained that the volunteers would view a videotape and photographs and that they would be given a questionnaire to complete. The jurors were given no other instructions beyond those read to them on the instruction sheet. Law students working as research assistants read the instructions to the jurors.

The jurors were not permitted to deliberate with other jurors prior to completing their questionnaires. Replicating the time jurors would have to deliberate at a real trial would have presented serious difficulties. Few of our participants likely would have been willing to make the time commitment for open-ended deliberation. Allowing a short deliberation period (perhaps ten minutes) would have been possible, but obtaining equally reliable data with deliberation groups would have required a much larger pool of jurors.¹²⁷ Further, although the point is debated, some studies have suggested that deliber-

[Instruction to person administering study: Show the first segment of the videotape, but stop it immediately after the judge states the facts. Then read the following:]

As the judge indicated, you will now be shown pictures of a lawn mower with a deadman clutch and without a deadman clutch. Please look at these pictures and pass them on.

[Instruction to person administering study: Pass out the pictures, and don't go on until everyone has looked at them. Then collect the pictures, and show the rest of the videotape. When the videotape is completed, read the following:]

I will now pass out the questionnaire and a copy of the jury instructions that the judge has read to you. You may refer to the written jury instructions in answering the questionnaire. Please do not talk while answering the questionnaire. Please do not leave when you are finished, but remain seated until I dismiss you. Thank you.

[Instruction to person administering study: Pass out the jury instructions and the questionnaires. Do not dismiss them until everyone is finished. After collecting the questionnaires, read the following:]

Thank you for participating. Please do not discuss the facts of the case with others. You are now dismissed.

¹²⁶ Volunteers viewing videotapes that included jury instructions on the law but no oral arguments were read the same preliminary instructions, except that references to hearing arguments from the attorneys were omitted. Volunteers viewing videotapes that included no jury instructions on the law and no oral arguments were read the same preliminary instructions, except that references to hearing arguments from the attorneys and references to hearing the judge read instructions were omitted. For discussion of the differences in the videotapes, see *infra* Part II.B.

¹²⁷ Assuming that the group dynamics would influence the decisionmaking of each juror, introducing deliberation groups would require looking at least to some extent at each group rather than at each juror. Absent structuring the study to include both group and individual data, focusing on groups would have prevented analyzing how individual characteristics, such as age, gender, and income level, influenced jurors' interpretations of negligence versus strict liability language.

ation has only a minor effect on juror decisionmaking.¹²⁸ One recent study suggests that, at least with regard to the question of how much to award in damages, deliberations tend only to exaggerate jurors' individual assessments rather than to alter them fundamentally.¹²⁹

A. *Facts of the Case*

Each of the videotapes included identical footage of a judge reading a brief factual summary of the case. The general defect issue chosen for the case—whether a lawn mower manufactured without a “deadman clutch” is defective in design—has been the subject of appellate litigation.¹³⁰ However, no effort was made to mirror the specific facts of any particular case. The facts were designed to be fairly equiponderant so that the jurors would vary in their views on liability: Ideally, a significant percentage of the jurors would vote to award money to the plaintiff and a significant percentage of the jurors would reject liability.¹³¹ No comparative or contributory negligence instruc-

¹²⁸ See Harry Kalven, Jr. & Hans Zeisel, *The American Jury* 489 (1966) (“The deliberation process might well be likened to what a developer does for an exposed film: it brings out the picture, but the outcome is pre-determined.”); Shari Seidman Diamond & Judith N. Levi, *Improving Decisions on Death by Revising and Testing Jury Instructions*, 79 *Judicature* 224, 230 (1996) (arguing that deliberation will improve juror comprehension only when substantial majority of jury members begin deliberations with correct understanding of information at issue); Phoebe C. Ellsworth, *Are Twelve Heads Better Than One?*, *Law & Contemp. Probs.*, Autumn 1989, at 205, 219-20 (describing experiment where deliberation did not correct jurors' initial misunderstanding of judge's instructions on law); Robert F. Forston, *Sense and Non-Sense: Jury Trial Communication*, 1975 *BYU L. Rev.* 601, 612 (contending that “vast majority” of jurors arrive at fairly definite decision before presentation of all evidence); Natasha K. Lakamp, *Comment, Deliberating Juror Predeliberation Discussions: Should California Follow the Arizona Model?*, 45 *UCLA L. Rev.* 845, 853-54 (1998) (maintaining that natural tendency of jurors is to process information as it is received as well as afterward, thus forming tentative judgments about evidence before deliberation).

¹²⁹ David Schkade, Cass R. Sunstein & Daniel Kahneman, *Deliberating About Dollars: The Severity Shift*, 100 *Colum. L. Rev.* 1139, 1140-41 (2000).

¹³⁰ See *Baker v. Outboard Marine Corp.*, 595 F.2d 176, 178 (3d Cir. 1979) (claiming that lawn mower designed without deadman clutch was unreasonably dangerous); *Hubbard v. McDonough Power Equip., Inc.*, 404 N.E.2d 311, 315 (Ill. App. Ct. 1980) (deeming lawn mower unreasonably dangerous in absence of deadman device); *Gauthier v. McDonough Power Equip., Inc.*, 608 So. 2d 1086, 1089 (La. Ct. App. 1992) (concluding that lawn mower's lack of deadman clutch constituted design defect); *Watkins v. Toro Co.*, 901 S.W.2d 917, 918 (Mo. Ct. App. 1995) (holding that lawn mower designed without operator-presence controls was defective); *Erkson ex rel. Hickman v. Sears, Roebuck & Co.*, 841 S.W.2d 207, 209 (Mo. Ct. App. 1992) (deciding that failure to design lawn mower with deadman clutch rendered the lawn mower defective); *Johnson v. Hannibal Mower Corp.*, 679 S.W.2d 884, 885 (Mo. Ct. App. 1984) (same).

¹³¹ Before creating the videotapes, a preliminary study based on a written text was performed with approximately 200 undergraduate student volunteers. Based on the results of the preliminary study, which showed a strong majority of jurors finding for the defendant, the facts were modified to strengthen the plaintiff's case for the videotape study.

tions were given, and an effort was made to present facts that would minimize any perception that the plaintiff could have been partially at fault.¹³²

The judge in the videotapes was played by a law professor wearing a judicial robe.¹³³ The videotape was filmed in a courtroom, and the judge, a thirty-five-year-old Caucasian male, was sitting at the bench. The judge read the following factual summary, which was included identically in all of the videotapes:

I am about to read a summary of the facts in this case. These are the facts that you would hear if witnesses and evidence were presented in this case. Assume that both parties agree that the facts I am about to read are true.

On June 4, 1995 Fred Jones was mowing his front lawn with a gasoline-powered lawn mower manufactured by Acme Lawn Mowers. While mowing he saw a young girl fall off of her bicycle on the street near his house. Concerned that the child could be hit by a passing vehicle, Fred left the lawn mower running and walked toward the child in the street to help her. While walking toward the child Fred slipped on a small wet spot in the grass that he had not seen, and fell to the ground. As he fell his left hand slid under the lawn mower's blade, cutting off much of his thumb and part of his index finger. The severed fingers could not be reattached.

The lawn mower was manufactured in 1982 and was purchased by Fred's next-door neighbor that same year. Fred was borrowing the lawn mower from his neighbor at the time of the accident. Some lawn mowers built in 1982 included a safety feature called a "deadman clutch." After hearing this factual summary you will be shown a picture of a lawn mower with a deadman clutch, and you will be shown a picture of a lawn mower without a deadman clutch. The deadman clutch is a thin metal bar that is attached below a lawn mower's push bar. The "push bar" is the bar a user holds when he or she is pushing the lawn mower. The deadman clutch bar has to be pulled upward and held together with the push bar to allow the lawn mower to run. If the user releases his grip on the deadman clutch bar the lawn mower's motor stops immediately. It is called a "deadman" clutch because it makes the engine go dead when the user releases it. The Acme lawn mower that Fred used did not have a deadman clutch.

The Acme lawn mower cost \$150 when Fred's neighbor bought it in 1982. Adding the deadman clutch to the design would have raised the price \$3 to \$153. Some other lawn mowers on the market at that

¹³² See *infra* p. 135.

¹³³ The judge was played by Timothy Perrin, Professor of Law, Pepperdine University School of Law.

time came with a deadman clutch bar, but other brands did not have one. The Acme lawn mower purchased by Fred's neighbor was one of the less expensive models available.

The motors on lawn mowers with a deadman clutch have to be re-started every time the user takes his hands away from the bar. Acme sold approximately 500,000 lawn mowers without the deadman clutch. Assume that about 500 people were injured by Acme lawn mowers in accidents that the installation of a deadman clutch would have prevented.

As mentioned above, much of Fred's left thumb and part of his left index finger were cut off. He has incurred \$25,000 in medical expenses having an operation performed on his hand and in physical therapy. Fred is right-handed and works as an accountant; his ability to work will not be impaired by the accident. He is 50 years old and is married with no children.

The facts put Fred in the situation of rescuing a child to discourage jurors from condemning his leaving the mower running while stepping away. To minimize any possible perceptions of recklessness, he was presented as walking away from the mower instead of running. Fred borrowed the mower rather than purchasing it himself to prevent potential concerns that he willfully chose a mower without a deadman clutch. The facts indicated that deadman clutch mowers were on the market at the time this product was sold to avoid state-of-the-art issues.¹³⁴ The facts identified the additional cost of adding a deadman clutch to the design, the number of mowers sold by Acme without a deadman clutch, and the number of people injured because of the absence of the clutch as factors to be considered in a simple risk/utility analysis.¹³⁵ Fred's injuries were intended to appear serious and per-

¹³⁴ Courts have defined the state-of-the-art issue in several ways, but the trend is to rule that a seller cannot be responsible for failing to use an alternative design if, at the time of the product's sale, it was the best design scientifically and economically feasible. See Restatement (Third), *supra* note 6, § 2, reporters' note to cmt. d; see also *Boatland of Houston v. Bailey*, 609 S.W.2d 743, 748 (Tex. 1980) ("The state of the art with respect to a particular product refers to the technological environment at the time of its manufacture. This technological environment includes the scientific knowledge, economic feasibility, and the practicalities of implementation when the product was manufactured."), quoted in *Carter v. Massey-Ferguson, Inc.*, 716 F.2d 344, 347 & n.6 (5th Cir. 1983) (holding that state-of-the-art does not refer to what usually is done in industry, but instead refers to what could have been done in terms of scientific knowledge, economic feasibility, and practicalities of implementation).

¹³⁵ In actual cases, factors to be considered in a risk/utility analysis may be much more complex. See Owen, *supra* note 12, at 243 (positing that there is "fundamental confusion [among commentators and the courts] as to the precise nature and components of a proper [risk/utility] analysis for use in design defect cases"); Alan Schwartz, *Proposal for Products Liability Reform: A Theoretical Synthesis*, 97 *Yale L.J.* 353, 386-87 (1988) (criticizing application of risk/utility test because utility analysis is "impossible for either firms or juries

manent but not life-threatening. His ability to continue working was portrayed as unimpaired to avoid issues of lost future income.

*B. Differences in Questionnaires and
in the Five Videotapes Shown to Volunteers*

Each volunteer viewed only one of five videotapes presenting variations of the case. None of the videotapes was longer than approximately twenty minutes.

*1. Group 1—Jurors Hearing the Case Presented
with Strict Liability Language and Oral Arguments*

A group of fifty-eight volunteer jurors witnessed the judge reading the factual summary described above, followed by oral argument from a plaintiff's lawyer and a defense lawyer describing the case in strict liability language, and then by the judge reading strict liability jury instructions. After viewing the videotape, the volunteers completed a questionnaire that first asked whether they would award any money to Fred Jones if they were a juror in the case.¹³⁶ The questionnaire also tested:¹³⁷

- a) the degree of jurors' certainty regarding whether they would award money;
- b) their personal feelings about whether money should be awarded;
- c) the amount of money, if any, that should be awarded;
- d) whether they believed that Acme was "negligent" in designing the mower, and the strength of such feelings;
- e) whether they believed Acme "acted unreasonably" in designing the mower, and the strength of such feelings;
- f) whether they believed that the design was "not reasonably safe," and the strength of such feelings;
- g) whether they believed that adding the deadman clutch to the lawn mower would have been a "reasonable alternative design," and the strength of such feelings;

to ascertain"); Kim D. Larsen, Note, *Strict Products Liability and the Risk-Utility Test for Design Defect: An Economic Analysis*, 84 *Colum. L. Rev.* 2045, 2051 (1984) (suggesting that risk/utility factors are "difficult to apply" because there is no guidance as to their "relative weights and interrelationships"). Further, in actual cases the facts typically cannot be presented as clearly to the jury as was done in this study. For example, in actual cases it is typically difficult to be certain how many injuries would have been prevented by using an alternative design.

¹³⁶ An identical question was posed to all categories of jurors at the beginning of their questionnaires. The question read: "Would you vote to require Acme to pay any money to Fred Jones if you were a juror in this case? 1) yes ___ 2) no ___." See *infra* Appendices II-IV, Question 1.

¹³⁷ For a discussion of the reasons for including all of the questions in the questionnaire, see *infra* Parts III-IV.

- h) the extent to which, after watching the videotape, they understood how a product manufacturer can be liable for a design defect even if it was not negligent;
- i) whether they found the jury instruction defining strict liability for design defects confusing; and
- j) their gender, age, and family income range.¹³⁸

The juror instruction defining strict liability for defective designs was based on the definition provided in section 2 of the Restatement (Third).¹³⁹ It read:

Definition of Strict Liability Defective Design

The plaintiff is not required to prove that the defendant acted negligently in designing the product to show that the design is defective. Rather, a product is defective in design when the foreseeable risks of harm posed by the product could have been reduced or avoided by the adoption of a reasonable alternative design by the manufac-

¹³⁸ For a full transcript of the questionnaire provided to Group 1, see *infra* Appendix III.

¹³⁹ The first paragraph of the instruction is based on the black-letter rule of section 2. The second paragraph is based on comment f to section 2. Section 2 lists the definitions of the three kinds of product defects, and it reads as follows:

A product is defective when at the time of sale or distribution, it contains a manufacturing defect, is defective in design, or is defective because of inadequate instructions or warnings. A product: (a) 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; (b) is defective in design when the foreseeable risks of harm posed by the product could have been reduced or avoided by the adoption of a reasonable alternative design by the seller or distributor, or a predecessor in the commercial chain of distribution, and the omission of the alternative design renders the product not reasonably safe; (c) is defective because of inadequate instructions or warnings when the foreseeable risks of harm posed by the product could have been reduced or avoided by the provision of reasonable instructions or warnings by the seller or other distributor, or a predecessor in the commercial chain of distribution, and the omission of the instructions or warnings renders the product not reasonably safe.

Restatement (Third), *supra* note 6, § 2. Comment f to section 2 provides factors for determining when there is a "reasonable alternative design" and a "not reasonably safe" product:

A broad range of factors may be considered in determining whether an alternative design is reasonable and whether its omission renders a product not reasonably safe. The factors include, among others, the magnitude and probability of the foreseeable risks of harm, the instructions and warnings accompanying the product, and the nature and strength of the consumer expectations regarding the product. The relative advantages and disadvantages of the product as designed and as it alternatively could have been designed must also be considered. Thus, the likely effects of the alternative design on the production costs; the effect of the alternative design on products' longevity, maintenance, repair, and aesthetics; and the range of consumer choice among products are factors that may be taken into account.

Id. § 2, cmt. f.

turer, and the omission of the alternative design renders the product not reasonably safe.

In determining whether an alternative design is reasonable and whether its omission renders a product not reasonably safe you may consider:

- 1) The magnitude of the foreseeable risks of harm;
- 2) The nature and strength of consumer expectations regarding the product;
- 3) The relative advantages and disadvantages of the product as designed and as it alternatively could have been designed; and
- 4) The effects of the alternative design on production costs and marketability.

The other brief jury instructions addressed the burden of proof and damages. These were based upon standard jury instructions routinely used in California courts.¹⁴⁰

The brief oral arguments utilizing strict liability language were provided by two attorneys described as representing the plaintiff and the defendant.¹⁴¹ Efforts were made to minimize the likelihood that factors other than the strength of the case would affect the jurors' decisions. The attorneys making the oral arguments were both Caucasian, in their mid-thirties, and of fairly similar height, weight, and appearance.¹⁴² Both undertook to present their arguments in a similar understated style and tone of voice. Both read their arguments from cue cards (not visible to those watching the videotape) to ensure consistency.

After explaining the burden of proof, the oral arguments primarily addressed the risk/utility standard used in the jury instructions for finding a design defect. The plaintiff's lawyer emphasized that the jurors do not need to find negligence and read the strict liability instruction to the jurors. He argued that adding a deadman clutch safety feature¹⁴³ to the defendant's lawn mower was a reasonable alternative design, and that the failure to use this alternative made the defendant's design defective. He noted that adding a deadman clutch would have been inexpensive, that the medical costs and pain and suffering of the 500 people injured because the deadman clutch was not

¹⁴⁰ The burden of proof instruction was based upon § 2.60 of BAJI California Jury Instructions: Civil (8th ed. 1994). The damages instruction was based on BAJI §§ 14.10 and 14.13. *Id.* For the full text of the jury instructions read to Group 1, see *infra* Appendix V.

¹⁴¹ The attorneys were played by Michael Gradisher, a professor at Pepperdine University School of Law, and by Richard L. Cupp Jr., one of the study's authors.

¹⁴² Both had dark hair, dark eyes, similar haircuts, similar complexions, and both wore glasses during their arguments.

¹⁴³ See *supra* notes 134-35 and accompanying text.

used outweighed the minor cost savings of not adding the device, and that the device would not have significantly diminished the mower's utility. He reminded the jurors that even if they did not think the defendant acted negligently, they must hold for the plaintiff if they found that there was a reasonable alternative design and that the failure to use the alternative design rendered the product not reasonably safe. The plaintiff's lawyer closed by briefly addressing damages for medical expenses and pain and suffering. He did not suggest a specific amount of damages the jury should award.

The defendant's lawyer emphasized that the word "reasonable" comes up twice in the jury instruction defining a design defect and described it as the "key word" in the instruction. He noted that even though the jurors did not have to find negligence to impose liability, they still had to find that a reasonable alternative design existed, and that failure to utilize the alternative made the product not reasonably safe. The defendant's lawyer then argued that the detriment of adding a deadman clutch outweighed its benefits, focusing on the increased cost, the fact that consumers could choose a safer and more expensive mower if they wished, the decrease in utility caused by a deadman clutch, and the relatively small number of people who had been hurt. He analogized the mower to a Volkswagen Beetle, which is not the safest automobile available, but which is not unreasonably dangerous.¹⁴⁴

2. *Group 2—Jurors Hearing the Case Presented with Negligence Language and Oral Arguments*

Like Group 1, the forty-seven jurors in Group 2 heard the judge read the facts of the case and then heard oral arguments and jury instructions. However, the oral arguments and jury instructions heard by Group 2 were based on negligence language rather than strict liability language.

The jury instruction defining a design defect was essentially the same as the instruction given to Group 1, except that it substituted negligence language for strict liability language in describing the test. The instruction read:

Definition of Negligent Design

A manufacturer is negligent in designing a product when the foreseeable risks of harm posed by the product could have been reduced or avoided by the adoption of a reasonable alternative design by the

¹⁴⁴ The full text of the strict liability oral arguments for both the plaintiff and defendant appears in *infra* Appendix I.

manufacturer, and the omission of the alternative design renders the product not reasonably safe.

In determining whether an alternative design is reasonable and whether its omission renders a product not reasonably safe you may consider:

- 1) The magnitude of the foreseeable risks of harm;
- 2) The nature and strength of consumer expectations regarding the product;
- 3) The relative advantages and disadvantages of the product as designed and as it alternatively could have been designed; and
- 4) The effects of the alternative design on production costs and marketability.

In addition to this instruction, the jurors heard the same burden of proof and damages instructions provided to the jurors in Group 1 hearing strict liability language. In sum, the only difference in the jury instructions provided to Group 1 and Group 2 was that Group 1 heard the risk/utility test described in strict liability terms, and Group 2 heard the same risk/utility test described in negligence terms.

Group 2 heard oral arguments made by the same attorneys who made the oral arguments heard by Group 1. The attorneys wore the same clothing for both groups, argued for the same side, and attempted to make presentations as similar as possible except for use of negligence language versus strict liability language. Reading from cue cards, the attorneys said exactly the same words to the jurors in Groups 1 and 2, except Group 1 heard the risk/utility test described with strict liability words and concepts, and Group 2 heard the test described with negligence words and concepts.

This difference in emphasis required relatively little change in the language of the oral arguments. In the plaintiff's argument, the differences began with the description of "key issues" in the case: In Group 1, one of the key issues was described as "Was the lawn mower defective?" while for Group 2 it was described as "Was Acme negligent in the way it designed its lawn mower?"¹⁴⁵

In Group 1, the plaintiff's lawyer introduced the risk/utility instruction as follows:

We believe that making the lawn mower without a deadman clutch was a design defect. In our state we apply something called "strict liability" to product designs. That means that the seller is liable *even if it was not negligent*¹⁴⁶ in designing the product if the product

¹⁴⁵ See *infra* Appendix I.

¹⁴⁶ Underlined language was underlined in the cue cards used, indicating to the lawyer that he should emphasize those words.

is too dangerous. Fault does not matter—if the product is unreasonably dangerous in its design, you are to find Acme liable even if it was not negligent in choosing the design. Let me read for you the instruction that the judge will give you defining a design defect under strict liability:

“The plaintiff is *not required* to prove that the defendant acted negligently in designing the product to show that the design is defective. Rather, a product is defective in design when . . .”
[Lawyer begins quotation from risk/utility design defect instruction used in both versions].

However, in Group 2 the plaintiff’s lawyer introduced the same risk/utility instruction as follows:

We believe that making the lawn mower without a deadman clutch was negligent. Negligence can be defined as failing to act reasonably. Let me read for you the instructions that the judge will give you defining a negligent design defect:

“A manufacturer is negligent in designing a product when . . .”
[Lawyer begins quotation from risk/utility design defect instruction used in both versions].

Except for this difference, the plaintiff’s oral arguments provided to Group 1 and to Group 2 were identical until near the conclusion. At that point the plaintiff’s lawyer said to Group 1:

The bottom line is, the design was unreasonable, and Fred Jones was injured as a result of the unreasonable design. A safe alternative could have been used easily and inexpensively. Acme is required to compensate Fred for its defective design.

As you think through whether a reasonable alternative design existed, and whether Acme’s lawn mower was reasonably safe, let me remind you again that fault or blame are *not necessary* in this case.

You may think that Acme acted negligently in choosing its lawn mower without a deadman clutch. However, even if you do not believe that Acme acted unreasonably, you must find for Fred Jones as long as a reasonable alternative design existed that would have prevented the accident, and failure to use that design made the mower not reasonably safe.

However, when addressing Group 2, at the same point in the argument the plaintiff’s lawyer said:

The bottom line is, Acme acted unreasonably—negligently—in choosing its design, and Fred Jones was injured as a result of that negligence. It knew how to easily and inexpensively make a safe design, and it *intentionally* chose not to do so. Acme needs to compensate Fred for its negligence.

The defense attorney's presentations to the jurors in Group 1 and Group 2 differed at only one point in his argument. Near the beginning of his argument, the attorney told Group 1:

The plaintiff has the burden of proving that a reasonable alternative design exists and that without the deadman's clutch the product is not reasonably safe. The key word that comes up twice in the instructions is *reasonable*. The plaintiff's attorney pointed out that you do not have to find that Acme acted negligently to award a judgment. That may be true, but as you will see in the judge's instructions you would have to find that a *reasonable* design alternative exists, and that the lawn mower without the deadman clutch is not *reasonably* safe.

However, at the same point in his argument he used somewhat different language for the jurors in Group 2:

The plaintiff has the burden of proving that a reasonable alternative design exists and that without the deadman clutch the product is not reasonably safe. The key word that comes up twice in the instructions is *reasonable*. As you will see in the judge's instructions, to find negligence you would have to find that a *reasonable* alternative design exists, and that the lawn mower without the deadman clutch is not *reasonably* safe.

The questionnaire given to Group 2 jurors after watching their videotape was identical to the questionnaire given to Group 1 jurors with the exception of two questions. Group 1's questionnaire included a question asking whether the jurors understood how a manufacturer could be liable for a design defect even if it were not negligent.¹⁴⁷ It also probed whether the jurors found the strict liability jury instruction confusing.¹⁴⁸ Group 2's questionnaire asked the same questions but substituted negligence for strict liability. One question asked whether the jurors understood what is required for a product manufacturer to be found negligent in the design of its product.¹⁴⁹ The next question probed whether jurors found the negligence jury instruction confusing.¹⁵⁰

3. *Group 3—Jurors Hearing the Facts Only, with No Jury Instructions or Oral Arguments*

The thirty-nine jurors in Group 3 served as a control group. Their videotape showed the judge reading the same factual summary presented to the jurors in the other groups. However, Group 3 jurors

¹⁴⁷ See *infra* Appendix III, Question 13.

¹⁴⁸ See *id.* at Question 14.

¹⁴⁹ See *infra* Appendix IV, Question 13.

¹⁵⁰ See *id.* at Question 14.

were not presented with any jury instructions, and they did not hear any oral arguments. Instead, after hearing only the judge's factual summary, they were asked to complete a questionnaire similar to those provided to the other groups.

The only difference between the questionnaire provided to Group 3 and the questionnaires provided to the other groups is that Group 3's questionnaire omitted the question asking whether the jurors understood liability without fault (or negligence, for the jurors seeing the negligence videotapes) and also omitted the question probing whether the jurors found the strict liability jury instruction (or the negligence instruction, for the jurors seeing the negligence videotapes) confusing.

4. *Group 4—Jurors Hearing the Case Presented with Strict Liability Language but with No Oral Arguments*

The seventy-five jurors in Group 4 heard the judge read the facts and heard the judge read the jury instructions using strict liability language, but they did not hear oral arguments. In other words, they were presented exactly the same videotape as the jurors in Group 1, except for the absence of oral argument. Jurors in Group 4 were then given the same questionnaire provided to the jurors in Group 1.¹⁵¹

5. *Group 5—Jurors Hearing the Case Presented with Negligence Language but with No Oral Arguments*

The eighty-seven jurors in Group 5 heard the judge read the facts and the jury instructions using negligence language, but they did not hear oral arguments. In other words, they were presented exactly the same videotape as the jurors in Group 2, except for the absence of oral argument. Jurors in Group 5 were then given the same questionnaire provided to the jurors in Group 2.¹⁵²

III

DIFFERENCES AMONG THE GROUPS IN AWARDING DAMAGES

A. *Would the Jurors Vote to Award Any Damages?*

The first question in all of the questionnaires asks, "Would you vote to require Acme to pay any money to Fred Jones if you were a juror in this case?"¹⁵³ Groups 1 and 2 provided jurors an experience closest to what they would encounter in an actual trial—hearing facts,

¹⁵¹ See *infra* Appendix III.

¹⁵² See *infra* Appendix IV.

¹⁵³ See *infra* Appendices II, III, & IV, Question 1.

jury instructions, and oral arguments. In these two key groups,¹⁵⁴ 26% of the jurors hearing strict liability language would award money, while 38% of the jurors hearing negligence language would award money.¹⁵⁵

When compared to all of the other groups combined,¹⁵⁶ jurors in Group 1—those hearing the full case with strict liability language—voted to award money to the plaintiff at a statistically significant lower rate.¹⁵⁷ Jurors in Group 2 (those hearing the full case with negligence language), on the other hand, were not significantly different from the other groups in their willingness to award damages. In other words, using strict liability language in the most realistic setting produced the worst results for the plaintiff.

Interestingly, the study established with statistical significance that the jurors were less likely to award money when negligence or strict liability principles were explained to them in closing arguments than if there was no explanation. Regarding strict liability, 49% of the jurors hearing only the facts and jury instructions (Group 4) would award money, as compared to 26% of the jurors who also heard closing arguments (Group 1).¹⁵⁸ Regarding negligence, 44% of the jurors hearing only the facts and jury instructions (Group 5) would award money, as compared to 37% of jurors also hearing closing arguments (Group 2).¹⁵⁹ This seems to suggest that, at least under the facts of this case, the more explanation provided of the instructions and how they are to be applied, the less attractive the plaintiff's case appears under both strict liability and negligence.

Gender, age, and income level were in some aspects significant in jurors' decisions regarding whether to award money. No significant gender differences could be discerned in jurors under thirty years old. Within most of the individual groups, there was not a significant gen-

¹⁵⁴ Hereinafter, Groups 1 and 2 sometimes are called the "closest-to-actual-trial" groups.

¹⁵⁵ This difference, while interesting, did not show statistical significance, in that the difference could be the product of chance. Larger numbers of jurors may have produced statistically significant results. See *infra* note 157 for an explanation of "statistical significance."

¹⁵⁶ As opposed to comparing Group 1 only with Group 2.

¹⁵⁷ Chi-square; $p < .05$. The *chi-square* test is a goodness-of-fit test that compares the observed and expected frequencies in each category. It tests either that all categories contain the same proportion of values or that each category contains a user-specified proportion of values. When $p < .05$, the results showing that two groups are different would be obtained by chance less than 5% of the time. When $p < .05$, researchers refer to the difference as "statistically significant."

¹⁵⁸ Chi-square; $p < .05$.

¹⁵⁹ Chi-square; $p < .05$. Only 18% of the control group (Group 3), which heard only the facts, would award money to the plaintiff.

der difference in any age ranges.¹⁶⁰ However, when looking at all five groups as a whole, among jurors over thirty, women were significantly more likely to award money than were men.¹⁶¹ This is consistent with the perception of at least some litigators that male jurors are often less empathetic to plaintiffs than are female jurors in civil trials.¹⁶²

Regarding income levels, use of negligence language versus strict liability language in closing arguments did not reveal significant differences regarding whether money would be awarded. When looking at all five groups as a whole, no significant differences are apparent based on income level. The only statistically significant comparative finding was that jurors in the \$50,000 to \$100,000 income bracket were more likely to award damages when negligence instructions and oral arguments were given (Group 2) than when they heard only the facts (Group 3).¹⁶³

B. The Jurors' Certainty Regarding Whether They Would Vote to Award Damages

After being asked whether they would vote to award damages, jurors in all five groups were asked to indicate on a scale of 1 to 7 how certain they were about whether they would award damages, with 1 indicating "very certain" and 7 indicating "very uncertain."¹⁶⁴ The question was asked to gauge whether the use of strict liability language versus negligence language influenced jurors' certainty regard-

¹⁶⁰ The exception is Group 5 (facts and negligence jury instructions, no oral argument), in which women age thirty to fifty were more likely to award money than were their same-age male counterparts (fourteen out of twenty-two women would award money, as contrasted with four out of twenty-one men: chi-square; $p < .05$), and in which for the over-fifty age range women were also more likely to award money than their same-age male counterparts (ten out of sixteen women would award money, as contrasted with two out of twelve men: chi-square; $p < .05$).

¹⁶¹ In the thirty-to-fifty age range, thirty-six out of seventy-three women would award money, as compared to sixteen out of fifty-five men: chi-square; $p < .05$; in the over-fifty age range, twenty-one out of fifty-five women would award money, as compared to eleven out of fifty-five men: chi-square; $p < .05$.

¹⁶² See Dennis C. Harrington & James Dempsey, *Psychological Factors in Jury Selection*, Address at the Trial Advocacy Seminar during the 88th Annual Convention of the Tennessee Bar Association (June 10, 1969), in 37 *Tenn. L. Rev.* 173, 173-74 (1969) (advising that women tend to be more plaintiff oriented than men).

¹⁶³ Forty-two percent of the \$50,000 to \$100,000 income jurors in Group 2 would award money, as contrasted to 10% of the \$50,000 to \$100,000 income jurors in Group 3: chi-square; $p < .05$.

¹⁶⁴ Question 2 for all five groups read:

On the scale below rate how certain you are that you would vote as indicated in response to question number one (circle one number).

Very certain						Very uncertain
1	2	3	4	5	6	7

See *infra* Appendices II-IV.

ing their position on liability, and to gauge whether jurors awarding money or not awarding money were more certain of their position.

On the whole, the jurors were not extremely certain regarding their decision. Combining the five groups, the average response on the 7-point scale was 2.54, only moderately closer to “very certain” than to “very uncertain.” However, this difference was statistically significant in showing the jurors closer to certainty than to uncertainty.¹⁶⁵

The use of negligence language versus strict liability language did not seem to influence the jurors’ certainty. Among both the jurors who would have awarded money and those who would not have awarded money, there was not a significant difference in certainty between the five groups.¹⁶⁶

C. Jurors’ Personal Feelings About Whether Plaintiff Should Win Money Regardless of the Legal Rules

Question 3, given to all five groups, tested the jurors’ personal feelings about whether the plaintiff should win money regardless of the legal rules. The question asked jurors to rate their feelings on a 7-point scale, with 1 indicating “feel strongly should pay” and 7 indicating “feel strongly should not pay.”¹⁶⁷ The question’s purpose was to test whether a difference might be shown between what jurors think is a just result and what they think the jury instructions require of them. Testing for a disconnect between jurors’ sense of justice and whether they vote to award money is particularly interesting in light of the perception that strict liability is a hyper-technical approach to recovery that leaves jurors emotionally cold.¹⁶⁸ Finding a greater discon-

¹⁶⁵ Both for jurors awarding money and for jurors not awarding money, responses were significantly closer to one than to seven. For both those awarding money and those not awarding money, $+ (305) = -13.651$; $p < .05$.

¹⁶⁶ Regarding the difference in certainty between the closest-to-actual-trial groups, chi-square = 1.463; $df = 1$; $p > .05$. (The degrees of freedom (df) for any statistic is the number of scores that are free to vary in calculating that statistic.) Also comparing the difference in certainty across all five groups, for both those voting to award money and those voting not to award money, chi-square = 3.578; $df = 4$; $p > .05$.

¹⁶⁷ Question 3 on all forms read:

Regardless of your answers to questions number one and two, on the scale below rate how you personally feel about whether Acme should be required to pay any money to Fred Jones (circle one number).

Feel strongly should pay						Feel strongly should not pay
1	2	3	4	5	6	7

See *infra* Appendices II-IV.

¹⁶⁸ See Rheingold, *supra* note 97, at 531-32; see also *supra* Part I.D.1.

nect between jurors' sense of justice and their holdings with strict liability language might lend indirect support to arguments that jurors dislike strict liability, although it also might boost arguments that jurors have the ability to rise above their dislike of the doctrine and follow jury instructions.

The study found no significant difference between the personal feelings of jurors hearing the full case with strict liability language versus those hearing it with negligence language. However, when viewing all groups of jurors as a whole, the positive correlation between how jurors voted and their personal feelings was strongly significant. This was true both for jurors who would have voted to award money to the plaintiff¹⁶⁹ and for jurors who would have voted not to award money to the plaintiff.¹⁷⁰ This strong connection may support the argument that jurors seek to achieve a rough sense of justice regardless of the jury instructions provided.¹⁷¹ It tends to show that, regardless of the language used and instructions given, jurors strongly tended to vote for a result they personally felt was fair. Jurors who voted to award no money had a significantly stronger connection between their vote and their personal sense of justice than did jurors who voted to award money to the plaintiff.¹⁷²

D. Amount Awarded for Medical Expenses and Pain and Suffering

The factual summary provided to all jurors indicated that the plaintiff's reasonable medical expenses totaled \$25,000. All the groups receiving jury instructions were told that pain and suffering is compensable if they found for the plaintiff. In the closest-to-actual-trial groups, the plaintiff's lawyer did not ask for a specific amount of damages for pain and suffering, opting instead to ask the jurors simply to award what they thought was fair.¹⁷³ In their questionnaires, jurors favoring the payment of some damages were asked to provide separate figures regarding how much should be awarded for medical expenses and how much should be awarded for pain and suffering.¹⁷⁴

¹⁶⁹ $+(114) = -6.921$; $p < .05$.

¹⁷⁰ $+(190) = -12.028$; $p < .05$.

¹⁷¹ See *supra* notes 100-04 and accompanying text.

¹⁷² Combining the five groups, jurors awarding no money felt stronger that their votes were consistent with their personal feelings, as compared with jurors who awarded money ($z = -11.178$; $p < .05$).

¹⁷³ See *infra* Appendix I.

¹⁷⁴ Question 4 in all questionnaires read:

If your answer to question one is yes, how much money would you award to Fred Jones to compensate for his medical expenses and to compensate for his pain and suffering?

Viewing the groups as a whole, among jurors who said some damages should be awarded, the average amount awarded for medical expenses was \$24,789. The pain and suffering awards provided by these jurors averaged \$54,893. For the closest-to-actual-trial groups, the average pain and suffering award was \$27,571 with strict liability language (Group 1) and \$49,750 with negligence language (Group 2). In other words, jurors on average awarded nearly twice as much pain and suffering damages when hearing negligence language than they did when hearing strict liability language.

IV

DIFFERENCES AMONG THE JUROR GROUPS IN UNDERSTANDING THE RHETORIC OF RESPONSIBILITY

After testing whether the jurors would award money to the plaintiff, how much they would award, and whether their award is consistent with their personal sense of justice, the questionnaires asked jurors to apply key legal terms and concepts to the case. These questions were designed to ascertain how jurors understand differing terms that courts use to describe legal responsibility under a risk/utility test. For example, in a case utilizing negligence language, a juror may be told to determine whether the defendant "acted unreasonably" using a risk/utility analysis, whereas in a strict liability case using the same risk/utility analysis a juror may be told to determine whether the defendant's product was "not reasonably safe."¹⁷⁵

The questions tested how well jurors understood the terms, and whether they reacted differently to the terms depending on whether they heard the case in strict liability language, negligence language, or had no instructions at all. The questions sought reactions to the terms "negligent," "acted unreasonably," "not reasonably safe," and "reasonable alternative design."

A. Juror Responses to the Word "Negligent"

Question 5 on all of the juror forms asked jurors if they believed that Acme was negligent in designing its lawn mower without a deadman clutch.¹⁷⁶ Jurors were asked this question regardless of whether they heard the case described in negligence terms, strict lia-

1. Medical expenses:	\$ _____
2. Pain and suffering:	\$ _____
Total:	\$ _____

See *infra* Appendices II-IV.

¹⁷⁵ See *infra* notes 205-08 and accompanying text.

¹⁷⁶ Question 5 read:

bility terms, or no legal terms at all. Negligent conduct is obviously the heart of the negligence cause of action; jurors in such actions must always determine whether the defendant's actions or failures to act were negligent.

The participants' reactions to Question 5 support, or are at least consistent with, the findings reported above that jurors respond more favorably to negligence language than to strict liability language. Among the closest-to-actual-trial groups, jurors hearing negligence instructions and arguments were significantly more likely to believe that defendant was negligent than were jurors who heard strict liability instructions and arguments.¹⁷⁷ Apparently the rhetoric of strict liability did not make jurors as likely to conclude that negligent conduct took place as did the "hot" language of fault used in the negligence videotapes.

This finding also speaks to the argument that, regardless of the theory of liability, most jurors only will award damages for design defects if they believe the defendant acted negligently.¹⁷⁸ As addressed above, the closest-to-actual-trial jurors hearing strict liability language voted to award money to the plaintiff significantly less often than the other groups.¹⁷⁹ The fact that they also were significantly less likely to believe that the defendant acted negligently is consistent with the position that, regardless of the cause of action, most jurors will not award damages unless they believe negligence is present.

One might wonder whether jurors hearing strict liability language were less likely to think the defendant was negligent simply because they were not thinking in those terms—all of their instructions and arguments had ignored negligence concepts, focusing instead on strict liability terms. However, using the language of strict liability may be even worse for plaintiffs than not characterizing the conduct at all. Among jurors voting *not* to award any money, 22% of the control group jurors not receiving any instructions or oral arguments (Group 3) believed the defendant was negligent. However, only 2% of jurors

Do you believe that Acme was negligent in designing its lawn mower without a deadman clutch?

1. Yes ____

2. No ____

See *infra* Appendices II-IV.

¹⁷⁷ Chi-square; $p > .05$. No significant difference existed between Group 1 and the control group jurors hearing no instructions or arguments (Group 3): chi-square; $p > .05$. Also, no significant difference existed between Group 2 and Group 3: chi-square; $p > .05$. Viewing all of the groups, the number of jurors believing Acme was not negligent was significantly higher than the number of jurors believing Acme was negligent: chi-square; $p > .05$.

¹⁷⁸ See *supra* notes 102-04 and accompanying text.

¹⁷⁹ See *supra* notes 155-57 and accompanying text.

hearing strict liability instructions and oral arguments who voted not to award money believed that the defendant was negligent. This difference is statistically significant.¹⁸⁰ Apparently, hearing the case described in strict liability terms pushed the jurors toward believing that the defendant was not negligent.

Viewing all the groups together, only 10% of jurors who voted *not* to award money nevertheless believed that the defendant was negligent. In other words, 90% of all jurors who voted not to award money thought there was no negligence. This seems to suggest that, on the whole, there was a solid relationship between jurors' feelings about whether money should be paid and their feelings about whether the defendant was negligent. This may provide further support for the proposition that many jurors base their liability decisions on whether they believe that the defendant was negligent, regardless of how the legal claim is described.

Question 6 on all of the juror questionnaires asked jurors to rate how strongly they felt regarding whether the defendant was or was not negligent.¹⁸¹ This question was asked of all groups, regardless of the language, or absence of language, they heard to describe liability standards. Both those who believed there was negligence and those who believed there was no negligence tended to be fairly confident but not absolutely sure of their beliefs. Across all groups, the average juror who believed the defendant *was* negligent rated herself at 2.39 on a 7-point scale, with 1 indicating "feel strongly was negligent" and 7 indicating "feel strongly was not negligent." Again across all groups, the average juror who believed the defendant was *not* negligent rated herself at 5.99 on the 7-point scale.¹⁸² Use of negligence language versus strict liability did not create a significant difference in the level of certainty in the closest-to-actual-trial jurors.

¹⁸⁰ Chi-square; $p > .05$.

¹⁸¹ Question 6 read:

On the scale below rate how strongly you feel regarding whether Acme was negligent or not negligent in designing its lawn mower without a deadman clutch (circle one number).

Feel strongly was negligent					Feel strongly was not negligent	
1	2	3	4	5	6	7

See *infra* Appendices II-IV.

¹⁸² The data did not show statistically significant differences regarding the closeness to a rating of 7 of jurors who said there was no negligence, as compared to the closeness of jurors to a rating of 1 who said there was negligence: chi-square; $p > .05$.

B. Juror Responses to the Term "Acted Unreasonably"

Question 7 on all of the juror forms asked jurors if they believe that Acme "acted unreasonably in designing its lawn mower without a deadman clutch."¹⁸³ Jurors were asked this question regardless of whether they heard the case described in negligence terms, strict liability terms, or no legal terms at all. Courts typically use the word "reasonable" to describe whether a defendant's conduct was negligent or not.¹⁸⁴ Courts applying a strict liability risk/utility analysis and wishing to avoid express use of the word "negligence" often use reasonableness language in jury instructions instead—with the reasonableness inquiry focused on the product rather than the seller.¹⁸⁵ Thus, asking whether the defendant acted unreasonably allows some insights into whether jurors equate the words "negligence" and "reasonableness" in the same way that courts do, and how strongly using the word "reasonableness" in a strict liability case imports negligence concepts.

Perhaps not surprisingly, jurors' responses to "acted unreasonably" tended to correspond closely to their responses to the word "negligence." For all five of the groups, there was no significant difference between responses to Question 5 (whether Acme was negligent) and Question 7 (whether Acme acted unreasonably).¹⁸⁶

Further, the term "acted unreasonably" did not seem to create any more or less cognitive dissonance with jurors than did the word "negligence." Regarding jurors who voted *not* to award any money, there was no significant difference between whether they thought Acme was nonetheless "negligent" versus whether they thought Acme nonetheless "acted unreasonably."¹⁸⁷ As with the word "negligence," the overwhelming majority of jurors who voted *not* to award money believed that Acme did *not* act unreasonably. There was not much disconnect between their feelings about whether money should be paid and their feelings about whether the defendant "acted unreasonably."¹⁸⁸ This held true regardless of the language (or, for Group 3, the absence of language) the jurors heard to describe the liability stan-

¹⁸³ See *infra* Appendices II-IV, Question 7.

¹⁸⁴ See *Charbonneau v. MacRury*, 153 A. 457, 462 (N.H. 1931) (judging negligence by standard of "average prudent person"); *Warrington v. N.Y. Power & Light Corp.*, 300 N.Y.S. 154, 158 (N.Y. App. Div. 1937) (determining negligence by comparing action of defendant to that of "typical prudent man"); *Osborne v. Montgomery*, 234 N.W. 372, 376 (Wis. 1931) (applying standard of conduct of "ordinarily prudent and intelligent person").

¹⁸⁵ See *supra* notes 76-77 and accompanying text.

¹⁸⁶ For all groups, chi-square; $p > .05$.

¹⁸⁷ For all groups, chi-square; $p > .05$.

¹⁸⁸ See *supra* notes 186-87 and accompanying text. Jurors who voted not to award any money answered the question regarding whether Acme "acted unreasonably" as follows—

dard.¹⁸⁹ These findings may provide additional support for the argument that jurors' decisions are influenced most strongly by their rough sense of justice, and they are unlikely to award damages if they do not believe the defendant acted unreasonably, i.e. negligently.¹⁹⁰

C. *Juror Responses to the Term "Not Reasonably Safe"*

Question 9 on all of the juror forms asked jurors if they believed that Acme's lawn mower design was "not reasonably safe" since it did not have a deadman clutch.¹⁹¹ Jurors were asked this question whether they had heard the case described in negligence terms, strict liability terms, or no legal terms at all. "Not reasonably safe" is a key term the Restatement (Third) uses in its formulation of a design defect standard.¹⁹²

The Restatement (Third)'s employment of the term "not reasonably safe" reflects a desire to utilize negligence concepts without requiring that courts formally label the cause of action as negligence.¹⁹³ As explained in Part I, the same or similar language is used by many jurisdictions in describing strict liability to jurors. Efforts frequently are made to distinguish this strict liability language from negligence, in that the strict liability reasonableness inquiry is directed at the product whereas in negligence the reasonableness inquiry is directed at the seller.¹⁹⁴ However, these attempts at a distinction often are criticized because the manufacturer chooses how to design the product, and thus a "not reasonably safe" product typically indicates an unreasonable manufacturer.¹⁹⁵ In light of this controversy, the study sought to compare jurors' reactions to "not reasonably safe" language directed at the product, with "acted unreasonably" and "was negligent" language, which is directed at the manufacturer. The study also analyzed whether jurors hearing the case described with different language (or no legal language) interpreted "acted unreasonably" in the same way.

Regarding the question of whether the product was "not reasonably safe," there was no significant difference between Groups 1 and 2,

Group 1: 40 no, 3 yes; Group 2: 27 no, 2 yes; Group 3: 23 no, 7 yes; Group 4: 31 no, 7 yes; Group 5: 47 no, 2 yes.

¹⁸⁹ See *infra* note 200.

¹⁹⁰ See *supra* notes 102-04 and accompanying text.

¹⁹¹ See *infra* Appendices II-IV, Question 9.

¹⁹² Restatement (Third), *supra* note 6, § 2(b); see also *supra* notes 76-77 and accompanying text.

¹⁹³ See Restatement (Third), *supra* note 6, § 1 cmt. a ("Sections 2(b) and 2(c) rely on a reasonableness test traditionally used in determining whether an actor has been negligent.").

¹⁹⁴ See *supra* notes 76-77 and accompanying text.

¹⁹⁵ See *id.*

the closest-to-actual-trial jurors hearing strict liability and negligence language. There was also no significant difference between either of these groups and the control group (Group 3) on the question. Interestingly, both with negligence language and with strict liability language, jurors were significantly more likely to think that the product was not reasonably safe if they received jury instructions but *no* oral arguments (Groups 4 and 5), as compared to those who heard both jury instructions and oral arguments (Groups 1 and 2).¹⁹⁶ It may be that the somewhat awkward mixing of positives and negatives required in the question—"Answer yes or no, 'Do you believe the lawn mower design was not reasonably safe?'"¹⁹⁷—generated confusion. If so, perhaps explanation in oral arguments significantly reduced the confusion, thus producing significantly different responses. Since the term appeared in both sets of jury instructions, the lawyers explained the term "not reasonably safe" in both the negligence and strict liability videotapes.¹⁹⁸

In addition to analyzing the jurors as a whole, the study focused separately on those who voted against awarding money and on those who voted for awarding money. Among jurors who voted *not* to award money to the plaintiff, the closest-to-actual-trial jurors hearing strict liability language (Group 1) were significantly more likely to say the product was *not* reasonably safe than were jurors in the control group (Group 3).¹⁹⁹ In other words, no-liability jurors who received no explanation of the phrase in jury instructions were less likely to find the lawn mower "not reasonably safe" than were no-liability jurors who received an explanation in a strict liability context.²⁰⁰ This may reflect that the phrase "not reasonably safe" is somewhat confusing, and that, at least for those concluding not to award damages, explanation is needed to make the term communicate the desired message.

Again addressing jurors who voted *not* to award any money, no significant difference existed regarding the "not reasonably safe"

¹⁹⁶ Regarding those hearing strict liability language, between the group hearing only strict liability jury instructions (Group 4) and the group hearing strict liability jury instructions and strict liability oral arguments (Group 1): chi-square; $p < .05$. Regarding those hearing negligence language, between the group hearing only negligence jury instructions (Group 5) and the group hearing negligence jury instructions and negligence oral arguments (Group 2): chi-square; $p < .05$. The difference between Groups 1 and 2 combined versus Groups 4 and 5 combined is also significant: chi-square; $p < .05$.

¹⁹⁷ See *infra* Appendices II-IV, Question 9.

¹⁹⁸ See *infra* Appendix I.

¹⁹⁹ Chi-square; $p < .05$.

²⁰⁰ The closest-to-actual-trial jurors who heard the case described in negligence terms (Group 2) and who voted against awarding damages did not differ significantly from the control group in answering the "not reasonably dangerous" question: chi-square; $p > .05$.

question between the closest-to-actual-trial jurors hearing the case described as strict liability (Group 1) and those hearing the case described as negligence (Group 2). Since, as noted above, the term was defined by the lawyers in closing arguments in both the strict liability and negligence videotapes,²⁰¹ the absence of a difference between the no-liability jurors in the groups is not surprising.

Looking at jurors who voted *in favor* of awarding money to the plaintiff leads to similar results when comparing the closest-to-actual-trial groups on the question of whether the product is not reasonably safe. As with the no-liability jurors, no statistically significant difference existed between strict liability and negligence²⁰² in the yes-liability jurors.

Returning to an analysis of all of the jurors (rather than only those who voted no-liability or yes-liability), the study compared responses to the "not reasonably safe" question with jurors' responses to the questions on whether Acme was "negligent"²⁰³ or "acted unreasonably."²⁰⁴ No significant difference was found in any of the groups between the percentages of jurors saying that the product was not reasonably safe and those saying that Acme was negligent. There was also no significant percentage difference in any of the groups between those saying that the product was not reasonably safe and those saying that Acme acted unreasonably. Thus, although some evidence suggested that the term "not reasonably safe" is somewhat confusing,²⁰⁵ jurors generally interpreted it in a manner consistent with the rhetoric of negligence.²⁰⁶

Question 10 on all of the juror questionnaires asked jurors to rate how strongly they felt regarding whether the lawn mower design was or was not reasonably safe.²⁰⁷ This question was asked of all groups,

²⁰¹ See *supra* note 198 and accompanying text.

²⁰² This references a comparison of Group 1 (strict liability) and Group 2 (negligence): chi-square; $p > .05$.

²⁰³ This was Question 5 in all of the survey forms. See *supra* notes 176-80 and accompanying text.

²⁰⁴ This was Question 7 in all of the survey forms. See *supra* notes 183-90 and accompanying text.

²⁰⁵ See *supra* notes 196-97 and accompanying text.

²⁰⁶ The terms "negligent" and "acted unreasonably" are of course used in negligence actions. See *supra* notes 176-90 and accompanying text. Breaking the participants down into subgroups of those who voted for liability and those who voted against liability, the study still found no statistically significant difference among any of the groups in percentages of those finding the product "not reasonably safe" (Question 9), those finding that Acme was "negligent" (Question 5), and those finding that Acme "acted unreasonably" (Question 7): chi-square; $p > .05$.

²⁰⁷ See *infra* Appendices II-IV, Question 10, which asked: "On the scale below rate how strongly you feel regarding whether the lawn mower design was not reasonably safe or was reasonably safe without a deadman clutch."

regardless of the language, or absence of language, they heard to describe liability standards. As with the question of whether Acme acted negligently,²⁰⁸ both those who believed the product was not reasonably safe and those who believed that it was reasonably safe tended to be fairly confident, but not absolutely sure, of their beliefs. Across all groups, the average juror who believed the product was *not* reasonably safe rated herself at 2.27 on a 7-point scale, with 1 indicating “feel strongly was not reasonably safe” and 7 indicating “feel strongly was reasonably safe.” Again across all groups, the average juror who believed that the lawn mower *was* reasonably safe rated herself at a 5.82 on the 7-point scale.²⁰⁹

Comparing all five juror groups, there were statistically significant differences in the strength of personal feelings regarding whether the design was reasonably safe.²¹⁰ Group 1 registered the strongest feelings that the design *was* reasonably safe: an average of 5.14 out of 7 (with 7 representing the strongest possible feeling that the design was safe).²¹¹ This appears to support other findings in the study suggesting that plaintiffs experience the worst results when strict liability language and instructions are utilized.²¹²

D. Juror Responses to the Term “Reasonable Alternative Design”

Question 11 on all of the juror forms asked jurors if they believed that adding the deadman clutch to Acme’s lawn mower would have been a “reasonable alternative design.”²¹³ Jurors were asked this question whether they heard the case described in negligence terms,

²⁰⁸ See *supra* notes 181-82 and accompanying text.

²⁰⁹ As with strength of feelings on the question of negligence, the data did not show statistically significant differences regarding the closeness of jurors who said the design was reasonably safe to a rating of 1 versus the closeness of jurors who said the design was not reasonably safe to a rating of 7.

²¹⁰ Comparing the average strength of personal feelings regarding whether the design was not reasonably safe across all five groups, chi-square; $p < .05$.

²¹¹ This includes all jurors in Group 1: those who voted to award money as well as those who voted not to award money.

²¹² See *infra* notes 259-64 and accompanying text. Comparing Group 1 with other groups individually, rather than comparing all of the groups together, produced statistically significant differences with Group 4 and Group 5, but no significant differences with Group 2 and Group 3. The average strength of feeling regarding whether the design was not reasonably safe on the 7-point scale was as follows—Group 1: 5.14; Group 2: 4.85; Group 3: 4.74; Group 4: 4.27; Group 5: 3.98.

²¹³ Question 11 read:

Do you believe that adding the deadman clutch to Acme’s lawn mower would have been a reasonable alternative design?

1. Yes ____
2. No ____

See *infra* Appendices II-IV.

strict liability terms or no legal terms at all. "Reasonable alternative design" is a key phrase the Restatement (Third) uses in its formulation of a design defect standard.²¹⁴

The Restatement (Third) mandates that, in all but exceptional cases, plaintiffs establish the existence of a reasonable alternative design in order to prevail in design defect cases, regardless of whether they are pleaded as negligence or as strict liability.²¹⁵ This most controversial element of the Restatement (Third)²¹⁶ was created to ensure that plaintiffs cannot typically prevail if the defendant's design conforms to the state of the art, i.e., is the best design available.²¹⁷ Therefore, both the negligence and the strict liability jury instructions read to the study's jurors indicated that they could not find for the plaintiff unless he proved the existence of a reasonable alternative design.²¹⁸ The plaintiff's lawyer and the defendant's lawyer also attempted to explain the term to the jurors in both the negligence and strict liability videotapes that included oral arguments.²¹⁹

The study sought to measure jurors' understanding of the term "reasonable alternative design." If the jurors understood the phrase as intended, answering that the deadman clutch was not a reasonable alternative design could be predicted to correlate to jurors' answers to the questions of whether Acme "was negligent,"²²⁰ whether it "acted unreasonably,"²²¹ and whether the design was "not reasonably safe."²²² Thus, the study compared the jurors' responses to the reasonable alternative design question between each of the five groups and also compared their responses to that question with their responses to the study's other questions testing understanding of key terms.

Comparing the five juror groups, it is clear that the more explanation jurors received about the reasonable alternative design requirement, the less they favored the plaintiff in interpreting the requirement. In other words, the more explanation the jurors received, the less likely they were to describe the deadman clutch as a

²¹⁴ Restatement (Third), *supra* note 6, § 2(b); see also *supra* notes 15-17 and accompanying text.

²¹⁵ See *supra* notes 15-18 and accompanying text.

²¹⁶ See *supra* note 134.

²¹⁷ See Restatement (Third), *supra* note 6, § 2 cmt. d. In comment d, the Reporters bemoan the conflicting interpretations that courts have provided for the term "state of the art" and imply that the term should be interpreted as meaning the absence of a reasonable alternative design. *Id.*

²¹⁸ See *infra* Appendices V & VI.

²¹⁹ See *infra* Appendix I.

²²⁰ See *supra* notes 176-82 and accompanying text.

²²¹ See *supra* notes 183-90 and accompanying text.

²²² See *supra* notes 191-212 and accompanying text.

reasonable alternative design. The differences between the jurors receiving the least explanation and those receiving the most were fairly dramatic. Ninety-five percent of the control group jurors answered that the deadman clutch was a reasonable alternative design. However, only 65% of the closest-to-actual-trial jurors hearing strict liability language (Group 1) and 70% of the closest-to-actual-trial jurors hearing negligence language (Group 2) answered that the deadman clutch was a reasonable alternative design.²²³

This suggests that jurors' intuitive interpretations of the phrase may be more generous to plaintiffs than its intended meaning in design defect cases. Perhaps plaintiffs' lawyers would benefit from encouraging jurors to interpret the term simply and with its natural meaning, and defendants' lawyers would benefit from as much explanation of the requirement as possible. Since negligence is a more intuitive concept for jurors than is strict liability,²²⁴ these findings may also be interpreted as suggesting that plaintiffs should prefer negligence over strict liability.²²⁵

More explanation also improved the consistency between jurors' responses regarding whether the deadman clutch was a reasonable alternative design and their responses regarding whether the defendant should be liable. Ninety-three percent of the control-group jurors who voted *not* to award damages to the plaintiff nevertheless answered that the plaintiff's proposed deadman clutch *was* a reasonable alternative design. However, of closest-to-actual-trial jurors who voted not to award damages, only 57% hearing strict liability language (Group 1) and 54% hearing negligence language (Group 2) believed that the deadman clutch was nevertheless a reasonable alternative design.²²⁶

²²³ For both the comparisons between Group 1 and Group 3, and the comparison between Group 2 and Group 3: chi-square; $p < .05$. In Group 4, which heard strict liability instructions but no oral arguments, 92% of the jurors answered that the deadman clutch was a reasonable alternative design. In Group 5, which heard negligence instructions but no oral arguments, 95% of the jurors answered that the deadman clutch was a reasonable alternative design. For the comparisons between Group 1 and Group 4, Group 1 and Group 5, Group 2 and Group 4, and Group 2 and Group 5, statistical significance exists: chi-square; $p < .05$. However, in comparing both Group 4 and Group 5 with the control group, no statistical significance exists: chi-square; $p > .05$.

²²⁴ See *supra* Part I.D.1.

²²⁵ Although the difference between the closest-to-actual-trial groups and the other groups was statistically significant (chi-square; $p < .05$), no statistical significance was found between the closest-to-actual-trial jurors hearing negligence language and the closest-to-actual-trial jurors hearing strict liability language (chi-square; $p > .05$).

²²⁶ For the comparisons between Group 1 and Group 3 and between Group 2 and Group 3, the difference was statistically significant: chi-square; $p < .05$.

Finding that the deadman clutch is a reasonable design is not necessarily inconsistent with holding against the plaintiff on the ultimate question of liability. Under the Restatement (Third), plaintiffs also are required to prove, both in negligence and strict liability, that failure to use the reasonable alternative design rendered the product not reasonably safe.²²⁷ However, finding that the plaintiff presented a reasonable alternative design is at the least a significant step toward finding liability. This study found that control-group jurors almost always found that a reasonable alternative design existed—even when they found the defendant not liable. The results suggest that courts' use of reasonable alternative design language is not intuitive. More explanation may lead to better understanding and more consistent application of the concept.²²⁸ These findings also seem to support the argument, addressed above,²²⁹ that receiving more explanation of the reasonable alternative design concept makes jurors less likely to agree with plaintiffs that a reasonable alternative design exists.

The study also compared jurors' answers regarding whether the deadman clutch was a reasonable alternative design with their answers regarding whether Acme was "negligent"²³⁰ and whether Acme "acted unreasonably."²³¹ The comparisons produced similar results. Once again, more explanation of the term "reasonable alternative design" led to greater conformity among jurors' answers. Among control-group jurors who found that Acme was *not* negligent, 94% nevertheless responded that the deadman clutch *was* a reasonable alternative design. However, in the closest-to-actual-trial groups, only 56% of strict liability jurors (Group 1) and 58% of negligence jurors (Group 2) responded that Acme was *not* negligent but that the deadman clutch nevertheless *was* a reasonable alternative design.²³²

Similarly, 91% of the control group who answered that Acme did *not* act unreasonably nevertheless responded that the deadman clutch *was* a reasonable alternative design. However, also similarly, in the

²²⁷ See Restatement (Third), *supra* note 6, § 2(b).

²²⁸ More explanation seems to provide more consistency equally under strict liability and negligence. There was no statistically significant difference between the closest-to-actual-trial jurors hearing strict liability language (Group 1) and the closest-to-actual-trial jurors hearing negligence language (Group 2) regarding those who said the plaintiff did establish a reasonable alternative design, but who also said that the defendant was not liable.

²²⁹ See *infra* notes 223-25 and accompanying text.

²³⁰ See *supra* notes 176-82 and accompanying text.

²³¹ See *supra* notes 183-90 and accompanying text.

²³² The differences are statistically significant using a chi-square test. For the comparisons between Group 1 and Group 3 and between Group 2 and Group 3, $p < .05$. However, no statistically significant difference exists between the responses of Group 1 and the responses of Group 2 on this issue: chi-square; $p > .05$.

closest-to-actual-trial groups, only 47% of strict liability jurors (Group 1) and 39% of negligence jurors (Group 2) responded that Acme did *not* act unreasonably but that the deadman clutch nevertheless *was* a reasonable alternative design.²³³ Adding oral arguments to explain the reasonable alternative design standard brought jurors significantly closer to their responses regarding whether Acme was negligent and whether it acted reasonably. These findings also seem to buttress the argument that more explanation of the reasonable alternative design concept makes jurors less likely to agree with plaintiffs that a reasonable alternative design exists. And, since negligence is a more intuitive concept requiring less explanation, these results again may suggest it is a safer approach for plaintiffs than attempting to rely on strict liability.

Question 12 on all of the juror questionnaires asked jurors to rate the strength of their feelings regarding whether the deadman clutch was a reasonable alternative design.²³⁴ This question was asked of all groups, regardless of the language, or absence of language, they heard to describe liability standards. As with the questions of whether Acme acted negligently²³⁵ and whether they thought the product was reasonably safe,²³⁶ both those who believed the product was *not* a reasonable alternative design and those who believed that it *was* a reasonable alternative design tended to be fairly confident, but not absolutely sure, of their beliefs. Across all groups, the average juror who believed that the deadman clutch *was* a reasonable alternative design rated herself at 2.12 on a 7-point scale, with 1 indicating “feel strongly would be a reasonable alternative design” and 7 indicating “feel strongly would not be a reasonable alternative design.” The average juror who believed that the deadman clutch was *not* a reasonable alternative design rated herself at 5.98 on the 7-point scale.

²³³ As with the comparison to the negligence question, the differences are statistically significant using a chi-square test: for the comparisons between Group 1 and Group 3 and between Group 2 and Group 3, $p < .05$. However, no statistically significant difference exists in the responses of Group 1 to the responses of Group 2 on this issue: chi-square; $p > .05$.

²³⁴ Question 12 read:

On the scale below rate how strongly you feel regarding whether adding the deadman clutch to Acme's lawn mower would have been a reasonable alternative design?

Feel strongly would
be a reasonable
alternative design

Feel strongly would
not be a reasonable
alternative design

1 2 3 4 5 6 7

See *infra* Appendices II-IV.

²³⁵ See *supra* notes 181-82 and accompanying text.

²³⁶ See *supra* notes 207-12 and accompanying text.

Comparing all five juror groups, there were statistically significant differences in the strength of personal feelings regarding whether the deadman clutch was a reasonable alternative design.²³⁷ Group 1, the closest-to-actual-trial group hearing strict liability language, registered the strongest feelings that the deadman clutch was *not* a reasonable alternative design: an average of 3.9 out of 7 (with 7 representing the strongest possible feeling that the deadman clutch was not a reasonable alternative design).²³⁸ Indeed, even focusing only on jurors who indicated that the deadman clutch *was* a reasonable alternative design, the closest-to-actual-trial strict liability jurors registered the weakest enthusiasm for their pro-plaintiff position.²³⁹ As with the jurors' feelings regarding whether the product was reasonably safe,²⁴⁰ this seems to support other findings in the study suggesting that plaintiffs experience the worst results when strict liability language and instructions are utilized.²⁴¹

CONCLUSION

A debate still lingers regarding whether the ALI's adoption of section 402A of the Restatement (Second) of Torts in the early 1960s itself generated the explosive growth of strict products liability, or whether the ALI merely anticipated that the courts were heading in that direction on their own.²⁴² The answer probably lies somewhere

²³⁷ Comparing the average strength of personal feelings regarding whether the deadman clutch was a reasonable alternative design across all five groups: chi-square = 34.795; df = 4; $p < .05$.

²³⁸ This includes all jurors in Group 1: those who voted to award money as well as those who voted not to award money. Even though Group 1's average personal feeling score of 3.9 represented the worst results for the plaintiff, it is of course only slightly closer to 7 (feel strongly was not a reasonable alternative design) than to 1 (feel strongly was not a reasonable alternative design). This reflects that a strong percentage of jurors in all of the groups felt that the deadman clutch was a reasonable alternative design, even if they did not ultimately believe that Acme should be liable.

²³⁹ Among jurors who said that the deadman clutch was a reasonable alternative design, the average strength of feelings on the 7-point scale (again, with 7 indicating the strongest feeling that the deadman clutch was not a reasonable alternative design) was as follows: Group 1: 2.73; Group 2: 2.26; Group 3: 2.46; Group 4: 1.91; Group 5: 1.81. Comparing all five of these groups, there was statistical significance in the differences of their strength of feelings: chi-square = 9.668; df = 4; $p < .05$.

²⁴⁰ See *supra* notes 191-202 and accompanying text.

²⁴¹ See *infra* notes 259-64 and accompanying text. Comparing Group 1 with other groups individually, rather than comparing all of the groups together, produced statistically significant differences with Groups 3, 4, and 5, but no significant difference with Group 2: Group 3 ($z = -2.796$; $p < .05$), Group 4 ($z = -4.401$; $p < .05$), Group 5 ($z = -5.249$; $p < .05$), Group 2 ($z = -1.362$; $p < .05$). The average strength of feelings regarding whether the deadman clutch was a reasonable alternative design on the 7-point scale was as follows—Group 1: 3.9; Group 2: 3.31; Group 3: 2.68; Group 4: 2.24; Group 5: 2.00.

²⁴² See *supra* notes 54-57 and accompanying text.

in between. A similar debate someday may develop regarding the Restatement (Third)'s approach of treating negligence and strict liability as substantively equivalent in design and warning defect claims. The courts already were trending in that direction, and the Restatement (Third)'s stamp of approval likely will add substantial impetus to the movement.

In light of this increasingly active evolution toward substantive equivalency, the question of how negligence and strict products liability still might differ is one of tort law's most interesting problems. Except in manufacturing-defect claims, strict products liability is clearly on the ropes. Born of a desire to make recovery for injured plaintiffs easier, it must now struggle to validate itself as a source of potent benefits for plaintiffs despite losing its substantive distinctions from negligence. If it does not succeed in establishing that it remains a weapon worth keeping, the doctrine may, perhaps in the not too distant future, succumb to complete extinction in design and warning claims.

Of the potential arrows remaining in strict liability's quiver,²⁴³ the rhetorical benefit of communicating to jurors a message that fault is not required has been the most intriguing and the most difficult to assess. No doubt because of this, several scholars have speculated about whether the rhetoric of strict liability is truly an advantage, or whether negligence language actually might be more helpful to plaintiffs. However, despite nearly three decades of discussion,²⁴⁴ little has been done to move the debate beyond bald speculation.

This study's findings are certainly not the last words on the debate, but they may add some substance and some new points of discussion to it. To summarize, some of the study's more interesting findings include:

- When compared to all of the other groups combined, the closest-to-actual-trial jurors hearing strict liability language (Group 1) were less likely to award any money to the plaintiff. Twenty-six percent of the Group 1 jurors would award money, while 38% of the closest-to-actual-trial jurors hearing negligence language (Group 2) would award money.²⁴⁵
- The average pain and suffering award among jurors who said some money should be awarded was almost twice as high under

²⁴³ For a discussion of other possible "procedural" benefits strict products liability might offer plaintiffs even after its substantive merger with negligence, see *supra* notes 93-95 and accompanying text.

²⁴⁴ Paul Rheingold's seminal law review article framing the issue was published in 1974. See Rheingold, *supra* note 97.

²⁴⁵ See *supra* notes 154-57 and accompanying text.

negligence language as it was under strict liability language. For the closest-to-actual-trial group hearing negligence language (Group 2), the average pain and suffering award among jurors who thought some damages should be awarded was \$49,750. Among the jurors who thought some damages should be awarded in the closest-to-actual-trial group hearing strict liability language (Group 1), the average was \$27,571.²⁴⁶

- Among the closest-to-actual-trial groups, jurors hearing the case under negligence language were significantly more likely to say they believed that the defendant was “negligent” than were the jurors hearing strict liability language. The control group jurors were also more likely than were the strict liability group jurors to say they believe that the defendant was “negligent.”²⁴⁷
- The closest-to-actual-trial jurors hearing strict liability language had the strongest feelings that the defendant’s design was “reasonably safe.”²⁴⁸
- The more explanation jurors received about the reasonable alternative design requirement, the less they favored the plaintiff in interpreting the requirement.²⁴⁹
- Jurors in the closest-to-actual-trial group hearing strict liability language registered the strongest feelings that the plaintiff did not establish the existence of a reasonable alternative design.²⁵⁰
- Although several findings showed advantages to using negligence language or disadvantages to using strict liability language, none of the study’s findings showed obvious rhetorical advantages to using strict liability language.

These findings seem to support the contention that, rather than serving as one of strict liability’s remaining advantages, the doctrine’s rhetoric is one of its weaknesses. As Paul Rheingold first speculated in the 1970s, the concept formulated to make plaintiffs’ recovery easier actually may hurt them.²⁵¹ Rheingold may have been correct in asserting that jurors prefer the “hot” language of the more intuitive negligence approach over the “cold” and technical language of strict liability.²⁵² If so, plaintiffs’ choice of legal theories to present to the

²⁴⁶ See *supra* notes 173-74 and accompanying text.

²⁴⁷ See *supra* notes 177-82 and accompanying text.

²⁴⁸ See *supra* notes 191-212 and accompanying text.

²⁴⁹ See *supra* notes 233-39 and accompanying text.

²⁵⁰ See *supra* note 238 and accompanying text.

²⁵¹ See *supra* notes 97-98 and accompanying text.

²⁵² Rheingold, *supra* note 97, at 531-32.

jury may remain important, even if the underlying risk/utility test used with both theories is identical.

The implications to be drawn from these findings depend in part on one's perspective. Those critical of the Restatement (Third)'s collapsing of negligence and strict liability theories together in design cases may find ammunition for their position in the study. The Reporters' justifications for eliminating substantive distinctions between the theories centered on arguments that they are already essentially the same.²⁵³ The more differences that may be established between use of strict liability and negligence, the weaker the Reporters' position becomes.²⁵⁴

Alternatively, one might contend that the study's findings support the Restatement (Third)'s approach of unifying only the substantive risk/utility test and allowing other differences between negligence and strict liability to survive. As discussed above, under the Restatement (Third) plaintiffs still are allowed to choose whether to label their claim as negligence or strict liability.²⁵⁵ The Restatement (Third) recognizes that a few differences might continue to exist between negligence and strict liability, such as whether to allow a comparative negligence defense, even if the same functional risk/utility test is used for both theories.²⁵⁶ Differences in rhetorical impact might simply be an additional reason to allow both causes of action to continue in separate existence, despite their substantive marriage. However, negligence is not the cause of action in danger of extinction in design and warning claims. If one of the differences between strict liability and negligence is that jurors respond better to plaintiffs using negligence language, this is hardly a distinction that will encourage continued strategic employment of multiple causes of action in products liability claims. Rather than strengthening the argument to retain both causes of action, it strengthens negligence at the expense of the already beleaguered strict liability.

²⁵³ See *supra* notes 22-24 and accompanying text.

²⁵⁴ However, the position of the Restatement (Third)'s Reporters likely will not be changed by this study's findings. In an early draft of their comments to section 2, the Reporters acknowledged that there may be a psychological impact in choosing to use negligence or strict liability language. The Restatement (Third) of Torts: Products Liability § 2, reporters' note to cmt. m (Tentative Draft No. 2, 1995). Although they did not speculate in the draft as to which language offered a psychological advantage, acknowledging this possibility did not prevent them from successfully advocating that the theories should be substantively combined in a risk/utility test.

²⁵⁵ This is only true, of course, provided that the jurisdiction allows for both causes of action. See Restatement (Third), *supra* note 6, § 2 cmt. m; see also *supra* notes 20-21 and accompanying text.

²⁵⁶ See Restatement (Third), *supra* note 6, § 1 cmt. a.

The findings may be interpreted as either supporting or undermining the Restatement (Third)'s insistence that plaintiffs choose only one legal theory to present to the jury, rather than arguing both negligence and strict liability. As noted above, most jurisdictions disagree with the Restatement (Third) on this issue, allowing plaintiffs to present both causes of action simultaneously to the jury.²⁵⁷ The greater the rhetorical impact of choosing between negligence language and strict liability language, the greater the differences in the causes of action and, thus, the greater the justification for allowing plaintiff to use both rather than being forced to choose only one. However, the Restatement (Third) explains its rule against utilizing both theories as a guard against confusion and inconsistent verdicts.²⁵⁸ The question then becomes whether achieving varying results through use of different language is unacceptable inconsistency, or whether it reflects legitimate differences in emphasis inherent in the separate causes of action.

Studying how jurors react when they hear both negligence rhetoric and strict liability rhetoric together may provide a missing element necessary to answer this question. This may confuse jurors, or it may provide them a fuller picture of interests the courts are addressing when allowing products liability claims. This study focused on jurors hearing either strict liability language or negligence language, rather than hearing both. Further empirical study in which jurors hear both strict liability and negligence arguments would be helpful in addressing this issue.

The study's finding that jurors award money to the plaintiff at a lower rate when strict liability language is used²⁵⁹ is also consistent with speculation provided by one of the authors in an earlier article that jurors may be pulled toward reaching a conclusion they believe is "fair" regardless of the jury instructions.²⁶⁰ Negligence analysis is in essence the same as a rough sense of fairness;²⁶¹ punishing only unreasonable conduct is consistent with the rules of fairness we learn on the playground as children and bring into the courthouse with us before hearing a word about legal rules from the judge or the lawyers.²⁶² Awarding money less frequently when the plaintiff attempts to utilize

²⁵⁷ See *supra* note 6 and accompanying text.

²⁵⁸ See Restatement (Third), *supra* note 6, § 2 cmt. n.

²⁵⁹ See *supra* notes 153-55 and accompanying text.

²⁶⁰ See Cupp, *supra* note 98, at 1096 ("[T]he jurors seemed to focus more on their own perception of case-specific fairness than on the judge's instructions."); see also *supra* notes 101-04 and accompanying text.

²⁶¹ Or, as Justice Andrews so aptly put it when discussing proximate cause, "a rough sense of justice." *Palsgraf v. Long Island R.R. Co.*, 162 N.E. 99, 103 (N.Y. 1928).

²⁶² See Cupp, *supra* note 98, at 1105.

a standard that is not based on jurors' preexisting sense of fairness supports the contention that this preexisting sense carries significant weight.

The study neither supports nor erodes the speculation that negligence language is preferable in cases when the facts for the plaintiff are strong, but strict liability language may be preferable when the facts are weaker.²⁶³ Since the jurors were provided only one set of facts, no comparison may be made between how they would react to a stronger factual scenario versus a weaker scenario. Testing the impact of strict liability versus negligence rhetoric in stronger versus weaker factual scenarios should be another subject for a future study.

As noted at the outset of this article, Lewis Carroll's Humpty Dumpty argued that when he uses a word "it means just what I choose it to mean—neither more nor less."²⁶⁴ On the whole, this study seems to suggest that ascribing pro-plaintiff meaning to strict liability language will not do. Simply put, under the conditions of this study, jurors chose to interpret the use of simple negligence language as meaning the plaintiff has a better case—neither more nor less.

²⁶³ See *id.* at 1106 (stating that in weak case, focusing on strict liability language may improve chances of recovery for plaintiff); see also *supra* notes 110-16 and accompanying text.

²⁶⁴ Carroll, *supra* note 1, at 269.

APPENDIX I
TEXTS OF ORAL ARGUMENTS²⁶⁵

Plaintiff's Argument Based on Strict Liability

I would like to begin by thanking you jurors for paying careful attention to the evidence in this case. Before I begin addressing this evidence, I would like to discuss what we lawyers call the “burden of proof” with you. In this kind of trial, the plaintiff, Fred Jones, has to prove his case by a preponderance of the evidence. That is different from the standard that is used in criminal trials. In criminal trials the state typically has to prove its case “beyond all reasonable doubt.” However, in this kind of trial, Fred Jones only has to prove that it is *more likely than not*²⁶⁶ that the lawn mower is defective and that he should be awarded the amount of damages you think appropriate. In other words, although he has the burden of proof, you only have to find it slightly more likely that the lawn mower is not reasonably safe than that it is reasonably safe.

There are two key issues in dispute in this case:

- 1) Was the lawn mower defective? and
- 2) If so, how much is a fair amount to award to Fred Jones in damages?

Let's start with the question of whether the lawn mower's design was defective.

We believe that making the lawn mower without a deadman clutch was a design defect. In our state, we apply something called “strict liability” to product designs. That means that the seller is liable, *even if it was not negligent* in designing the product, if the product is too dangerous. Fault does not matter—if the product is unreasonably dangerous in its design, you are to find Acme liable even if it was not negligent in choosing the design. Let me read for you the instruction that the judge will give you defining a design defect under strict liability:

The plaintiff is *not required* to prove that the defendant acted negligently in designing the product to show that the design is defective. Rather, a product is defective in design when the foreseeable risk of harm posed by the product could have been reduced or avoided by

²⁶⁵ These are the exact texts of the oral arguments made for the videotapes shown to jurors. The first two oral arguments on strict liability were heard by Group 1 jurors who also received strict liability jury instructions. The second two oral arguments on negligence were heard by Group 2 jurors who also received jury instructions on negligence. The attorneys read the text from cue cards to ensure that the exact language provided in this transcript was used.

²⁶⁶ Underlined text was underlined in the lawyer's cue cards, signaling the lawyer to emphasize the underlined words.

the adoption of a reasonable alternative design by the manufacturer, and the omission of the alternative design renders the product not reasonably safe.

In determining whether the alternative design is reasonable and whether its omission renders a product not reasonably safe you may consider:

1. The magnitude of the foreseeable risks of harm;
2. The nature and strength of consumer expectations regarding the product;
3. The relative advantages and disadvantages of the product as designed and as it alternatively could have been designed; and
4. The effects of the alternative design on production costs and marketability.

Under this instruction, you have to decide first whether a reasonable alternative design existed that would have reduced or avoided the risk of harm. We submit that a reasonable alternative design is clearly present—Acme could have designed the lawn mower with a deadman clutch. If the lawn mower had the clutch, its mower would have stopped immediately when Fred let go of the bar, and this accident would not have occurred. The deadman clutch was already on the market and in use with other lawn mowers when Acme sold the lawn mower that mutilated Fred. The deadman clutch would only have added \$3 to the lawn mower's price, had Acme decided to use it.

Failing to use this alternative design makes the lawn mower not reasonably safe. By raising the price only \$3, 500 users would have been saved from terrible injuries like those suffered by Fred Jones.

Think about how much pain, suffering, and medical expense has been caused by this design with all of those injured users. Just looking at money, in this case alone Fred's medical bills totaled about \$25,000—not to mention the much greater value of all the pain he has suffered and will continue to suffer for the rest of his life. Think about all of the thousands and thousands of dollars that have been spent on medical bills by all of the people hurt by this lawn mower, and, even more significant, all of the suffering they are enduring. All of this could have been avoided by raising the price only \$3.

I'll be interested to hear if Acme tries to argue that if Fred's neighbor wanted a safe lawn mower he could have bought another brand that had a deadman clutch. If Acme makes this argument, that might tell you something about whether Acme itself realizes its lawn mower is not reasonably safe. Also, Fred wasn't the one who chose the lawn mower. He didn't make any choices about whether to buy another brand with a deadman clutch. The fact is, there shouldn't

even be a choice to make—the deadman clutch was an inexpensive, simple safety feature that should be on *every* lawn mower on the market. If Acme makes—If Acme’s argument were true, a manufacturer could get away with making the most recklessly dangerous products in the world, as long as some safer product is on the market it could say that consumers should have chosen instead. That’s absurd.

Acme’s lawyer is also going to argue that the deadman clutch is too inconvenient because consumers won’t want to have to restart the engine every time they step away from the lawn mower. When you think about this argument, think about Fred’s mutilated hand. Think about the 500 other people who have been mutilated by Acme’s lawn mowers without the deadman clutch. That’s a lot of people. Do you think they would worry about the inconvenience of having to restart the mower every now and then if they could get their fingers and toes back? When you balance a little inconvenience against hundreds of permanent, serious injuries, it isn’t hard to see that the inconvenience is worth it many times over.

The bottom line is, the design was unreasonable, and Fred Jones was injured as a result of that unreasonable design. A safe alternative design could have been used easily and inexpensively. Acme is required to compensate Fred for its defective design.

As you think through whether a reasonable alternative design existed, and whether Acme’s lawn mower was reasonably safe, let me remind you again that fault or blame are *not necessary* in this case. You may think that Acme acted negligently in choosing to design its lawn mower without a deadman clutch. However, even if you do not believe that Acme acted negligently, you must find for Fred Jones as long as a reasonable alternative design existed that would have prevented the accident, and failure to use that design made the lawn mower not reasonably safe.

I know you are going to weigh the evidence carefully and follow the judge’s instructions carefully, and I believe that you are going to find that the design was defective. So let me close by talking about some things to consider when deciding what amount of damages is appropriate.

First of all, we all understand that no amount of money is going to make up for the suffering Fred has endured and will continue to endure for the rest of his life. He would much rather have his fingers back than to be paid some money. However, this is not going to happen. Awarding money is the only means we have of compensating his injuries. As the evidence showed, Fred’s medical expenses are \$25,000. In addition to that sum, he is entitled to damages for the pain and suffering he has gone through and will continue to go through. I

am not going to suggest an amount of money that is appropriate to compensate for that pain and suffering, because I think that the jury is best-suited to do that. I only ask that you award what you think is fair.

Thank you again for paying careful attention to the facts and evidence in this case.

Defendant's Argument Based on Strict Liability

As has the plaintiff's attorney, I would like to thank you for your willingness to serve on this jury. I know that you have paid close attention to all of the evidence, and I am confident that you will render a fair decision. Although we all feel very badly that the plaintiff has been injured, the only fair result in this case is to find that Acme's lawn mower was not defective.

The plaintiff's attorney read you the instruction that the judge will give you on liability. Let's look more closely at what that instruction requires.

The plaintiff has the burden of proving that a reasonable alternative design exists and that without the deadman clutch the product is not reasonably safe. The key word that comes up twice in the instructions is "reasonable." Plaintiff's attorney pointed out that you do not have to find that Acme acted negligently to award a judgment. That may be true, but as you will see in the judge's instructions, you would have to find that a reasonable alternative design exists, and that the lawn mower without the deadman clutch is not reasonably safe.

Although an alternative design does exist, it is not a reasonable alternative given the facts in this case. And although the product could, by raising the price and making the product less practical, conceivably be a bit safer, it is reasonably safe without the deadman clutch.

The alternative design of adding a deadman clutch is not reasonable, and the product is reasonably safe as is, for the same reason: The benefit that would result from adding the deadman clutch is not worth the detriment of adding the deadman clutch.

Let's look at the "costs" of adding the deadman clutch. I hesitate to use the word "costs" because it may sound like we're talking only about dollar costs. Money is certainly a factor, but there are several other "costs" to adding a deadman clutch besides the extra money. The money costs are at least a good starting place. The plaintiff's attorney talks as if adding \$3 to the lawn mower's price were a minor thing. That would be true if we were talking only about one lawn

mower, but of course we are not. Acme has sold 500,000 of these lawn mowers. If a \$3 deadman clutch were added to each of these, the total cost to the consumers would be *one-half million dollars*. Don't be fooled into thinking that the dollar cost of making the design change that the plaintiff wants would be minimal. To the contrary, the overall cost to consumers would be large.

The plaintiff's attorney said he was curious whether I'd point out that consumers have options in deciding whether to buy a lawn mower with a deadman clutch. Well, I *am* going to talk about that, and I am confident that you are not going to be taken in by his attempt to glaze over that very important fact.

This may seem like I'm getting off the subject at first, but do you realize that we do not *have* to have any automobile fatalities in this country? Automobile manufacturers could very easily make vehicles with top speeds of 20 miles per hour and with metal frames three inches thick to make sure they could withstand any 20 mile per hour collision. But cars like that would not be very popular. We want to go faster and get better gas mileage, and we are willing to take some risks in exchange. Of course we can decide to buy a car with a reputation for great safety, like a Volvo. Or we can decide to buy a car not known for being quite as safe, but that is less expensive and has other benefits, like a Volkswagen Beetle.

The point is, society benefits greatly by having a range of products with different price ranges and safety features for consumers to choose from. In this case the purchaser had a choice. He could have purchased a more expensive lawn mower from another manufacturer, and he might have obtained more safety features with the extra money. But do we want to force all consumers to purchase the equivalent of a Volvo? Shouldn't the market be allowed to include a range of prices and product characteristics, so that consumers have the power to decide what is best? I think you will agree that consumers should have the choice of taking a little more of a risk in exchange for a lower price and other benefits without the less expensive product being found "not reasonably safe."

Not only is Acme's mower less expensive than mowers with a deadman's clutch, it also works better. If you've ever mowed a lawn before, you know that you will, for some reason or another, need to take your hands off the pushbar several times every time you use the lawn mower. Imagine having to restart the engine every time you do that. Remember, this is not like a car engine, where you just turn a key to start it. Starting a lawn mower requires pulling a nylon cord with all of your strength and sometimes you have to make several pulls before it will start. The plaintiff's attorney talks about this as if it

were a minor inconvenience, but I would argue it is a pretty significant factor in determining whether you will be satisfied with your mower. I ask that you consider this in deciding whether the product is reasonably safe, and whether the alternative design is reasonable.

Finally, let's look at how dangerous Acme's lawn mower really is without the deadman clutch. Yes, about 500 people have been hurt. But remember that is out of 500,000 lawn mowers. Do you know how small a percentage that is? Five hundred injured users is only one tenth of one percent of the total number of purchasers of Acme lawn mowers. Again, we feel badly that injuries, on very rare occasions, do occur. However, these are very rare occasions.

In light of this, adding the deadman clutch is not worth the one and one half million dollars extra it would cost consumers. Is Acme's lawn mower as safe as it could possibly be? No. Like the Volkswagen Beetle, it could be safer. But is it reasonably safe? Definitely. In light of the lawn mower's cost advantage, utility advantage, and infrequent rate of injury, calling it not reasonably safe would be a miscarriage of justice. Thank you.

Plaintiff's Argument Based on Negligence

I would like to begin by thanking you jurors for paying careful attention to the evidence in this case. Before I begin addressing this evidence, I'd like to discuss what we lawyers call the "burden of proof" with you. In this kind of trial, the plaintiff, Fred Jones, has to prove his case to you by a preponderance of the evidence. That is different from the standard that is used in criminal trials. In criminal trials, the state typically has to prove its case "beyond all reasonable doubt." However, in this kind of trial, Fred Jones only has to prove that it is more likely than not that the lawn mower is defective and that he should be awarded the amount of damages you think is appropriate. In other words, although he has the burden of proof, you only have to find it slightly more likely that the lawn mower design is not reasonably safe than that it is reasonably safe.

There are two key issues in dispute in this case:

- 1) Was Acme negligent in the way it designed its lawn mower? and
- 2) If so, how much is a fair amount to award to Fred Jones in damages?

Let's start with the question of whether Acme was negligent.

We believe that making the lawn mower without a deadman clutch was negligent. Negligence can be defined as failing to act rea-

sonably. Let me read for you the instructions that the judge will give you defining a negligent design defect:

A manufacturer is negligent in designing a product when the foreseeable risks of harm posed by the product could have been reduced or avoided by the adoption of a reasonable alternative design by the manufacturer, and the omission of the alternative design renders the product not reasonably safe.

In determining whether the alternative design is reasonable and whether its omission renders a product not reasonably safe you may consider:

1. The magnitude of the foreseeable risks of harm;
2. The nature and strength of consumer expectations regarding the product;
3. The relative advantages and disadvantages of the product as designed and as it alternatively could have been designed; and
4. The effects of the alternative design on production costs and marketability.

Under these instructions, you have to decide first whether a reasonable alternative design existed that would have reduced or avoided the risk of harm. We submit that a reasonable alternative design is clearly present—Acme could have designed the mower with a deadman clutch. If the lawn mower had the clutch, its motor would have stopped immediately when Fred let go of the bar, and this accident would not have occurred. The deadman clutch was already on the market and in use with other lawn mowers when Acme sold the lawn mower that mutilated Fred. The deadman clutch would have added \$3 to the lawn mower's price, had Acme decided to use it.

Failing to use this alternative design was negligent, and makes the lawn mower not reasonably safe. By raising the price only \$3, 500 users would have been saved from terrible injuries like those suffered by Fred Jones.

Think about how much pain, suffering, and medical expense has been caused by this design with all of those injured users. Looking just at money, in this case alone, Fred's medical bills totaled about \$25,000—not to mention the much greater value of all the pain he has suffered and will continue to suffer for the rest of his life. Think about all of the thousands and thousands of dollars that have been spent on medical bills by all of the people hurt by this lawn mower, and, even more significant, all of the suffering they are enduring. All of this could have been avoided by raising the price only \$3.

I'll be interested to hear if Acme tries to argue that if Fred's neighbor wanted a safe lawn mower he could have bought another

brand that had a deadman clutch. If Acme makes that argument, that might tell you something about whether Acme itself realizes its lawn mower is not reasonably safe. Also, Fred wasn't the one who chose the lawn mower. He didn't make any choices about whether to buy another brand with a deadman clutch. The fact is, there shouldn't even be a choice to make—the deadman clutch was an inexpensive, simple safety feature that should be on *every* lawn mower on the market. If Acme's argument were true, a manufacturer could get away with making the most recklessly dangerous products in the world, as long as some other safer product is on the market it can say consumers should have chosen instead. That's absurd.

Acme's lawyer is also going to argue that the deadman clutch is too inconvenient because consumers won't want to have to restart the engine every time they step away from the lawn mower.

When you think about this argument, think about Fred's mutilated hand. Think about the 500 other people who have been mutilated by Acme's lawn mowers without the deadman clutch. That's a lot of people. Do you think they would worry about the inconvenience of having to restart the mower every now and then if they could get their fingers and toes back? When you balance a little inconvenience it is worth it many times over.

The bottom line is, Acme acted unreasonably—negligently—in choosing its design, and Fred Jones was injured as a result of that negligence.

It knew how to easily and inexpensively make a new design, and it *intentionally* chose not to do so. Acme needs to compensate Fred for its negligence.

I know you are going to weigh the evidence carefully and follow the judge's instructions carefully, and I believe you are going to find that the design was defective. So let me close by talking about some things to consider when deciding what amount of damages is appropriate.

First of all, we all understand that no amount of money is going to make up for the suffering Fred has endured and will continue to endure for the rest of his life. He would much rather have his fingers back than be paid some money. However, that is not going to happen. Awarding money is the only means we have of compensating his injuries.

As the evidence showed, Fred's medical expenses are \$25,000. In addition to that sum, he is entitled to damages for the pain and suffering he has gone through and will continue to go through. I am not going to suggest an amount of money that is appropriate to compen-

sate for that pain and suffering, because I think that the jury is best-suited to decide that. I only ask that you award what you think is fair.

Thank you again for paying careful attention to the facts and evidence in this case.

Defendant's Argument Based on Negligence

As has the plaintiff's attorney, I would like to thank you for your willingness to serve on this jury. I know that you have paid close attention to all the evidence, and I am confident that you will render a fair decision. Although we all feel very badly that the plaintiff has been injured, the only fair result in this case is to find that Acme's lawn mower was not defective.

The plaintiff's attorney read you the instruction that the judge will give you on liability. Let's look more closely at what that instruction requires. The plaintiff has the burden of proving that a reasonable alternative design exists and that without the deadman clutch the product is not reasonably safe. The key word that comes up twice in the instructions is *reasonable*. As you will see in the judge's instructions, to find negligence you would have to find that a *reasonable* alternative design exists, and that the lawn mower without the deadman clutch is not *reasonably* safe.

Although an alternative design does exist, it is not a *reasonable* alternative given the facts in this case. And although the product could, by raising the price and making the product less practical, conceivably be a bit safer, it is *reasonably* safe without the deadman clutch.

The alternative design of adding a deadman clutch is not reasonable, and the product is reasonably safe as is, for the same reason: The *benefit* that would result from adding the deadman clutch is not worth the *detriment* of adding the deadman clutch.

Let's look at the "costs" of adding the deadman clutch. I hesitate to use the word "costs," because it may sound like we are only talking about dollar costs. Money certainly is one factor, but there are several other "costs" to adding a deadman clutch besides the extra money. The money costs are at least a good starting point. The plaintiff's attorney talks as if adding \$3 to the lawn mower's price were a minor thing. That would be true if we were only talking about one lawn mower, but of course we are not. Acme has sold 500,000 of these lawn mowers. If a \$3 deadman clutch were added to each of these, the total cost to consumers would be *one and one half million dollars*. Don't be fooled into thinking that the dollar cost of making the design change

that the plaintiffs wants [sic] would be minimal—to the contrary—the overall cost to consumers would be large. The plaintiff's attorney said he was curious whether I'd point out that consumers have options in deciding whether to buy a lawn mower with a deadman clutch. Well, I am going to talk about that, and I am confident that you are not going to be taken in by his attempt to glaze over that very important fact.

This may seem like I am getting off the subject at first, but do you realize that we do not *have* to have any automobile fatalities in this country? Automobile manufacturers could very easily make vehicles with top speeds of 20 miles per hour, and with metal frames 3 inches thick to make sure they could withstand any 20 mile per hour collision. But cars like that would not be very popular. We want to go faster and get better gas mileage, and we are willing to take some risks in exchange. Of course we can decide to buy a car with a reputation for great safety, like a Volvo. Or we can decide to buy a car that is less expensive and has other benefits, like a Volkswagen Beetle. The point is, society benefits greatly by having a range of products with different price ranges and safety features for consumers to choose from. In this case, the purchaser had a choice. He could have purchased a more expensive lawn mower from another manufacturer, and he might have obtained more safety features with the extra money. But do we want to say all cars are defective unless they are Volvos?

I think you will agree that consumers should have the choice of taking a little more of a risk in exchange for a lower price and other benefits without the manufacturer being found negligent. Not only is Acme's mower less expensive than mowers with a deadman's clutch, it also works better. If you have ever mowed a lawn before, you know that you will, for some reason or another, need to take your hands off of the push bar several times every time you use the mower. Imagine having to restart the engine every time you do that. Remember, this is not like a car engine, where you just turn a key to start it. Starting a lawn mower requires pulling a nylon cord with all of your strength, and sometimes you will have to make several pulls before it will start. The plaintiff's attorney talks about this as if it were a minor inconvenience, but I would argue it is a pretty significant factor in determining whether you will be satisfied with your lawn mower. I ask that you consider this in deciding whether the product is reasonably safe, and whether the alternative design is reasonable.

Finally, let's look at how dangerous Acme's lawn mower really is without the deadman clutch. Yes, about 500 people have been hurt. But remember, that is out of *five hundred thousand* lawn mowers. Do you know how small a percentage that is? Five hundred injured users

is only one tenth of one percent of the total number of purchasers of Acme's lawn mowers. Again, we feel badly that injuries, on very rare occasions, do occur. However, these are *very* rare occasions.

In light of this, adding the deadman clutch is not worth the one and one half million dollars extra it would cost consumers. Is Acme's lawn mower as safe as it could possibly be? No. Like the Volkswagen Beetle, it could be safer. But is it *reasonably* safe? Definitely. In light of the lawn mower's cost advantage, utility advantage, and infrequent rate of injury, calling it not reasonably safe would be a miscarriage of justice. Acme *has not* done anything worthy of blame in choosing its design. Thank you.

APPENDIX II
 QUESTIONNAIRE FOR JURORS HEARING THE FACTS ONLY
 (GROUP 3)

1) Would you vote to require Acme to pay any money to Fred Jones if you were a juror in this case?

1. Yes _____

2. No _____

2) On the scale below rate how certain you are that you would vote as indicated in response to question number one (circle one number).

Very certain

Very uncertain

1

2

3

4

5

6

7

3) Regardless of your answers to questions number one and two, on the scale below rate how you personally feel about whether Acme should be required to pay any money to Fred Jones (circle one number).

Feel strongly
should pay

Feel strongly
should not pay

1

2

3

4

5

6

7

4) If your answer to question one is yes, how much money would you award to Fred Jones to compensate for his medical expenses and to compensate for his pain and suffering?

1. Medical expenses: \$_____

2. Pain and suffering: \$_____

 Total: \$_____

5) Do you believe that Acme was negligent in designing its lawn mower without a deadman clutch?

1. Yes _____

2. No _____

6) On the scale below rate how strongly you feel regarding whether Acme was negligent or not negligent in designing its lawn mower without a deadman clutch (circle one number).

Feel strongly
was negligent

Feel strongly
was not negligent

1

2

3

4

5

6

7

7) Do you believe that Acme acted unreasonably in designing its lawn mower without a deadman clutch?

1. Yes _____

2. No _____

8) On the scale below rate how strongly you feel regarding whether Acme acted unreasonably or acted reasonably in designing its lawn mower without a deadman clutch (circle one number).

Feel strongly acted reasonably						Feel strongly acted unreasonably
1	2	3	4	5	6	7

9) Do you believe that the lawn mower design was not reasonably safe since it did not have a deadman clutch?

1. Yes _____
2. No _____

10) On the scale below rate how strongly you feel regarding whether the lawn mower design was not reasonably safe or was reasonably safe without a deadman clutch (circle one number).

Feel strongly was not reasonably safe						Feel strongly was reasonably safe
1	2	3	4	5	6	7

11) Do you believe that adding the deadman clutch to Acme's lawn mower would have been a reasonable alternative design?

1. Yes _____
2. No _____

12) On the scale below rate how strongly you feel regarding whether adding the deadman clutch to Acme's lawn mower would have been a reasonable alternative design?

Feel strongly would be a reasonable alternative design						Feel strongly would not be a reasonable alternative design
1	2	3	4	5	6	7

13) What is your gender? Female _____ Male _____

14) What is your age? _____

15) Please circle one of the below to describe your family's income range (if you are a student, circle your parents' income range).

- | | |
|-------------------------|----------------------------|
| 1. 0 to \$20,000 | 7. \$70,000 to \$80,000 |
| 2. \$20,000 to \$30,000 | 8. \$80,000 to \$90,000 |
| 3. \$30,000 to \$40,000 | 9. \$90,000 to \$100,000 |
| 4. \$40,000 to \$50,000 | 10. \$100,000 to \$125,000 |
| 5. \$50,000 to \$60,000 | 11. \$125,000 to \$150,000 |
| 6. \$60,000 to \$70,000 | 12. Over \$150,000 |

APPENDIX III
 QUESTIONNAIRE FOR JURORS HEARING
 STRICT LIABILITY LANGUAGE
 (GROUPS 1 & 4)

- 1) Would you vote to require Acme to pay any money to Fred Jones if you were a juror in this case?
1. Yes _____
 2. No _____
- 2) On the scale below rate how certain you are that you would vote as indicated in response to question number one (circle one number).
- | | | | | | | |
|--------------|---|---|---|---|---|----------------|
| Very certain | | | | | | Very uncertain |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
- 3) Regardless of your answers to questions number one and two, on the scale below rate how you personally feel about whether Acme should be required to pay any money to Fred Jones (circle one number).
- | | | | | | | |
|-----------------------------|---|---|---|---|---|---------------------------------|
| Feel strongly
should pay | | | | | | Feel strongly
should not pay |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
- 4) If your answer to question one is yes, how much money would you award to Fred Jones to compensate for his medical expenses and to compensate for his pain and suffering?
1. Medical expenses: \$_____
 2. Pain and suffering: \$_____
 - Total: \$_____
- 5) Do you believe that Acme was negligent in designing its lawn mower without a deadman clutch?
1. Yes _____
 2. No _____
- 6) On the scale below rate how strongly you feel regarding whether Acme was negligent or not negligent in designing its lawn mower without a deadman clutch (circle one number).
- | | | | | | | |
|--------------------------------|---|---|---|---|---|------------------------------------|
| Feel strongly
was negligent | | | | | | Feel strongly
was not negligent |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
- 7) Do you believe that Acme acted unreasonably in designing its lawn mower without a deadman clutch?
1. Yes _____
 2. No _____

- 15) What is your gender? Female ____ Male ____
- 16) What is your age? ____
- 17) Please circle one of the below to describe your family's income range (if you are a student, circle your parents' income range).
- | | |
|-------------------------|----------------------------|
| 1. 0 to \$20,000 | 7. \$70,000 to \$80,000 |
| 2. \$20,000 to \$30,000 | 8. \$80,000 to \$90,000 |
| 3. \$30,000 to \$40,000 | 9. \$90,000 to \$100,000 |
| 4. \$40,000 to \$50,000 | 10. \$100,000 to \$125,000 |
| 5. \$50,000 to \$60,000 | 11. \$125,000 to \$150,000 |
| 6. \$60,000 to \$70,000 | 12. Over \$150,000 |

APPENDIX IV
QUESTIONNAIRE FOR JURORS HEARING
NEGLIGENCE LANGUAGE
(GROUPS 2 & 5)

1) Would you vote to require Acme to pay any money to Fred Jones if you were a juror in this case?

- 1. Yes ____
- 2. No ____

2) On the scale below rate how certain you are that you would vote as indicated in response to question number one (circle one number).

Very certain Very uncertain
1 2 3 4 5 6 7

3) Regardless of your answers to questions number one and two, on the scale below rate how you personally feel about whether Acme should be required to pay any money to Fred Jones (circle one number).

Feel strongly Feel strongly
should pay should not pay
1 2 3 4 5 6 7

4) If your answer to question one is yes, how much money would you award to Fred Jones to compensate for his medical expenses and to compensate for his pain and suffering?

- 1. Medical expenses: \$_____
- 2. Pain and suffering: \$_____
- Total: \$_____

5) Do you believe that Acme was negligent in designing its lawn mower without a deadman clutch?

- 1. Yes ____
- 2. No ____

6) On the scale below rate how strongly you feel regarding whether Acme was negligent or not negligent in designing its lawn mower without a deadman clutch (circle one number).

Feel strongly Feel strongly
was negligent was not negligent
1 2 3 4 5 6 7

7) Do you believe that Acme acted unreasonably in designing its lawn mower without a deadman clutch?

- 1. Yes ____
- 2. No ____

- 8) On the scale below rate how strongly you feel regarding whether Acme acted unreasonably or acted reasonably in designing its lawn mower without a deadman clutch (circle one number).
- | | | | | | | |
|-----------------------------------|---|---|---|---|---|-------------------------------------|
| Feel strongly
acted reasonably | | | | | | Feel strongly
acted unreasonably |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
- 9) Do you believe that the lawn mower design was not reasonably safe since it did not have a deadman clutch?
1. Yes _____
 2. No _____
- 10) On the scale below rate how strongly you feel regarding whether the lawn mower design was not reasonably safe or was reasonably safe without a deadman clutch (circle one number).
- | | | | | | | |
|--|---|---|---|---|---|--------------------------------------|
| Feel strongly was
not reasonably safe | | | | | | Feel strongly was
reasonably safe |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
- 11) Do you believe that adding the deadman clutch to Acme's lawn mower would have been a reasonable alternative design?
1. Yes _____
 2. No _____
- 12) On the scale below rate how strongly you feel regarding whether adding the deadman clutch to Acme's lawn mower would have been a reasonable alternative design?
- | | | | | | | |
|--|---|---|---|---|---|--|
| Feel strongly would
be a reasonable
alternative design | | | | | | Feel strongly would
not be a reasonable
alternative design |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
- 13) After watching the videotape, did you understand what is required for a product manufacturer to be found negligent in its design of a product? (Circle one.)
1. I understood that very well.
 2. I understood that fairly well.
 3. I may have understood that, but am not certain.
 4. I did not understand that at all.
- 14) Did you find the instruction entitled "Definition of Negligent Design" confusing? (Circle one.)
1. Not at all confusing
 2. A little bit confusing
 3. Moderately confusing
 4. Quite confusing
 5. Extremely confusing

- 15) What is your gender? Female ____ Male ____
- 16) What is your age? ____
- 17) Please circle one of the below to describe your family's income range (if you are a student, circle your parents' income range).
- | | |
|-------------------------|----------------------------|
| 1. 0 to \$20,000 | 7. \$70,000 to \$80,000 |
| 2. \$20,000 to \$30,000 | 8. \$80,000 to \$90,000 |
| 3. \$30,000 to \$40,000 | 9. \$90,000 to \$100,000 |
| 4. \$40,000 to \$50,000 | 10. \$100,000 to \$125,000 |
| 5. \$50,000 to \$60,000 | 11. \$125,000 to \$150,000 |
| 6. \$60,000 to \$70,000 | 12. Over \$150,000 |

APPENDIX V
STRICT LIABILITY JURY INSTRUCTIONS

1) Burden of Proof

The plaintiff is seeking damages based upon a claim of strict liability defective design. The plaintiff has the burden of proving by a preponderance of the evidence that the design was defective, and that the defect was a cause of injury to the plaintiff.

2) Definition of Strict Liability Defective Design

The plaintiff is not required to prove that the defendant acted negligently in designing the product to show that the design is defective. Rather, the product is defective in design when the foreseeable risks of harm posed by the product could have been reduced or avoided by the adoption of a reasonable alternative design by the manufacturer, and the omission of the alternative design renders the product not reasonably safe.

In determining whether an alternative design is reasonable and whether its omission renders a product not reasonably safe, you may consider:

1. The magnitude of the foreseeable risks of harm;
2. The nature and strength of consumer expectations regarding the product;
3. The relative advantages and disadvantages of the product as designed and as it alternatively could have been designed; and
4. The effects of the alternative design on production costs and marketability.

3) Damages

The plaintiff is seeking damages for medical expenses and damages for pain and suffering. You are only to award damages if you find that the lawnmower was defectively designed, as defined above.

The measure of damages for medical expenses is the reasonable value of medical care, services and supplies reasonably required and actually given in the treatment of the plaintiff to the present time. The measure of damages for pain and suffering is reasonable compensation for any pain, discomfort, fears, anxiety and other mental and emotional distress suffered by the plaintiff and of which injury was a cause, and for similar suffering reasonably certain to be experienced in the future from the same cause.

No definite standard or method of calculation is prescribed by law by which to fix reasonable compensation for pain and suffering. Nor is the opinion of any witness required as to the amount of such reasonable compensation. In making an award for pain and suffering you shall exercise your authority with calm and reasonable judgment and the damages you fix shall be just and reasonable in light of the evidence.

APPENDIX VI
NEGLIGENCE JURY INSTRUCTIONS

1) *Burden of Proof*

The plaintiff is seeking damages based upon a claim of negligent design. The plaintiff has the burden of proving by a preponderance of the evidence that the design was negligent, and that the negligence was a cause of injury to the plaintiff.

2) *Definition of Negligent Design*

A manufacturer is negligent in designing a product when the foreseeable risks of harm posed by the product could have been reduced or avoided by the adoption of a reasonable alternative design by the manufacturer, and the omission of the alternative design renders the product not reasonably safe.

In determining whether an alternative design is reasonable and whether its omission renders a product not reasonably safe, you may consider:

1. The magnitude of the foreseeable risks of harm;
2. The nature and strength of consumer expectations regarding the product;
3. The relative advantages and disadvantages of the product as designed and as it alternatively could have been designed; and
4. The effects of the alternative design on production costs and marketability.

3) *Damages*

The plaintiff is seeking damages for medical expenses and damages for pain and suffering. You are only to award damages if you find that the lawnmower was defectively designed, as defined above.

The measure of damages for medical expenses is the reasonable value of medical care, services and supplies reasonably required and actually given in the treatment of the plaintiff to the present time. The measure of damages for pain and suffering is reasonable compensation for any pain, discomfort, fears, anxiety and other mental and emotional distress suffered by the plaintiff and of which injury was a cause, and for similar suffering reasonably certain to be experienced in the future from the same cause.

No definite standard or method of calculation is prescribed by law by which to fix reasonable compensation for pain and suffering. Nor is the opinion of any witness required as to the amount of such reasonable compensation. In making an award for pain and suffering you shall exercise your authority with calm and reasonable judgment and the damages you fix shall be just and reasonable in light of the evidence.