The Reasonable Alternative Design Requirement

William E. Westerbeke

Section 2(b) provides that a product is defective in design only if the manufacturer failed to adopt a reasonable alternative design (RAD). Whether the RAD requirement is an efficient and sensible limitation on design defect litigation depends on four questions: (1) does the RAD requirement eliminate the categorical risk theory; (2) is the shift from a consumer expectations analysis to a risk-utility analysis appropriate; (3) is negligence the more appropriate standard for design defect litigation; and (4) will the RAD requirement make design defect litigation too inflexible?

First, whether the RAD requirement eliminates the categorical risk theory of liability for products such as tobacco, alcohol and asbestos will be addressed later in this symposium. Let me just make two brief observations. In my view, the issue is more appropriate for legislative handling. In any event, if the RAD requirement is sound for the ordinary design defect case, it should not be abandoned simply to permit a categorical risk argument in the rare and unique case. The tail should not wag the dog.

Second, the risk-utility test seems better suited than the consumer expectations test for design defect cases. Yesterday, Professor Twerski explained the weakness of consumer expectations in design defect cases, and I agree with his analysis. Leaving aside for the moment the choice between strict liability and negligence, the consumer expectations test is difficult to apply to complex product designs because consumers almost never have well-defined expectations concerning the specific safety performance of complex products.

In addition, the consumer expectations test originated in contract law with focus on the buyer-seller relationship. In essence, it asks whether the buyer got what he paid for. Confusion arises when the inquiry becomes whether the buyer got a reasonably safe product because the buyer is not necessarily the person injured by the defective product. The buyer's expectations of safety may differ considerably from the injured product user's expectations of safety when the injured product user is a young child exposed to a product purchased by a parent, a patient using a drug prescribed by a doctor, an employee using a machine purchased by an employer, or a bystander injured by another's product.

In my opinion, the risk-utility approach is better. Section 402A requires that the product be "in a defective condition unreasonably dangerous to the user or consumer . . . ." If liability requires only a dangerous product, then the words "in a defective condition" are superfluous. I assume those words were included for a reason, and that reason is to limit liability to cases in which the product is not in the condition that it should be in. This leads inexorably to the need for some point of comparison, and this need is satisfied by comparing the actual design with a reasonable alternative design that provides greater product safety. This alterna-

William E. Westerbeke is a Professor of Law at the University of Kansas School of Law.
tive design is reasonable when it is supported on balance by the traditional risk-utility factors. Various commentators have criticized the adoption of risk-utility analysis. Some say it had not been adopted by many states and therefore is inappropriate in a "restatement" of the law. Yet a restatement need not be limited to widely accepted rules. Section 402A is probably the most frequently cited section in the Restatement (Second) of Torts, yet at the time of its adoption only California imposed strict liability for defective products.

Others complain that risk-utility analysis is too uncertain because specific human injuries cannot be precisely valued for purposes of the "gravity of injury" element. That is not a fair criticism. Every legal standard has some uncertainty. The question is whether despite some uncertainty the legal standard is preferable to other viable choices. Judge Learned Hand recognized this problem in Conway v. O'Brien when he observed that an accurate risk-utility analysis was not possible either in theory or in practice. For example, what is my eyesight worth? No sane person would sell me his healthy eyes, so there is no market price for a pair of good eyes.

Yet seven years after Conway, Judge Hand formally adopted risk-utility analysis as the test for negligence in United States v. Carroll Towing Company. On which occasion was Hand correct? In my opinion, he was correct on both occasions. The precise value of injury is admittedly uncertain and elusive. Yet accident cases must be resolved. Lawyers need guidance on what evidence to introduce, and the trier of fact needs guidance on how to organize and weigh all the evidence. 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 requirement may involve some uncertainty, but it is not too speculative to be inappropriate in design defect cases.

Simply as an aside, commentators have not suggested that the value of injuries is too speculative to measure damages. If the value of a personal injury is too speculative at the liability stage of the litigation, then I would think logically it would also be too speculative at the damages stage. But the better explanation is that neither determination is too speculative.

The third issue is the appropriateness of a negligence standard for design defect litigation. Commentators protest that section 2(b) constitutes a retreat from the strict liability standard developed over three decades. I beg to differ. One cannot retreat from a position not actually reached in the first instance. While courts often state that they have adopted a strict liability standard for design defect cases, the facts of those cases invariably show that the product danger was already known and that a safer alternative design already existed. For example, in the well-known case Phillips v. Kimwood Machine Company, the danger of an injury caused by a sanding machine kicking back an undersized board was well known in the industry, and a simple design change to prevent such accidents was already being used in other models of sanding machines. All the elements of a traditional negligence claim were easily satisfied, and nothing in the case necessitated the adoption of strict liability for design defects. Confusion might be avoided if courts limited the adoption of strict liability to specific problem situations in which liability is unattainable under traditional negligence principles.
A few courts and commentators suggest that strict liability for design defects is appropriate if a reasonable alternative design that was unavailable as of the date of manufacture becomes available as of the date of trial. The product could be said to be defective because at the time of trial a reasonable alternative design is available for comparison with the product's original design. This approach is not consistent with the basic objectives of tort law.

The "time of trial" approach does not provide more deterrence against unreasonably dangerous product designs. Deterrence requires actual or constructive knowledge of both a danger and a means of eliminating or minimizing that danger. A negligence standard permits maximum deterrence. Knowledge acquired after manufacture of the product, but before trial, does not deter any additional accidents.

Liability beyond negligence advances only compensation interests. Yet there is no sound reason to view compensation itself as the policy underlying product liability law. Consider the automobile passenger injured in an accident on the highway. If he is injured by a defectively designed highway, the highway is real property, not a product. If he is injured by the "defective conduct" of his driver, that conduct is a service, not a product. In either case, the plaintiff receives no compensation unless he can prove negligence in the design of the highway or in the driving of the car. If he is injured by the defective design of the automobile, what rationale now supports his claim for compensation in the absence of negligence? In truth, the need for compensation is defined by the injury itself, not by the cause of the injury. So compensation should not be viewed as an independent policy of product liability law, and does not justify a "time of trial" approach to the RAD requirement.

Similarly, a "time of trial" approach does not advance any other interests of tort law. A "time of trial" approach does not identify a class of more deserving plaintiffs, nor does it identify products that by reason of their dangerousness are most in need of extensive research and development. The "time of trial" approach only identifies those plaintiffs who were injured by a product for which an improved design fortuitously became available prior to the time of trial. This fortuity is not a logical basis for imposing additional liability on a product seller.

Finally, some commentators note that some European countries have imposed, or are considering imposing, true strict liability by adopting the "time of trial" approach. If Europe can adopt strict liability, the United States could do so as well. But there are at least two major differences in European and American tort law relevant to this issue.

First, damages in European tort cases are but a small fraction of the damages routinely awarded in the United States. A few years ago, an Austrian judge informed me that the largest personal injury judgment ever awarded in Austria was approximately $125,000 in a case of quadriplegia. In the United States, juries have awarded more than that for the loss of a finger.

Second, European systems tend to have more restrictive time limitations on the initiation of tort actions. In the United States we have abandoned those tight restrictions in favor of very liberal discovery rules. As a result, tort actions may often be commenced in the United States twenty, thirty, even forty years after the
manufacture and sale of a product. This greater delay means a greater disparity between the available technology at the time of manufacture and at the time of trial. It is not my purpose here to advocate the European approach to damages and time limitations. I merely wish to emphasize the importance of looking at the totality of another country's tort system before giving weight to any comparison on a specific legal issue.

Finally, some question arises whether the RAD requirement might introduce too much inflexibility into design defect litigation. The danger lies in the meaning of a "reasonable alternative design." If the RAD requirement means that the alternative design must already exist, at least in a fully tested prototype form, then I would agree that the requirement is too inflexible. That approach would prevent a jury from imposing liability in cases such as Boatland of Houston, Inc. v. Bailey, where the alternative design did not yet exist in prototype form, but would have been simple, inexpensive, and capable of development by any first-year engineering student. This is, however, an argument not for abandoning the RAD requirement, but simply for the exercise of some caution and common sense in its application.

Notes

5. 111 F.2d 611 (2d Cir. 1940).
6. 158 F.2d 169 (2d Cir. 1947).
8. 525 P.2d 1033 (Or. 1974).
11. In Austria and many other European countries, the nearly universal availability of medical care and unemployment income support justifies the smaller size of damage awards. Some courts have noted that the lack of such uniform protection in the United States justifies a more liberal approach to the imposition of liability and/or the measurement of damages. See, e.g., Reyes v. Wyeth Lab., 498 F.2d 1264, 1294 (5th Cir.), cert. denied, 419 U.S. 1096 (1974).
12. See, e.g., Hedinger v. Ashford Memorial Community Hosp., 734 F.2d 81 (1st Cir. 1984) ($175,000 for loss of little finger and delayed healing of ring finger); Philipe v. Browning Arms Co., 375 So.2d 151 (La. App. 1979) ($900,000 for loss of thumb).
15. 609 S.W.2d 743 (Tex. 1980).