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## Foreword: Understanding Products Liability

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Unquestionably, products liability ranks as one of the most conspicuous legal phenomena of the last twenty years, and the California Supreme Court has played a leading role in the elucidation of products liability doctrine. In *Greenman v. Yuba Power Products, Inc.*, decided in 1963, the court first ruled that manufacturers are subject to strict liability for injuries resulting from defective products. In its *Cronin* decision nine years later, the court reemphasized the "defect" prerequisite for strict liability, but rejected the Restatement's "unreasonably dangerous" gloss on "defect, thereby leaving the defect concept in a rather barren state. In *Barker v. Lull Engineering Co.*, decided in January 1978, a unanimous court finally attempted an explication of "defect." The court noted (as have others) that product defects can be classed under three headings: "manufacturing" defects, "design" defects, and defects involving inadequate warnings or instructions accom-

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<sup>1.</sup> Consider, for example, three law review symposia published during 1977-78: Symposium: 1977 Products Liability Institute, 10 Ind. L. Rev. 755 (1977); Symposium: Product Liability, 29 MERC. L. Rev. 373 (1978); Symposium on Products Liability Law: The Need for Statutory Reform, 56 N.C.L. Rev. 625 (1978). By now, the literature on products liability is voluminous; in this Foreword, it is cited selectively.

<sup>2. 59</sup> Cal. 2d 57, 377 P.2d 897, 27 Cal. Rptr. 697 (1963).

<sup>3.</sup> Cronin v. J.B.E. Olson Corp., 8 Cal. 3d 121, 501 P.2d 1153, 104 Cal. Rptr. 433 (1972).

<sup>4.</sup> RESTATEMENT (SECOND) OF TORTS § 402A (1965).

<sup>5. 20</sup> Cal. 3d 413, 573 P.2d 443, 143 Cal. Rptr. 225 (1978).

panying the product.<sup>6</sup> For manufacturing defects, the court specified in . dictum the appropriateness of a deviation-from-the-normal-product standard. But it is design defects that have engendered the most serious confusion, both in actual litigation and in the products literature. Noting this confusion, Barker established a "two-pronged" test for identifying design defects. First, a product's design is defective if the product "fails to perform as safely as an ordinary consumer would expect when used in an intended or reasonably foreseeable manner." Second, the design is defective if the risks inherent in that design are not justified by the design's intrinsic benefits—whether measured in terms of cost savings, improved performance, or other factors. In endorsing this riskbenefit prong, Barker also announced a seemingly dramatic allocation of the burden of proof: once the plaintiff shows that the "product's design proximately caused [the plaintiff's] injury," the design is deemed defective unless the manufacturer can persuade the jury that the design's benefits exceed its associated risks.8 Moreover, the Barker opinion twice indicates that the jury is to render its risk-benefit judgments upon the basis of "hindsight." And in a provocative footnote, the Barker opinion raises the possibility of strict liability, without proof of ordinary defect, for injuries caused by products "whose norm is danger."10

This Foreword will briefly trace the historical development of the existing products liability rule; it will compare that rule to a genuine strict products liability rule, which it will identify and evaluate; it will explore the general relationship between strict products hability in its present form and the pre-existing (and co-existing) doctrines of negligence and implied warranty; it will assess each of *Barker's* two "prongs;" and, finally, it will discuss *Barker's* references to "hindsight" evaluations of design defectiveness and to "norm-is-danger" products. In the course of these efforts, the Foreword will endeavor to achieve an understanding of strict products liability and, in particular, to establish the relationship between tort and contract principles within products liability.

<sup>6.</sup> The absence of a warning can easily be seen as a kind of defect in design. Given this perception, there are only two major defect types, manufacturing and design. According to a recent federal study, 35% of all products cases involve manufacturing defects, 37% design defects, and 18% warning defects. Interagency Task Force on Product Liability, Final Report II-54 (1977) [hereinafter referred to as Final Report].

<sup>7. 20</sup> Cal. 3d at 426-27, 573 P.2d at 452, 143 Cal. Rptr. at 234.

<sup>8.</sup> Id. at 427, 573 P.2d at 452, 143 Cal. Rptr. at 234.

<sup>9.</sup> Id. at 431, 435, 573 P.2d at 454, 456, 143 Cal. Rptr. at 236, 239.

<sup>10.</sup> Id. at 430 n.10, 573 P.2d at 455 n.10, 143 Cal. Rptr. at 237 n.10.

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#### HISTORY: ONE STATE'S EXPERIENCE

The California court system was set up, after statehood, in 1850. During the first half century of California law, not a single personal injury action against a product manufacturer reached the appellate level, and only one such action against a product retailer did so. 11 In 1901, the supreme court, in an opinion marked by an unself-conscious blend of implied warranty and negligence law, affirmed a farmer's \$2,000 personal injury recovery against a company that had both manufactured a harvester and directly sold it to the farmer. 12 During the next thirty-three years, California's appellate courts decided all of three actions brought by ultimate consumers against negligent manufacturiers. 13 In their opinions, the courts recognized a "privity of contract" limitation on recovery, but also refied on a highly ambiguous "inherently dangerous" exception to that limitation. These ambiguities were largely resolved in favor of product victims when the supreme court adopted the *MacPherson* rule 14 in 1934. 15

A year later, the court began affirming personal injury judgments secured against product retailers under a theory of implied warranty as derived from the Uniform Sales Act, which California had enacted back in 1931. These retailers were guilty of no negligence; implied warranty was from the start a strict hability doctrine. Strict hability is, of course, a constitutive feature of sales law and contract law generally. While the early warranty cases all concerned food products, the court's opinions did not suggest that the food element was necessary to the strict hability result. In 1944, in Escola v. Coca Cola Bottling Co., 18

<sup>11.</sup> The retailer was held hiable for willfully misrepresenting the safety of a bed purchased by a landlord for use by his tenant. Suit was brought by the tenant injured when the bed collapsed. Lewis v. Terry, 111 Cal. 39, 43 P. 398 (1896).

<sup>12.</sup> Snyder v. Holt Mfg. Co., 134 Cal. 324, 66 P. 311 (1901).

<sup>13.</sup> Kolberg v. Sherwin-Williams Co., 93 Cal. App. 609, 269 P. 975 (1st Dist. 1928); Cliff v. California Spray Chem. Co., 83 Cal. App. 424, 257 P. 99 (3d Dist. 1927); Catlin v. Union Oil Co., 31 Cal. App. 597, 161 P. 29 (2d Dist. 1916). See also Dahms v. General Elevator Co., 214 Cal. 733, 7 P.2d 1013 (1932); Fidehty & Casualty Co. v. Parafine Paint Co., 188 Cal. 184, 204 P. 1076 (1922).

<sup>14.</sup> MacPherson v. Buick Motor Co., 217 N.Y. 382, 111 N.E. 1050 (1916).

<sup>15.</sup> Kalash v. Los Angeles Ladder Co., 1 Cal. 2d 229, 34 P.2d 481 (1934).

Goetten v. Owl Drug Co., 6 Cal. 2d 683, 59 P.2d 142 (1936); Mix v. Ingersoll Candy Co.,
 6 Cal. 2d 674, 59 P.2d 144 (1936); Gindraux v. Maurice Mercantile Co., 4 Cal. 2d 206, 47 P.2d 708 (1935).

<sup>17.</sup> Gindraux, the leading case, relied on both the general implied warranty doctrine and a special food provision then in the Civil Code. By basing its warranty reasoning on Consolidated Pipe Co. v. Gunn, 140 Cal. App. 412, 35 P.2d 350 (4th Dist. 1934), the court made clear that the warranty doctrine extended beyond the food context. Gunn was an economic loss case involving an unfit well-drilling casing shoe.

<sup>18. 24</sup> Cal. 2d 453, 150 P.2d 436 (1944).

the court liberalized the use of rcs ipsa loquitur in products actions brought against manufacturers under a negligence theory, thereby easing the plaintiff's burden of proving negligence in cases concerning manufacturing defects. Justice Traynor, concurring in *Escola*, first articulated the formal strict products liability idea.

Between 1944 and 1963, there were significant numbers of products suits. When a manufacturing defect was involved, the plaintiffs were frequently successful under one theory or another, including both negligence<sup>19</sup> and the incipient idea of an implied warranty ruming directly against the product manufacturer.<sup>20</sup> Many of these suits alleged negligence in the product's design. California courts of appeal, unlike courts in certain other jurisdictions,<sup>21</sup> were quite willing to send reasonable-minds-can-differ design cases to the jury.<sup>22</sup> One court of appeal, in dramatic anticipation of the later doctrine of "reasonably foreseeable misuse,"<sup>23</sup> even tolerated a suit against a chair assembler for an injury caused by the chair's collapse when it was stood upon.<sup>24</sup> All of this warranty and negligence litigation culminated in *Greenman*, where Justice Traynor, now speaking for the full court, pronounced the strict products liability rule.

Greenman couched the strict liability test in terms of whether a product contained "a defect in design and manufacture of which the plaintiff was not aware that made [the product] unsafe for its intended use." Stimulated by Greenman, the American Law Institute approved a section for its Second Torts Restatement—drafted by its Reporter, Dean Prosser—imposing strict liability on the seller of "any product in a defective condition unreasonably dangerous to the user or consumer." Standing alone, "unreasonably dangerous" is a tort-like phrase that seemingly calls for a comparison of the risks and benefits associated with the alleged product defect. But comment i, appended to section 402A, goes on to explain "unreasonably dangerous" as meaning dangerous "to an extent beyond that which would be contemplated by the ordinary consumer who purchases it, with the ordinary knowledge common to the community as to its characteristics." This

<sup>19.</sup> See, e.g., Burr v. Sherwin Williams Co., 42 Cal. 2d 682, 268 P.2d 1041 (1954).

<sup>20.</sup> See Peterson v. Lamb Rubber Co., 54 Cal. 2d 339, 353 P.2d 575, 5 Cal. Rptr. 863 (1960).

<sup>21.</sup> See Noel, Manufacturers' Negligence of Design and Directions for Use of a Product, 71 YALE L.J. 816, 816 (1962).

<sup>22.</sup> See, e.g., Darling v. Caterpillar Tractor Co., 171 Cal. App. 2d 713, 341 P.2d 23 (2d Dist. 1959); Brooks v. Allis-Chalmers Mfg. Co., 163 Cal. App. 2d 410, 329 P.2d 575 (3d Dist. 1958).

<sup>23.</sup> See note 34 and accompanying text infra.

<sup>24.</sup> Phillips v. Ogle Aluminum Furniture, Inc., 106 Cal. App. 2d 650, 235 P.2d 857 (4th Dist. 1951). Technically, this was a manufacturing defect case.

<sup>25. 59</sup> Cal. 2d 57, 64, 377 P.2d 897, 901, 27 Cal. Rptr. 697, 701 (1963).

<sup>26.</sup> RESTATEMENT (SECOND) OF TORTS § 402A(1) (1965).

<sup>27.</sup> See Noel, supra note 21, at 818.

provides a contract or warranty-like explanation of defect. Most of the comment's illustrations of nondefective products—including sugar that harms a diabetic and butter that heightens a person's cholesterol level—are unhelpfully easy.<sup>28</sup> In 1966, Reporter Prosser explained that the "unreasonably dangerous" standard was devised to prevent manufacturers from becoming "automatically responsible for all the harm that such things [their products] do in the world."<sup>29</sup>

In Escola and Greenman, Justice Traynor had evidently regarded "defect" as a rather easy concept; 30 hence his belief that strict liability would vastly simplify the issues in products litigation.<sup>31</sup> By the time of an important speech he delivered in 1965, however, then-Chief Justice Traynor was beginning to appreciate various perplexities inhering in "defect."<sup>32</sup> Subsequent to the adoption of the Restatement, the supreme court's opinions shuttled back and forth between the Greenman language and the Restatement language.<sup>33</sup> Then, in its 1972 Cronin decision,<sup>34</sup> the court took two steps. First, it abandoned Justice Traynor's "intended use" limitation in favor of a test making liability possible whenever the product's use is "reasonably foreseeable," regardless of whether the use is otherwise unintended or improper. Second, Cronin held that the basic standard of liability should be "defect" rather than "unreasonably dangerous defect." On the latter issue, part of the court's reasoning was that "unreasonably dangerous" is superfluous, since the chief purpose of that language is to negate Reporter Prosser's fear of automatic liability and that purpose is fully achieved by "defect" standing alone. But Cronin also expressed the view that "unreasonably dangerous" is at least potentially nefarious. Here, the court was concerned with both style and substance. Stylistically, "unreasonably dangerous" is wrong because it "rings of negligence" and has a "negligence complexion." Also, the court found the language capable of being inisunderstood as subjecting the plaintiff to a two-step burden of proof, requiring him to prove not only the existence of a defect but

<sup>28.</sup> The comment does indicate that "good tobacco is not unreasonably dangerous merely because the effects of smoking may be harmful."

<sup>29.</sup> Prosser, Strict Liability to the Consumer in California, 18 HASTINGS L.J. 9, 23 (1966).

<sup>30.</sup> The *Escola* majority opinion frequently referred to the product's "defect" in discussing the negligence res ipsa issue, 24 Cal. 2d 453, 459, 461, 150 P.2d 436, 439, 440 (1944). In all likelihood, Justice Traynor's *Escola* concurrence merely accepted the majority's terminology.

<sup>31.</sup> See, e.g., Escola v. Coca Cola Bottling Co., 24 Cal. 2d 453, 463, 464, 150 P.2d 436, 441, 442 (1944) (Traynor, J., concurring).

<sup>32.</sup> Traynor, The Ways and Meanings of Defective Products and Strict Liability, 32 TENN. L. REV. 363 (1965).

<sup>33.</sup> Compare Pike v. Frank G. Hough Co., 2 Cal. 3d 465, 476, 467 P.2d 229, 236, 85 Cal. Rptr. 629, 636 (1970) with Elmore v. American Motors Corp., 70 Cal. 2d 578, 451 P.2d 84, 75 Cal. Rptr. 652 (1969).

<sup>34.</sup> Cronin v. J.B.E. Olson Corp., 8 Cal. 3d 121, 501 P.2d 1153, 104 Cal. Rptr. 433 (1972).

<sup>35. 8</sup> Cal. 3d at 132, 501 P.2d at 1162, 104 Cal. Rptr. at 442.

also that the defect rendered the product unreasonably dangerous. Addressing the substance of comment i, the court, critical of the "consumer expectations" approach, indicated an unwillingness to negate liability simply because a consumer's expectations have been lowered in some way—for example, by the obviousness of a product's defect.<sup>36</sup>

The Cronin opinion, while stripping "defect" of its "unreasonably dangerous" gloss, explicitly declined to set forth any kind of working "defect" definition.<sup>37</sup> As a result, Cronin received a decidedly mixed reception in other jurisdictions<sup>38</sup> and in the law reviews.<sup>39</sup> In Cahifornia, litigation in post-Cronin cases—especially those involving product design—was confused, as lawyers and judges struggled with the one word "defect" standard. A few judges evidently felt the jury should be instructed in the language of "defect" and nothing more.<sup>40</sup> Among law professors, it seems fair to say that the general understanding, even after Cronin, was that a design defect plaintiff needed to show the existence of some design alternative that would provide greater safety at acceptable cost. Court of appeal opinions after Cronin inclined in this direction,<sup>41</sup> although somewhat inconclusively.

The uncertainties engendered by *Cronin* provide the backdrop for *Barker*. In *Barker*, the plaintiff-employee was seriously injured when he jumped off a high-lift loader which the defendant had manufactured and then leased to the victim's employer. The injured employee was filling in for the loader's regular operator, who was absent from work. The employee leaped from the loader after it began to tip over while being operated on a sharply sloping terrain. At trial, the plaintiff launched a barrage of design defect accusations against the manufacturer.<sup>42</sup> Although the trial in *Barker* was subsequent to *Cronin*,<sup>43</sup> a confused trial judge gave the jury an "unreasonably dangerous" defect

<sup>36.</sup> Cronin's companion case, Luque v. McLean, 8 Cal. 3d 136, 501 P.2d 1163, 104 Cal. Rptr. 443 (1972), makes clear that even "patent" defects are covered by strict liability.

<sup>37.</sup> See 8 Cal. 3d at 134 n.16, 501 P.2d at 1162 n.16, 104 Cal. Rptr. at 442 n.16.

<sup>38.</sup> Compare Berkebile v. Brantly Helicopter Corp., 462 Pa. 83, 337 A.2d 893 (1975) (opinion of Jones, C.J.) with Kirkland v. General Motors Corp., 521 P.2d 1353 (Okla. 1974).

<sup>39.</sup> See, e.g., Keeton, Product Liability and the Meaning of Defect, 5 St. MARY'S L.J. 30 (1973); Wade, On the Nature of Strict Tort Liability for Products, 44 Miss. L.J. 825 (1973).

<sup>40.</sup> The California Trial Lawyers Association, as amicus in *Barker*, urged the court to endorse this practice. *See* Barker v. Lull Eng'r Co., 20 Cal. 3d 413, 427, 573 P.2d 443, 452, 143 Cal. Rptr. 225, 234 (1978).

<sup>41.</sup> See Buccery v. General Motors Corp., 60 Cal. App. 3d 533, 545, 132 Cal. Rptr. 605, 612-14 (2d Dist. 1976); Baker v. Chrysler Corp., 55 Cal. App. 3d 710, 716, 127 Cal. Rptr. 745, 749 (1st Dist. 1976).

<sup>42.</sup> See note 189 infra.

<sup>43.</sup> Telephone interview with Frank Hills, Barker's attorney (Nov. 6, 1978). The *Barker* opinion gets this chronology wroug. *See* 20 Cal. 3d at 422-23, 573 P.2d at 449, 143 Cal. Rptr. at 231.

instruction. The jury<sup>44</sup> then returned a verdict for the defendant-manufacturer. The plaintiff appealed and won a reversal in the court of appeal on the ground that the trial court's instruction had ignored *Cronin*. The manufacturer then secured a hearing in the supreme court, arguing that in complicated cases involving product design—and especially when the alleged design defect involves the omission of a safety device—the simple language of "defect" provides inadequate guidance to juries; rather, for these cases the language of "unreasonably dangerous" is sensible after all.<sup>45</sup> The manufacturer thus contended for a selective return to the Restatement view.<sup>46</sup>

Rejecting this contention, the supreme court in its *Barker* opinion reaffirmed that "unreasonably dangerous" is no part of the California "defect" definition. The court agreed, however, with the manufacturer's more general position that the word "defect," in isolation, is inadequate as a strict hability instruction in design cases. For these cases, therefore, the court formulated the new "two-pronged" defect test.

II

### GENUINE STRICT LIABILITY

It is quite possible to conceive of a hability rule in the products setting that is genuinely strict: this would be the rule (noted by Prosser) rendering product manufacturers automatically hable for all accidents caused or occasioned by the use of their products.<sup>47</sup> Thus, a car manufacturer would be liable for all injuries in which its cars are involved, a power mower manufacturer would bear the liability for all power mower accidents, a ladder manufacturer would suffer liability for all ladder falls, and a skateboard manufacturer would be fully liable for all skateboarding injuries. Existing strict products hability falls drastically short of such a genuine strict hability rule, since it grants the victim a recovery only if the victim can demonstrate the existence of a product "defect." By stating that products liability does not cast the manufacturer in the role of an "insurer," opinions like Barker and Cronin clearly (if somewhat awkwardly) reject the idea that the existing hability rule is in any way equivalent to genuine strict liability. Of course, the res ipsa loquitur doctrine, given its *Escola* breakthrough,

<sup>44.</sup> Barker's counsel describes the jury as the worst plaintiff's jury he has ever seen. Telephone interview with Frank Hills (Nov. 6, 1978).

<sup>45.</sup> Brief for Defendant at 1-2, 5-6.

<sup>46.</sup> The plaintiff urged the court simply to leave Cronin as is.

<sup>47.</sup> See Prosser, supra note 29, at 23. See also Wade, A Conspectus of Manufacturers' Liability for Products, 10 Ind. L. Rev. 755, 768 (1977).

<sup>48.</sup> See Barker v. Lull Eng'r Co., 20 Cal. 3d 413, 432, 573 P.2d 443, 456, 143 Cal. Rptr. 225, 238 (1978); Cronin v. J.B.E. Olson Corp., 8 Cal. 3d 121, 133, 501 P.2d 1153, 1162, 104 Cal. Rptr. 433, 442 (1972).

is now seen as a way station to the *Greenman* rule of strict "defect" liability.<sup>49</sup> Will today's defect doctrine be understood in the future as a transitional stage in the evolution of a genuine strict liability rule? Possibly, but this seems very doubtful. The *Barker* opinion, specifically adverting to the genuine strict liability idea, regards it as "extreme."<sup>50</sup> And the keen interest in proposals like auto no-fault—placing strong liability on the product user—is out of line with the development of any automatic liability rule operating on product manufacturers.

Yet the genuine strict liability rule calls for serious attention. That rule is capable of being plausibly defended not only by analogy but also by reference to those basic criteria for liability originally endorsed by Justice Traynor in his historic *Escola* concurrence and later extensively discussed in the contemporary tort literature<sup>51</sup> which that concurrence succinctly anticipated.<sup>52</sup> Since the *Escola* reasoning that provided the basis for the *Greenman* hability rule can also be viewed as conducive to genuine strict liability, and since the possibility of such a doctrine so discernibly hovers in the background of opinions like *Barker*,<sup>53</sup> if we wish to appreciate the *Greenman-Barker* hability principle we would do well to consider the genuine strict hability alternative.

The analogy adducible on its behalf is, of course, workers' compensation. Workers' compensation is a model of genume strict liability in operation:<sup>54</sup> the employer is held strictly liable for all accidents arising out of and in the course of the victim's employment. By now, workers' compensation is a staple of the American legal system, and is usually regarded as a successful, if imperfect, legal arrangement.<sup>55</sup> In recent years, it has been increasingly viewed as a personal injury law "precedent."

<sup>49.</sup> This was first glimpsed by Jaffe, Res Ipsa Loquitur Vindicated, 1 BUFFALO L. Rev. 1, 14-15 (1951).

<sup>50. 20</sup> Cal. 3d at 435, 573 P.2d at 457, 143 Cal. Rptr. at 239.

<sup>51.</sup> The leading work is G. Calabresi, The Costs of Accidents: A Legal and Economic Analysis (1970). Also important is R. Posner, Economic Analysis of Law (2d ed. 1977).

<sup>52.</sup> Economic writings have frequently confused genuine strict liability with the law's existing "defect" liability rule, really discussing the former while professing to discuss the latter. See, e.g., G. Calabresi, supra note 51, at 161-65 (treating existing products liability as a "nearly... classic" example of "general deterrence," id. at 164, which is the equivalent of what is here called genuine strict liability); Oi, The Economics of Product Safety, 4 Bell J. Econ. & Management Sci. 3, 5, 14 (1973) (seemingly equating liability for "defective" products with liability for "risky" products).

<sup>53.</sup> Thus, an Arizona court has found genuine strict liability implications in *Barker's* burden-of-proof rule. Brady v. Melody Homes Mfr., [1978] PROD. LIAB. REP. (CCH) ¶ 8303 (Ariz. App. 1978).

<sup>54.</sup> See G. CALABRESI, supra note 51, at 164-65.

<sup>55.</sup> See generally NATIONAL COMMISSION ON STATE WORKMEN'S COMPENSATION LAWS, REPORT (1972).

The policy analysis favoring genuine strict liability begins with the goal of compensation through loss spreading, as first emphasized by Justice Traynor's *Escola* concurrence. Undeniably, one of the major consequences of opinions like *Escola* and *Greenman* has been the acceptance of loss-spreading rhetoric in otherwise traditionally oriented legal documents. Yet so long as the existing strict liability rule continues to refuse to compensate the victims of *non* defective products, its alleged devotion to the loss-spreading ideal invites real skepticism. By contrast, a genuine strict liability rule would obviously achieve the maximum in loss spreading for product-related injuries.

Moreover, in several ways a genuine strict hability rule might contribute to the important objective of accident prevention, also highlighted by the *Escola* concurrence.<sup>59</sup> To the extent that certain product injuries are inevitable, genuine strict hability would achieve accident prevention by allocating resources through the market mechanism.<sup>60</sup> Assuming that product purchasers are not aware (or not fully aware) of product dangers,<sup>61</sup> genuine strict hability would raise the retail price of dangerous products; by so doing, it would accordingly diminish their sales—with a corresponding reduction in society's product-accident rate.<sup>62</sup> Insofar as product injuries are not inevitable, and again assuming limited consumer knowledge, a genuine strict hability rule would create significant safety incentives. Manufacturers would operate under a powerful and unremitting incentive (not requiring any intervention by the jury) to adopt all appropriate safety devices<sup>63</sup> and a sim-

<sup>56. 24</sup> Cal. 2d 453, 462, 150 P.2d 436, 441 (1944) (Traynor, J., concurring). For a full explanation of loss spreading, see G. CALABRESI, *supra* note 51, at 39-67.

<sup>57.</sup> See, e.g., RESTATEMENT (SECOND) OF TORTS § 402A, Comment c (1965).

<sup>58.</sup> Writing in 1965, Dean Prosser regarded the loss-spreading argument for products liability as a "inakeweight." Prosser, *The Fall of the Citadel (Strict Liability to the Consumer)*, 50 MINN. L. Rev. 791, 800 (1965). There is not a word about loss spreading in *Barker*, and in Daly v. General Motors Corp., loss spreading is discussed only in order to explain that the victim's loss should *not* be spread insofar as it is due to the victim's own faulty conduct. Daly v. General Motors Corp., 20 Cal. 3d 725, 737, 575 P.2d 1162, 1168-69, 144 Cal. Rptr. 380, 386-87 (1978).

<sup>59. 24</sup> Cal. 2d 453, 462, 150 P.2d 436, 441 (1944) (Traynor, J., concurring).

<sup>60.</sup> See G. CALABRESI, supra note 51, at 68-94, ou "general" or "inarket" deterrence.

<sup>61.</sup> Even if purchasers do have knowledge of the danger, genuine strict hability will produce market effects if the danger in the product runs toward third persous (for example, bystanders) whom the purchaser does not intend to protect.

<sup>62.</sup> See Michelman, Pollution as a Tort: A Non-Accidental Perspective on Calabresi's Costs, 80 YALE L.J. 647, 659-60 (1971).

<sup>63.</sup> Under genuine strict hability, manufacturers would adopt all safety devices which they deem risk-beneficial. Under Barker "defect" liability, the manufacturer will adopt only those safety devices which it deems risk-beneficial and which it foresees will also be found risk-beneficial by the jury. Insofar as particular jury pro-liability findings are foreseeable by the manufacturer but are nevertheless regarded by the manufacturer as incorrectly calculated, it will choose to pay the resulting products liability verdicts rather than incur what it sees as the greater costs of safety device investment. See Calabresi, Torts—The Law of the Mixed Society, 56 Texas L. Rev. 519, 528, 530 (1978).

ilar incentive to hasten the development of new safety techniques in the future.<sup>64</sup>

Arguments supporting a genuine strict hability rule can thus be rationally marshalled. Whatever their force, however, there is no avoiding the objection that many applications of the rule would fall below minimum standards of fairness. Assume that a drunk driver runs down a pedestrian, or that someone, allowing himself to become distracted, falls off an entirely well-built household ladder. Most would agree that it would be severely unfair to hold the car and ladder manufacturers liable for the resulting injuries. Claims of unfairness must be reckoned with as a possible veto upon hability-rule proposals. 66

Moreover, each of the arguments inclining towards genuine strict liability is susceptible to criticism. Take the compensation/loss-spreading argument first. As an explanation for almost any products liability rule, loss spreading is problematic. For one thing, a surprisingly large number of the product victims who bring suit under even the existing "defect" hability rule—for example, Gladys Escola and Ray Barker—turn out to be employees who have suffered injuries on the job.<sup>67</sup> The availability of workers' compensation to reimburse these victims for most of their out-of-pocket losses keenly embarrasses products hability's supposed loss-spreading rationale. True, products liability does allow recovery for elements of intangible harm like pain and suffering. But this only attracts attention to another point: it is by no means clear that the loss-spreading reasoning has any meaningful application to el-

<sup>64.</sup> See R. Posner, supra note 51, at 138. Finally, a genuine strict liability rule—by removing the troublesome "defect" issue—could lower the "overhead" of the existing products liability system. That overhead is indeed unfortunate: it is estimated that only 37.5 cents of every products liability insurance dollar ultimately reaches product victims. See O'Connell, An Alternative to Abandoning Tort Liability: Elective No-Fault Insurance for Many Kinds of Injuries, 60 MINN. L. Rev. 501, 511 (1976). Professor O'Connell's provocative proposal for a voluntary, limited liability no-fault compensation program for product-caused injuries is beyond this Foreword's scope.

<sup>65.</sup> The perceived injustice of a genuine strict liability rule may lie in an intuitive sense that the arguments supporting the rule are unconvincing and hence do not justify the heavy liability burden. If so, then the fairness objection is not wholly independent of the criticisms of those arguments set forth below.

<sup>66.</sup> See E. Cahn, The Sense of Injustice (1949); G. Calabresi, supra note 51, at 24-26. This analysis does not suggest any serious unfairness in workers' compensation. Workers' compensation liability is genuinely strict—but it is also genuinely limited: the negligent employer escapes liability for full common law damages. The "quid pro quo" which was politically essential to the original adoption of American workers' compensation also is helpful in establishing its general fairness. Additionally, the employee's (careless) conduct that causes injury to the employee himself or to his fellow worker is conduct that is within the employer's legal control. This fact alters the equities of the situation.

<sup>67.</sup> The federal study indicates that almost 50% of all products liability insurance "payouts" go to employee claimants. Final Report, supra note 6, at VII-85.

ements of noneconomic detriment such as pain and suffering.<sup>68</sup> That workers' compensation—which evidently operates, at least in part, on a loss-spreading principle—declines to take account of pain and suffering is in this respect suggestive.<sup>69</sup>

More generally, the loss-spreading criterion, when offered as a rationale for any tort law rule, seems inherently unstable, since it is in a basic sense promiscuous. If loss spreading is deemed the law's fundamental purpose, a compensation right should accordingly be extended to the victim of every serious accident, without regard to the involvement in that accident of any product. Yet tort law as we know it is "tort law" instead of a compensation program exactly because it is selective—that is, because the liability rules it fashions exclude recovery for some accident victims while permitting recovery for others.<sup>70</sup> If the loss-spreading rhetoric is taken with sufficient seriousness, it ultimately augers not the reform of tort law but rather (for better or worse) the supersession of tort law by some general compensation program. Such a program has now been adopted in New Zealand; and, as part of its adoption, that country has abolished all forms of products liability strict liability, negligence, whatever.<sup>71</sup> But so long as American law remains committed, whether wisely or not, to a tort law approach, the loss-spreading criterion should be treated with caution.<sup>72</sup>

The accident prevention justification for a genuine strict products liability rule is also questionable. That justification assumes that the manufacturer is the only party in any way responsible for the victim's product-related accident. But this assumption is often incorrect. The victim himself may be partly responsible, as in the ladder example described above. Or some other person may be partly responsible, as in the example of the drunk driver. Furthermore, the product of some second manufacturer may be partly responsible, as in the simple case of a collision between a car and a train or, for that matter, between a Chevrolet car and a Ford car. For the purpose of accident prevention,

<sup>68.</sup> See, e.g., Franklin, Tort Liability for Hepatitis: An Analysis and a Proposal, 24 STAN. L. REV. 439, 464, 479 (1972); Franklin, Replacing the Negligence Lottery: Compensation and Selective Reimbursement, 53 VA. L. REV. 774, 800 (1967). Chief Justice Traynor, in discussing in 1965 the extension of products liability into a general compensation program for accident victims, proposed the withholding of any award for pain and suffering. Traynor, supra note 32, at 375-76.

<sup>69.</sup> See Wights v. Staff Jennings, Inc., 241 Or. 301, 310, 405 P.2d 624, 628-29 (1965).

<sup>70.</sup> See the already classic statement of this position in R. KEETON & J. O'CONNELL, BASIC PROTECTION FOR THE TRAFFIC VICTIM 242 (1965).

<sup>71.</sup> See Palmer, Dangerous Products and the Consumer in New Zealand, 1975 N.Z.L.J. 366, 366.

<sup>72.</sup> A major objection to a general compensation program is that it could lead to terrible results in accident prevention. See G. CALABRESI, supra note 51, at 64-67. If genuine strict products liability could accomplish loss spreading while also promoting accident prevention—or at least without greatly interfering with the accident prevention effort—it would escape this objection.

in the ladder and drunk driving examples an unfettered rule of genuine strict liability, by focusing solely on the accident's background product cause while ignoring all its foreground behavioral causes, would be of uncertain merit. And for accidents involving the use of more than one product, it is not even clear what that rule would mean or how it would operate.<sup>73</sup>

To be sure, a genume strict liability rule, if adopted, would presumably be absorbed into the general fabric of California's tort law. Under Daly v. General Motors Corp. 74—decided two months after Barker—if the victim's unreasonable conduct has contributed to a product-related accident, the victim's recovery is diminished to the extent of his own contributory negligence;75 hence the distracted person who falls off the satisfactory ladder would probably be awarded only a small amount. Also, under American Motorcycle Association v. Superior Court<sup>76</sup> and Safeway Stores, Inc. v. Nest-Kart<sup>77</sup>—decided one month and four months after Barker, respectively—the auto manufacturer sued by the victim of the drunk driver would be entitled to comparative indemnification from the driver himself. Given the facts as stated, the jury would undoubtedly assign the lion's share of the hability to the driver.<sup>78</sup> Taken in combination, then, *Daly, American Motorcycle*, and Safeway would considerably reduce the impact of a genuine strict liability rule. The Daly-Safeway sequence, however, offers little help in the simple cases of the car-train and two-car accidents. Here, any safety benefits to be derived from genuine strict liability would be dependent upon how hability is apportioned between the product manu-

<sup>73.</sup> Consider the fencer injured when a sabre pierces his fencing mask. See Garcia v. Joseph Vince Co., 84 Cal. App. 3d 868, 148 Cal. Rptr. 843 (2d Dist. 1978). Or consider a person who injures his back lifting a heavy bowling ball out of the deep trunk of an automobile: is his injury attributable to the bowling ball, the car, both, or neither? For an accident hypothetical involving four products, see Blum, Book Review, 43 U. Chi. L. Rev. 217 (1975). See also Phillips, The Standard for Determining Defectiveness in Products Liability, 46 U. Cin. L. Rev. 101, 120-21 (1977). In workers' compensation, the question of what injuries are legally attributable to the victim's employment requires over a thousand pages of careful treatisewriting to explain. See A. Larson, 1 Workmen's Compensation chs. III-IV (1978). And workers' injuries rarely raise any problems of inultiple employers.

<sup>74. 20</sup> Cal. 3d 725, 575 P.2d I162, 144 Cal. Rptr. 380 (1978).

<sup>75.</sup> For a discussion of genuine strict liability with a full contributory negligence (as opposed to comparative negligence) defense, see Posner, Strict Liability: A Comment, 2 J. LEGAL STUD. 205, 207 (1973). Attempts to utilize a contributory negligence defense to give safety incentives to potential accident victims are replete with difficulties. See Schwartz, Contributory and Comparative Negligence: A Reappraisal, 87 YALE L.J. 697 (1978). Comparative negligence may fill this function about as well as any other possible rule. See id. at 721, 727. This Foreword will accept the Daly rule as an adequate response to the phenomenon of victim causation of product-related injuries.

<sup>76. 20</sup> Cal. 3d 578, 578 P.2d 899, 146 Cal. Rptr. 182 (1978).

<sup>77. 21</sup> Cal. 3d 322, 579 P.2d 441, 146 Cal. Rptr. 550 (1978).

<sup>78.</sup> Safeway emphasizes submitting the apportionment issue to the good sense of the jury. 21 Cal. 3d at 332-33, 579 P.2d at 446, 146 Cal. Rptr. at 585.

facturers. But if liability were imposed on the sole basis of a product's factual involvement in an accident, one does not even know what methodology to utilize in developing a "correct" apportionment formula.<sup>79</sup>

These doubts reveal the larger flaw in the accident-prevention thesis. Almost any accident, examined closely enough, can be seen as lying at the intersection of more than one activity or enterprise. Given this intersection quality, the process of attributing the accident to a particular activity or enterprise is inherently uncertain. Indeed, these uncertainties virtually compel the abandonment of the general resource allocation argument for strict liability; instead, about all that can be done is to choose among contributing activities or enterprises on the basis of which of them may be in the best position to reduce the accident risk in a cost-effective way. But this reformulation of the accident prevention strategy brings us back at least to the general vicinity of the defect requirement in existing products law.

In sum, because of the momentum provided by Justice Traynor's *Escola* reasoning, the idea of genuine strict hability is quite worth discussing. In light of the problems that such a liability rule would actually raise, however, it is neither surprising nor obviously inappropriate that the supreme court has chosen to remain with the far more moderate rule of strict liability for product "defects" only. But the *Barker* 

<sup>79.</sup> In a typical *Daly* case, the defendant's defective product and the plaintiff's unreasonable conduct both entail departures from relevant safety norms, and a comparison of the extent of the two departures may be feasible. But even comparisons of this sort would not be possible under genuine strict liability, given the absence of any requirement of subnormality.

<sup>80.</sup> See Weiler, Defamation, Enterprise Liability, and Freedom of Speech, 17 U. TORONTO L.J., 278, 298 (1967):

For instance, in a level-crossing collision between automobile and train engine, all the following "activities" (along with others) may be present: the railroad; the manufacturer of the various components of the railroad; the various types of users of the particular train (passenger, freight, etc.); the driver of an automobile; the business in which the automobile was being used; the purpose for which a passenger was "hitching" a ride; the care and raising of a family by the hired chauffer of the automobile; the manufacturer of this particular type of automobile; the manufacturer of the railroad; the builder of the highway (province); the owner of the highway who maintains the crossing (municipality). Unless most or all of these different "individuals" had engaged in various activities which coalesced in the concrete accident-situation, the harm would never have occurred.

<sup>81.</sup> See G. CALABRESI, supra note 51, at 138: Because "judgments as to who is likely to be the cheapest long-run cost avoider" are so very hard to make, "in many situations we may as well ignore the long-run judgment, as one guess is as good as another." This concession comes close to wiping out the resource allocation argument which Calabresi has so carefully constructed.

<sup>82.</sup> See id.: "[C]oncentrating on the short-run judgment [as to the best cost avoider] is the best we can do."

<sup>83.</sup> The reduction of overhead rationale can also be reconsidered. Even if a genuine strict liability rule dispensed with the defect requirement, products suits would still be plagued with difficult factual and legal issues—including those suggested by *Daly, AMA*, and *Safeway*. Also, the novel legal concept of accidents "caused or occasioned by the use of a product" would be certain to generate legal controversies.

opinion does leave open—in truth, it deliberately draws attention to—one limited but interesting application of the genuine strict liability idea. According to a *Barker* footnote, strict liability might be recognized, without proof of ordinary defect, for products whose design is such that their "norm is danger." The advisability of strict liability for defect-free "norm-is-danger" products will be assessed in a final section of this Foreword. Also, that section will take advantage of the foregoing analysis of genuine strict liability in evaluating *Barker*'s suggestion of a "hindsight" approach to its risk-benefit liability standard.

#### III

#### EXISTING STRICT "DEFECT" LIABILITY

## A. The Tort and Contract Bases for Strict Liability

By the time *Greenman* introduced strict liability, negligence law already afforded the injured product victim generous compensation rights against a negligent manufacturer, and implied warranty law<sup>85</sup> conferred on the product consumer a strict hability right running against the product retailer, if not the product manufacturer.<sup>86</sup> In his *Escola* concurrence, Justice Traynor relied on both the negligence and the warranty precedents in formulating the strict liability proposal which he later accepted, on behalf of the entire court, in *Greenman*; and the *Greenman* doctrine has itself been explained as an imaginative synthesis of negligence and warranty.<sup>87</sup>

If *Greenman* can be seen as synthesizing negligence and warranty, however, *Barker*'s two-pronged design defect test threatens to analyze away this synthesis. As the *Barker* opinion recognizes, its ordinary consumer expectations prong manifests the warranty heritage upon which California products liability doctrine partially rests.<sup>88</sup> Indeed, "consumer expectations" is a plausible restatement of the criterion for liability in a common implied warranty action.<sup>89</sup> Meanwhile, *Barker*'s

<sup>84.</sup> See 20 Cal. 3d at 431 n.10, 573 P.2d at 455 n.10, 143 Cal. Rptr. at 237 n.10.

<sup>85.</sup> It is sometimes suggested that tort warranty originally sounded in tort. What we now call express warranty has an observable tort background, through its affiliation with traditional torts like deceit and inisrepresentation. See S. WILLISTON, 1 LAW OF SALES OF GOODS §§ 195-196 (3d ed. 1948). Insofar as implied warranty can possibly be characterized as a tort, it is a tort intrinsically and necessarily connected to the sales transaction. Modern scholarship indicates that the implied warranty of merchantability can best be understood as an clement of contract. See W. WARREN, W. HOGAN, & R. JORDAN, COMMERCIAL AND CONSUMER TRANSACTIONS 2 (2d ed. 1975); Prosser, The Implied Warranty of Merchantable Quality, 27 MINN. L. REV. 117, 125, 133 (1943); text accompanying note 96 infra.

<sup>86.</sup> See notes 16, 17, 20 and accompanying text supra.

<sup>87.</sup> G. WHITE, THE AMERICAN JUDICIAL TRADITION 297, 299 (1976).

<sup>88. 20</sup> Cal. 3d at 430-31, 573 P.2d at 454, 143 Cal. Rptr. at 236.

<sup>89.</sup> Barker indicates that its consumer expectations prong is "somewhat analogous to the

risk-benefit prong reveals the strong indebtedness of strict hability doctrine to tort law's negligence principle, which itself has historically been understood as calling for a risk-benefit balancing. 90 Barker's indications of the warranty and negligence bases of strict liability doctrine invite an assessment of the logic underlying the negligence and warranty theories.

Negligence law, in its product applications, seems at first to take no account of the point that the product manufacturer stands in a kind of contractual relationship with the product purchaser; it imposes on the manufacturer the same obligation of reasonable care as it places on defendants in "stranger" cases<sup>91</sup> of the sort typified by Brown v. Kendall.92 This obligation is anchored in a fairness principle (that a potential injurer should not egoistically rank his own welfare above the welfare of others)<sup>93</sup> and an accident prevention principle (that a party should be discouraged from engaging in conduct which entails risks to others that exceed its benefits to the actor).94 Warranty law, by contrast, is drawn directly from the essentially contractual relationship between the consumer and the manufacturer.95 Its purpose is to give effect to the reasonable expectations which that relationship engenders in the parties, particularly the consumer; "the assumption [is] that the parties themselves [to a contract of sale], had they thought of it, would specifically have so agreed [to a merchantability guarantee]."96

The tort dimension of strict "defect" liability has been objected to in recent years on grounds that juries are somewhat prone to be unduly favorable to plaintiffs in product design cases,<sup>97</sup> and on the broader basis that sophisticated risk-benefit balancing is something that the process of adjudication is incapable of handling.<sup>98</sup> Neither of these ob-

- 91. See Posner, A Theory of Negligence, 1 J. LEGAL STUD. 29, 36-37 (1972).
- 92. 60 Mass. (6 Cush.) 292 (1850).
- 93. See Schwartz, supra note 75, at 701-02.
- 94. See id. at 703.
- 95. See note 116 and accompanying text infra.

Uniform Commercial Code's warranty of fitness and merchantability." 20 Cal. 3d at 430-31, 573 P.2d at 454, 143 Cal. Rptr. at 236.

See United States v. Carroll Towing Co., 159 F.2d 169, 173 (2d Cir. 1947) (L. Hand, J.);
 Weirum v. RKO General, Inc., 15 Cal. 3d 40, 48, 539 P.2d 36, 40, 123 Cal. Rptr. 468, 472 (1975).

As long as this indebtedness is recognized, there is no irony in finding so full a rendition of negligence law's balancing test in a strict liability opinion.

<sup>96.</sup> Hauter v. Zogarts, 14 Cal. 3d 104, 117, 534 P.2d 377, 385, 120 Cal. Rptr. 681, 689 (1975) (quoting Ezer, The Impact of the Uniform Commercial Code on the California Law of Sales Warranties, 8 U.C.L.A. L. Rev. 281, 292 (1961). See also W. Warren, W. Hogan, & R. Jordan, supra note 85, at 26; A. Schwartz, Products Liability and Judicial Wealth Distribution, 51 Ind. L.J. 558, 575 (1976).

<sup>97.</sup> This objection seems implicit in Professor Epstein's insistence that "the plaintiff should bear a heavy burden before he can take a case of unsafe design to the jury." Epstein, *Products Liability: The Search for the Middle Ground*, 56 N.C.L. Rev. 643, 650 (1978).

<sup>98.</sup> See Henderson, Judicial Review of Manufacturers' Conscious Design Choice: The Limits of

jections is entirely persuasive. The complaint about the jury lacks empirical verification. A recent federal study of products liability cases, collecting data from several jurisdictions (including California), has reported that at least half of all jury verdicts in products cases are in favor of the defense;99 and practicing lawyers report to me that many juries seem puzzled, if not disturbed, by the very notion of strict liability. 100 The second objection rests on the claim that product design cases are "polycentric" in Lon Fuller's sense and hence unsuitable for adjudication. Given Fuller's own examples of polycentricity, 102 this claim seems exaggerated. 103 Those who object to adjudication would apparently prefer to assign product design issues to the administrative process for purposes of prospective regulation. 104 But such a solution runs the risk of both idealizing the performance of administrative agencies 105 and neglecting the fact that they can never hope to deal with more than a limited number of product design cases. 106 Withdrawing products liability from cases involving conscious design choices would function to undermine the law's accident prevention purpose in just that class of cases in which it can most realistically hope to be effective. Exactly because design decisions are consciously rendered by highlevel company officials, there is good reason to hope that corporate decisionmaking will be influenced by those officials' awareness of the

Adjudication, 73 COLUM. L. REV. 1531 (1973); Henderson, Design Defect Litigation Revisited, 61 CORNELL L. REV. 541 (1976). In England, issues of product design are regarded as largely beyond the judicial function. See P. ATIYAH, ACCIDENTS, COMPENSATION AND THE LAW 59-61 (2d ed. 1977).

<sup>99.</sup> FINAL REPORT, supra note 6, at II-46, VI-39. See also the jury's almost incredible defense verdict in Hauter v. Zogarts, 14 Cal. 3d 104, 534 P.2d 377, 120 Cal. Rptr. 681 (1975).

<sup>100.</sup> In light of this, when pretrial discovery uncovers some evidence suggesting the manufacturer's negligence, lawyers believe there are strong reasons for bringing it to the jury's attention. In general, a plaintiffs' lawyer's success in products cases greatly depends upon his ability to explain the strict liability doctrine to the jury in a persuasive fashion.

<sup>101.</sup> Fuller, The Forms and Limits of Adjudication, 92 HARV. L. REV. 353, 394-95 (1978).

<sup>102.</sup> Fuller's chief examples of "polycentric" problems are the division of a large art collection between two art museums, the promulgation of comprehensive wage and price controls, and the establishment of lineups for a football team. *Id.* He makes explicit that the problem of the design of railroad crossings, if challenged in a negligence suit, is not so polycentric as to resist adjudication. *Id.* at 397-98.

<sup>103.</sup> See the criticism of the Henderson position in Twerski, Weinstein, Donaher, & Piehler, The Use and Abuse of Warnings in Products Liability—Design Defect Litigation Comes of Age, 61 CORNELL L. Rev. 495, 524-34 (1976).

<sup>104.</sup> In his 1973 article, Professor Henderson relies chiefly on agency regulation as the means for dealing with problems of "conscious design choices." Henderson, Judicial Review of Manufacturers' Conscious Design Choice: The Limits of Adjudication, 73 COLUM. L. REV. 1531, 1568, 1573-77 (1973). His 1978 article is somewhat less negative about the role of liability law. Henderson, Manufacturers' Liability for Defective Product Design: A Proposal for Statutory Reform, 56 N.C. L. REV. 625 (1978).

<sup>105.</sup> See Schott, Consumer Product Safety Panel Discovers Big Hazards in Just Getting Itself Rolling, Wall St. J., May 6, 1975, at 40, col. 1.

<sup>106.</sup> See G. CALABRESI, supra note 51, at 108-09.

company's potential liability.107

Neither of these objections, therefore, succeeds in establishing that tort law should retreat from product design controversies. <sup>108</sup> But the objections should by no means be ignored. It is undeniable that the issues in design cases often become extremely difficult, and it is also apparent that when a products case is sent to the jury under amorphous instructions, almost anything can happen. The objections are therefore valuable inasmuch as they suggest important criteria to rely on in evaluating the law's design-defect rules. If product design litigation is to achieve satisfying results, the law is obliged to formulate standards which identify the proper variables, which are capable of being administered in the civil trial context, and which provide the jury with effective, intelligent guidance. These criteria will be returned to repeatedly in the evaluation of *Barker* in Parts III and IV.

Historically, the chief limitation on the application of tort principles in products cases was located in the rule of privity. That rule—to the extent it was ever in effect in California 109—barred negligence suits against a manufacturer by anyone other than the person who had actually purchased the product from the manufacturer. From a contemporary vantage point, this traditional privity rule had hold of an important idea, but somehow managed to invert its significance. When parties have entered into a contractual relationship, it is permissible to argue that the rights and liabilities running between them should be deemed exclusively established by the provisions of their contract, express and implicit. 110 By contrast, when parties have not joined in any contract, the "jurisdiction" of tort law can be most emphatically con-

<sup>107.</sup> For any who may be inclined to regard this hope as an ivory tower construct, let me simply quote from my morning newspaper:

In 1960 Andrea McCormack, then 3 years old, received third degree burns over more than 30% of her body when she accidentally tipped over a vaporizer filled with scalding water. . . .

In 1967, she received a \$150,000 jury verdict levied against the vaporizer's manufacturer, Hankscraft Co.

In upholding the jury award the Supreme Court of Minnesota determined... the defect could have been eliminated by adopting any one of several "practical and inexpensive" alternative designs to secure the top of the jar, such as putting threads on the inside of the plastic top... [McCormack v. Hankscraft Co., 278 Minn. 322, 335, 154 N.W. 2d 488, 498 (1967)].

Today, most vaporizers have more secure tops and are designed so that the water in the reservoir does not reach dangerous temperatures.

L.A. Times, Oct. 22, 1978, § V, at 2, col. 2.

<sup>108.</sup> Professor Epstein, for example, would evidently immunize manufacturers from design liability so long as their design was "in substantial use" within the industry at the time of the product's sale. If there were two or more designs "in substantial use" at a particular time, all would enjoy the immunity. Epstein, *supra* note 97, at 662 n.68.

<sup>109.</sup> See notes 11-15 and accompanying text supra.

<sup>110.</sup> See Posner, supra note 91, at 37.

firmed.<sup>111</sup> There should be no doubt, therefore, that the "bystander" comes within products liability's tort-based protection.<sup>112</sup> Or, to approach the same point from a different direction, the bystander holdings most vividly verify that California's products hability rule contains a major tort dimension, one which prevents that rule from being rationalized in a purely contractual fashion.<sup>113</sup>

No one should deny the significant contractual dimension implicit in strict products hability, however, especially in hight of its warranty precursor. In suits brought by actual product purchasers, the privity doctrime that somewhat encumbered pre-Greenman warranty law<sup>114</sup> can be seen as erroneous, even in strictly contract terms.<sup>115</sup> The guarantees of product quality implicit in the purchaser's contract should be understood as running against the manufacturer rather than merely the retailer if the purchaser expects the former to be primarily responsible for product quality.<sup>116</sup> Given people's general and correct understanding that product defects are typically within the manufacturer's control—after all, defects both enter the product during the manufacturing process and are most easily detected there—the manufacturer can properly be regarded as a participant in or accessory to the retailer's immediate contract with the product purchaser.

This contractual feature in products hability has been extensively commented on in recent years by prominent lawyer-economists. These analysts have reasoned that as a matter of economic theory, products hability rules are essentially irrelevant, given the way the price mechanism reacts to a product's safety characteristics. The market, by requiring manufacturers of more dangerous products to lower their prices, gives manufacturers an incentive to make their products safer to

<sup>111.</sup> See Epstein, Medical Malpractice: The Case for Contract, 1976 AM. B. FOUNDATION RESEARCH J. 87, 94; Fletcher, Fairness and Utility in Tort Theory, 85 HARV. L. Rev. 537, 544 n.24, 546 n.38 (1972).

For an indication, however, that the manufacturer and the actual product purchaser do stand in a kind of contractual relationship, see notes 114-16 and accompanying text *infra*.

<sup>112.</sup> Epstein, supra note 97, at 647.

<sup>113.</sup> In affirming the bystander's products hability cause of action, the supreme court emphasized that products liability is "governed" by "tort rnles" rather than simply by contract principles. Elmore v. American Motors Corp., 70 Cal. 2d 578, 585, 451 P.2d 84, 88, 75 Cal. Rptr. 652, 656 (1969).

<sup>114.</sup> See note 20 and accompanying text supra.

<sup>115.</sup> See R. Posner, supra note 51, at 135. This assessment is implicit in all the economic works cited in notes 117 and 122 infra.

<sup>116.</sup> See A. Schwartz, supra note 96, at 575. Alan Schwartz now advises me that he has backed away somewhat from the conclusion he had earlier reached in applying this test. See id. at 574-78.

<sup>117.</sup> See G. CALABRESI, supra note 51, at 162-63; R. POSNER, supra note 51, at 134-36; Edited Transcript of AALS-ABA Conference on Products Liability, 38 U. CHI. L. REV. 117, 121 (1970) (Statement of G. Calabresi) (hereinafter cited as Statement of G. Calabresi).

the extent this can be done at reasonable cost; informed consumers can purchase the degree of product safety that they individually prefer.

Most of the time, however, the economic reasoning goes on to perceive that given various practicalities concerning imperfect consumer information, products liability rules ultimately do acquire real-world meaning. This conclusion I entirely agree with; but the line of reasoning I find questionable. Knowledge is not vested in consumers a priori; it must always be acquired. Through day-to-day living, most people undoubtedly pick up general knowledge of certain kinds of generic product hazards—for example, that matches can burn and that sling-shots can injure. But people do not have easy access to knowledge of defects in particular products, whether the defects are of a manufacturing or a design sort. Moreover, no matter how conscientious the consumer, the acquisition of knowledge about product defects, if possible at all, is a burdensome, time-consuming, and unpleasant business.

To be sure, economists have developed a concept of "information costs" that is hospitable to these observations—indeed, the very purpose of the information-cost concept is to bring observations of this sort into the substance of economic analysis. The concept is, however, unstable, for it concedes that people start out in ignorance of product defects and can obtain knowledge of these defects, if at all, only by "costly" efforts. Yet if this is true, it is far from clear why economic theory should choose to begin its analysis with the assumption of full

<sup>118.</sup> See G. CALABRESI, supra note 51, at 163; R. POSNER, supra note 51, at 136-37; Statement of G. Calabresi, supra note 117, at 121-22.

<sup>119.</sup> See Bojorquez v. House of Toys, Inc., 62 Cal. App. 3d 930, 133 Cal. Rptr. 483 (4th Dist. 1976) (hazard obvious to all, hence no duty to warn).

<sup>120.</sup> The best source of information may be Consumer Reports. Yet for products other than automobiles, it is usually impossible to find an issue of that magazine that is recent enough and specific enough (as to particular models) to satisfy one's informational needs. Anyway, Consumer Reports generally gives no information on manufacturing defects except in the case of automobiles, where the defects it counts (rarely of a safety nature) are evidently those detectable during a fairly brief driving experience. The magazine does attempt to identify design defects in the products it tests. But frequently it is unable to detect rather serious defects. See, e.g., Radial Tires, Consumer Reports, Oct. 1973, at 604 (rating Firestone 500 radials "well above average"); Six Subcompact Cars, Consumer Reports, June 1973, at 409 (rating the Ford Pinto last among six and criticizing the small capacity of the Pinto's gas tank, but making no mention of gas tank location). And occasionally the magazime overstates minor design problems, thereby damaging its credibility. Compare Chrysler's Big Mistakes, Consumer Reports, July 1978, at 376 (rating the Omni/Horizon "not acceptable") with U.S. Dep't of Transportation, Press Release NHTSA 74-78 (July 7, 1978) (finding no real world safety problem). Of course, Consumers Union encounters difficulties—"costs"—in acquiring its information.

<sup>121.</sup> The consumer product most likely to be involved in accidents is the automobile. Especially given the negotiability of auto prices, many consumers find the experience of shopping for cars so distressing that they knowingly buy quickly so as to cut short the distressful episode. Interview with Martha Scallon, Secretary to Judge J. Skelly Wright, en route to Dulles Airport (Oct. 16, 1978).

consumer information. To regard information costs as merely a matter of assumption-relaxing practicality is to encourage economic analysts to understate their magnitude<sup>122</sup> or to ignore them altogether, either on account of simple neglect<sup>123</sup> or because they detract from the elegance of a pure economic argument.<sup>124</sup> Economic modeling can certainly be helpful in attempting to understand products liability. But the model will help most if it bases itself on an original assumption of no consumer knowledge of product defects, and subsequently allows that assumption to be modified only to the extent that consumers, by incurring reasonable costs, can acquire some "defect" knowledge. Both implied warranty and the affiliated *Barker* consumer expectations prong profess to recognize that a particular product may deviate from what the consumer might have otherwise assumed about the product's quality. By avoiding the potential for inaccuracy implicit in the traditional economic analysis, these doctrines are to be commended.

Strict products liability, as noted, can be explained as a synthesis of negligence and warranty law.<sup>125</sup> This explanation is misleading in one sense, however, since even after *Greenman* the product victim remains free to bring suit under either a negligence<sup>126</sup> or an implied warranty<sup>127</sup> theory. Each theory has not only "survived" the introduction

The competitor's tort of product disparagement permits recovery only for special damages, and can be avoided if the disparagement is presented as an opinion. See W. Prosser, Handbook of the Law of Torts § 125, at 922-24, 926 (4th ed. 1971). Moreover, the manufacturer must incur costs if it wishes to monitor what is being said about its product in another manufacturer's retail outlets. For whatever combination of reasons, product disparagement claims are rare.

123. See W. Blum & H. Kalven, Public Law Perspectives on a Private Law Problem 58-59 (1965), later corrected in Blum & Kalven, The Empty Cabinet of Dr. Calabresi: Auto Accidents and General Deterence, 34 U. Chi. L. Rev. 239, 243 n.23 (1967).

For strong discussions (from different perspectives) of limited consumer information, see A. Schwartz, Private Law Treatment of Defective Products in Sales Situations, 49 Ind. L.J. 8 (1973); Shapo, A Representational Theory of Consumer Protection: Doctrine, Function, and Legal Liability for Product Disappointment, 60 Va. L. Rev. 1111, 1127-29, 1302-17 (1974).

<sup>122.</sup> Professor Oi relaxes his full information assumption in one opaquely written sentence. Oi, supra note 52, at 22. The only information problem whose existence Professor Posner concedes is that a seller, knowing of a design hazard in a competitor's product, will be reluctant to advertise that hazard for fear of raising the entire safety issue in consumers' minds in a way that might lead them to buy a safer "substitute" product instead. R. Posner, supra note 51, at 136-37. But the processes by which manufacturers and also retailers (many of whom sell a wide range of products) are able to learn of the design dangers in competitors' products are themselves hardly cost-free. And there is a more fundamental problem: no intelligent consumer could accept at anything resembling face value the statements of one seller about the unsafety (or other undesirable characteristics) of a competitor's product.

<sup>124.</sup> I suspect this is why Professor Demsetz assumes perfect information in graphing the implications of alternative liability rules for workers' injuries. Demsetz, Wealth Distribution and the Ownership of Rights, 1 J. LEGAL STUD. 223, 224-27 (1972).

<sup>125.</sup> See note 87 and accompanying text supra.

<sup>126.</sup> Jiminez v. Sears, Roebuck & Co., 4 Cal. 3d 379, 482 P.2d 681, 93 Cal. Rptr. 769 (1971).

<sup>127.</sup> Hauter v. Zogarts, 14 Cal. 3d 104, 534 P.2d 377, 120 Cal. Rptr. 681 (1975).

of strict products liability, <sup>128</sup> but indeed has flourished, for in the years since *Greenman* both negligence and implied warranty have undergone development. Thus, the supreme court has affirmed that negligence principles apply in a meaningful general way to issues of product design. <sup>129</sup> As for implied warranty, the consumer's right to sue the manufacturer (in addition to the retailer) under an implied warranty theory has been established, <sup>130</sup> as has the applicability of the theory to problems of product design. <sup>131</sup> Furthermore, in the years since *Greenman* plaintiffs' lawyers have developed greater skills in proving the facts of a products case; these enhanced skills make it easier for the plaintiff to prevail, regardless of the particular products theory.

If strict products liability is compared to early or immature systems of warranty and negligence, the importance of the strict liability synthesis may seem immense. The proper comparison, however, is between a mature strict liability system on the one hand and mature warranty and negligence systems on the other—a mature negligence system being one that has dispensed with privity, approved of res ipsa loquitur, extended itself to matters of product design, and acquired a sophisticated plaintiffs' bar. In this comparison, the impact of strict liability is far less dramatic. What is it that the *Greenman* rule really adds?<sup>132</sup>

It is now widely appreciated that affirmative defenses are partand-parcel of any liability rule. Can strict liability be distinguished from negligence and warranty in terms of available defenses? At the time of *Barker*, an overwhelming difference between strict liability and negligence lay in their treatment of the victim's contributory negligence. In a *Greenman* strict liability action, ordinary contributory neg-

<sup>128.</sup> Thus, after *Barker*, in a product design case the plaintiff can allege negligence, *and* implied warranty, *and* the strict liability risk-benefit prong, *and* the strict liability consumer-expectations prong.

<sup>129.</sup> Pike v. Frank G. Hough Co., 2 Cal. 3d 465, 467 P.2d 229, 85 Cal. Rptr. 629 (1970).

<sup>130.</sup> See Hauter v. Zogarts, 14 Cal. 3d 104, 534 P.2d 377, 120 Cal. Rptr. 681 (1975) (by necessary implication).

<sup>131.</sup> See id.

<sup>132.</sup> The focus here will be on the manufacturer, who is the primary defendant for products liability purposes. Suit is allowed against the retailer, Vandermark v. Ford Motor Co., 61 Cal. 2d 256, 391 P.2d 168, 37 Cal. Rptr. 898 (1964), but, absent special circumstances, the retailer can secure indemnification from the manufacturer, see Pearson Ford Co., v. Ford Motor Co., 273 Cal. App. 2d 269, 78 Cal. Rptr. 279, 282 (4th Dist. 1969), under a classic implied warranty theory if nothing else. See Escola v. Coca Cola Bottling Co., 24 Cal. 2d 453, 462, 150 P.2d 436, 442 (1944) (Traynor, J., concurring). If there is a wholesaler subject to strict liability, the analysis is the same: hability ultimately comes to rest on the manufacturer.

California law imposes strict liability on the in-the-business product lessor. See Price v. Shell Oil Co., 2 Cal. 3d 345, 466 P.2d 722, 85 Cal. Rptr. 178 (1970). In those (perhaps few) lessor cases in which (a) the defect cannot be traced back to the product at the time when the lessor purchased it, and (b) the lessor has been guilty of no negligence in inspecting or maintaining the product, the *Price* rule produces a new and interesting strict liability result.

ligence had no effect upon the victim's recovery. 133 As against a negligence claim, however, contributory negligence operated as a complete defense until Li v. Yellow Cab Co. 134 in 1975 and as a partial defense subsequent to Li. But in Daly v. General Motors Corp., 135 decided a month after Barker, a divided supreme court extended the Li contributory negligence liability-reducing rule into the strict products liability setting. This ruling all but bridges the dramatic gap that previously separated negligence from strict hability. The defense of contributory/comparative negligence has of course evolved in a tort law environment, and its status in a contract-oriented implied-warranty action has never been authoritatively clarified. 136 But the fairness principle underlying comparative negligence—that a defendant should not be required to reimburse the plaintiff for the full cost of an accident of which the plaintiff's own foolish conduct was a necessary cause 137 does not seem threatened by any transition from tort to contract. And for those who see the purpose of comparative negligence as providing potential victims with influential safety incentives, 138 this purpose is hardly incompatible with the risk-assigning criterion that is often seen at work in contract doctrine. 139 In all, it would be both surprising and wrong if, after Daly, the supreme court were to allow a plaintiff to escape the effects of comparative negligence by pleading implied warranty.

Liability disclaimers can be regarded as a special form of affirmative defense. While disclaimers of strict hability are presumptively invalid, <sup>140</sup> disclaimers of negligence hability fall under a similar cloud. <sup>141</sup> Implied warranty's contract framework may suggest that such a warranty is inherently vulnerable to supersession by an express contractual term. 142 Yet the U.C.C., in setting forth implied warranty doctrine, equivocates badly on the disclaimer issue, and at least permits the inference that as a general matter implied warranty liability for personal injuries cannot be disclaimed. 143 If, however, a seller should list its

<sup>133.</sup> Luque v. McLean, 8 Cal. 2d 136, 501 P.2d 1163, 104 Cal. Rptr. 443 (1972).

<sup>134. 13</sup> Cal. 3d 804, 532 P.2d 1226, 119 Cal. Rptr. 858 (1975).

<sup>135. 20</sup> Cal. 3d 725, 575 P.2d 1162, 144 Cal. Rptr. 380 (1978).

<sup>136.</sup> See L. Frumer & M. Freidman, 2 Products Liability § 16.01[3] (1978).
137. See Schwartz, supra note 75, at 721-27.
138. I am not one of them. See id. at 703-21.

<sup>139.</sup> See R. Posner, supra note 51, at 74, 77-79.

<sup>140.</sup> See Seely v. White Motor Co., 63 Cal. 2d 9, 17, 403 P.2d 145, 150, 45 Cal. Rptr. 17, 22 (1965) (dictum). All that Vandermark seems to hold is that a disclaimer of contractual liability does not profess to apply to a tort liability claim. Vandermark v. Ford Motor Co., 61 Cal. 2d 256, 391 P.2d 168, 37 Cal. Rptr. 896 (1964).

<sup>141.</sup> See Tunkl v. Regents of Univ. of Cal., 60 Cal. 2d 92, 383 P.2d 441, 32 Cal. Rptr. 33 (1963).

<sup>142.</sup> See S. WILLISTON, supra note 85, § 237.

<sup>143.</sup> Compare CAL. COM. CODE § 2316 (West 1964) (cstablishing that implied warranty is

product at a regular price but also offer the consumer a meaningful price discount if the latter chooses to accept a liability disclaimer, <sup>144</sup> for obvious contract reasons there is a good chance that courts would honor the disclaimer, whether it is attacked on strict liability, negligence, or warranty grounds.

Lying between comparative negligence and liability disclaimers is the defense of assumption of risk. For negligence and strict liability purposes, Li and Daly "inerge" assumption of risk into comparative negligence and thereby "abolish" it as a complete defense—but only to the extent that assumption of risk is no more than a "variant," or "form," of contributory negligence. 145 In cases where the consumer discovers the defect in his product at some time after his product purchase, I agree that contributory/comparative negligence should be the exclusive issue, whatever the liability theory. But when that hazard is fully disclosed to the consumer prior to his product purchase, his express knowledge of that liazard seemingly becomes part of the purchase contract in a way that clearly weakens any later implied warranty claim. 146 Consider now the purchaser who not only knows of the product hazard prior to the purchase, but who receives some benefit from the sales transaction that is necessarily tied to that hazard, and who chooses to accept the hazard in order to secure that benefit.<sup>147</sup> Absent a policy of extreme paternalism, in this situation the consumervictim's assumption of risk should override not only an implied war-

generally disclaimable by conspicuous language) with CAL. COM. CODE § 2719(3) (West 1964) (specifying that any "limitation of consequential damages for injury to the person" when an implied warranty exists is "prima facie unconscionable"). For a discussion of the Code's "peculiar inconsistency," see Franklin, When Worlds Collide: Liability Theories and Disclaimers in Defective-Product Cases, 18 STAN. L. REV. 974, 995 (1966). If the U.C.C. does indeed disallow personal injury disclaimers, the U.C.C. is arguably using the implied warranty doctrine for "disguised tort" purposes. See W. Warren, W. Hogan, & R. Jordan, supra note 85, at 77. See also G. Gilmore, The Death of Contract 94 (1974).

- 144. See Franklin, supra note 143 at 1006, 1010-11.
- 145. See Li v. Yellow Cab Co., 13 Cal. 3d 804, 826, 532 P.2d 1226, 1241, 119 Cal. Rptr. 858, 873 (1975); Daly v. General Motors Corp., 20 Cal. 3d 725, 739, 743, 575 P.2d 1162, 1169-70, 1172, 144 Cal. Rptr. 380, 387-388, 390 (1978).
- 146. See Pritchard v. Liggett & Myers Tobacco Co., 350 F.2d 479, 484-86 (3d Cir. 1970) (dictum) (assumption of risk in its "primary" or "strict" sense a complete defense even against an express warranty claim). See also Cal. Com. Code § 2316(3)(c) (West 1964).
- 147. Suppose that a manufacturer offers a safety device (say, an auto airbag) as a fairly-priced option and that a consumer declines to purchase it because he thinks that the device's safety benefits do not justify its price. It is hard to believe that the consumer could later sue the manufacturer on grounds that the absence of the safety device rendered the product's design defective. Even Li appreciates that in some assumption of risk situations recovery is properly denied because the "plaintiff is held to agree to relieve the defendant of an obligation of reasonable conduct toward him. Such a situation . . . involve[s] . . . a reduction of defendant's duty of care." Li v. Yellow Cab Co., 13 Cal. 3d 804, 824-25, 532 P.2d 1226, 1240, 119 Cal. Rptr. 858, 872 (1975) (quoting from Grey v. Fibreboard Paper Prods. Co., 65 Cal. 2d 240, 245-46, 418 P.2d 153, 156, 53 Cal. Rptr. 546, 548 (1966)).

ranty claim but a tort claim as well, whether sounding in negligence or strict liability.

The most prominent affirmative defenses thus call for only limited line-drawing among products liability theories. It is true, however, that implied warranty uniquely disadvantages product victims by requiring them to give the manufacturer notice within a "reasonable time" of the alleged warranty violation. <sup>148</sup> Justice Traynor's assessment that notice should not be required from the victim of a traunatic, disrupting personal injury led him to his *Greenman* conclusion that a tort liability theory is necessary. <sup>149</sup> Partly because of the notice requirement, and partly because the notions of "warranty" and "inerchantability" are difficult to explain to the jury, lawyers prosecuting products cases—while they often state implied warranty counts in their original complaints—rarely choose to emphasize implied warranty in their trial presentations.

This accounts for the affirmative defenses available in strict liability, negligence, and warranty. What about the more obvious question of differences in their standards of substantive liability? The core concept of *Greenman* strict liability is the product's "defect." The core concept of negligence liability is the manufacturer's faulty conduct. The core concept of implied warranty liability is the product's "unmerchantability," its "unfitness for the ordinary purposes for which such goods are used." These concepts obviously overlap and intermingle. The warranty literature specifies that a "defect" most clearly renders a product unmerchantable. In like manner, negligence cases have often indicated that the presence of a "defect" raises the issue of the manufacturer's negligence. And "strict" liability, given its defect requirement, can plausibly be regarded as a "fault" rule after all, one that simply shifts the focus from the "fault" of the manufacturer to the "fault" in the product itself. Iss

<sup>148.</sup> CAL. COM. CODE § 2607(3)(a) (West 1964).

<sup>149. 59</sup> Cal. 2d at 61-62, 377 P.2d at 900, 27 Cal. Rptr. at 700. For an argument that the U.C.C.'s notice requirement is both sensible and modest, see Shanker, Strict Tort Theory of Products Liability and the Uniform Commercial Code: A Commentary on Jurisdictional Eclipses, Pigeonholes and Communications Barriers, 17 W. Res. L. Rev. 5, 45-46 (1965).

<sup>150. &</sup>quot;Defect" also is the pivot of the notification and recall provisions in the federal motor vehicle safety program. See 15 U.S.C. §§ 1411, 1414(a) (1976); United States v. General Motors Corp. (Wheels), 518 F.2d 420, 427 (1976).

<sup>151.</sup> CAL. COM. CODE § 2314(1) (West 1964).

<sup>152.</sup> Id., § 2314(2)(c).

<sup>153.</sup> See W. Prosser, supra note 85, at 136-37; S. WILLISTON, supra note 85, at 642. See also Franklin, supra note 143, at 980 (equating products-liability "defect" and warranty "unmcrchantability").

<sup>154.</sup> See, e.g., Escola v. Coca Cola Bottling Co., 24 Cal. 2d 453, 459, 461, 150 P.2d 436, 439, 440 (1944) (majority opinion); Snyder v. Holt Mfg. Co., 134 Cal. 324, 325, 66 P. 311 (1901).

<sup>155.</sup> See O'Connell, The Interlocking Death and Rebirth of Contract and Tort, 75 Mich. L.

The Barker opinion professes to highlight the difference between manufacturer negligence and product defect. But if it is true that each involves a kind of fault, one should inquire when, if ever, the theories of negligence liability and defect liability actually lead to divergent results. The two theories can first be tested in their application to manufacturing defects. Typically, such defects are introduced into the product by a mishap somewhere in the manufacturing process. This mishap, in turn, is usually due to either the negligence of an employee of the manufacturer or the negligence of the manufacturer's supplier. Two vicarious hability rules—one quite ancient 157 and the other just emerging 158—render the manufacturer liable 159 in either event. 160

Negligence law, however, imposes on the plaintiff-victim the burden of proving his case. Since the circumstances of the particular mishap are commonly unknown even to the manufacturer and hence are quite beyond the plaintiff's ability to discover, the latter has little choice but to fall back upon res ipsa loquitur. In an early article, Dean Prosser claimed that if a victim can demonstrate a manufacturing defect, he can secure a res ipsa negligence verdict from the jury in almost all cases. <sup>161</sup> Prosser subsequently backed away from this strong claim, and contented himself with the softer allegation that a negligence plaintiff

Rev. 659, 664 n.3 (1977). The *Barker* opinion concedes as much: the manufacturer is hable only if there is "something wrong" with its product. 20 Cal. 3d at 433, 573 P.2d at 456, 143 Cal. Rptr. at 238. Under *Barker*, the plaintiff "is no longer required to impugn the maker, but he is required to impugn the product." 20 Cal. 3d at 436, 573 P.2d at 457, 143 Cal. Rptr. at 239 (quoting Keeton, *supra* note 39, at 33).

<sup>156.</sup> In light of warranty law's notice requirement and trial lawyers' perception of lay confusion concerning basic warranty concepts, the comparison here will downplay warranty and concentrate on strict liability versus negligence.

<sup>157.</sup> This is the taken-for-granted rule of respondeat superior.

<sup>158.</sup> On the vicarious hability of the manufacturer for the negligence of its supplier, see Vandermark v. Ford Motor Co., 61 Cal. 2d 256, 261, 391 P.2d 168, 170, 37 Cal. Rptr. 896, 898 (1964) (dictum).

<sup>159.</sup> There are other possibilities. The negligence may be committed by a retailer to whom the manufacturer delegates tasks of final assembly. If so, a vicarious liability rule probably runs against the manufacturer. See id. (by implication). The mishap may be traceable to the malfunction of some machine on the manufacturer's assembly line. If so, one can possibly speak of the manufacturer's vicarious liability for the torts of its machines. If this sounds anthropomorphic, consider the common law rule rendering the farmer hable for the "trespasses" of his cattle. See Williams v. Goodwin Dev. Corp., 41 Cal. App. 3d 496, 116 Cal. Rptr. 200 (3d Dist. 1974).

<sup>160.</sup> Similar problems arise in ascertaining the legally responsible party when medical surgery produces a clearly negligent result. The supreme court dealt with this problem in Ybarra v. Spangard, 25 Cal. 2d 486, 154 P.2d 687 (1944), by creating an essentially presumptive rule of group negligence liability within the surgical team. The court's *Ybarra* opimion (in which Justice Traynor concurred) was released only a few months after *Escola*, which had included Justice Traynor's strict liability concurrence. *Ybarra* is explained in Clark v. Gibbons, 66 Cal. 2d 399, 411, 426 P.2d 525, 533, 58 Cal. Rptr. 125, 133 (1967).

<sup>161.</sup> Prosser, The Assault Upon the Citadel (Strict Liability to the Consumer), 69 YALE L.J. 1099, 1114-15 (1960).

who identifies a manufacturing defect will "usually" prevail. 162 Only this latter assessment is faithful to the chanciness of the res ipsa argument. Even when the law allows resort to res ipsa, 163 under California's "conditional" res ipsa standards 164 there is a real risk that the jury will decline to accept the res ipsa invitation. 165 While res ipsa can be perceived as "a simple, understandable rule of circumstantial evidence, 166 lawyers agree that many juries either fail to understand the res ipsa theory or regard it as not entirely fair—perhaps implicitly sympathizing with the claim that "[s]urmise ought not be substituted for strict proof when it is sought to fix a defendant with serious liability." 167

In manufacturing defect cases, therefore, the basic consequence of the products liability rule is clear enough. The rule recognizes that manufacturers can be held vicariously liable for any negligence in the manufacturing process, that these defects are almost always a result of negligence somewhere within that process, but that res ipsa can be a cumbersome method of proving negligence in the individual case. By imposing automatic liability on the manufacturer, the rule correctly concludes that whatever marginal fine-tuning a mature negligence system makes possible would not justify the corresponding complication of the trial process, a complication that would disserve product victims by delaying, rendering more costly, and sometimes preventing the vindication of their valid negligence claims. Products liability thus serves

<sup>162.</sup> W. Prosser, Handbook of the Law of Torts 672 (4th ed. 1971).

<sup>163.</sup> The majority opinion in *Escola* declined to overrule Honea v. City Dairy, Inc., 22 Cal. 2d 614, 140 P.2d 369 (1943), where the supreme court (Justice Traynor concurring) held that res ipsa was not available in a suit brought against a milk bottler for an injury caused by an exploding milk bottle. The distinction between carbonated and noncarbonated beverages is notable. Given *Vandermark*'s subsequent announcement of an assembler's vicarious liability for "upstream" negligence, *see* note 158 *supra*, the res ipsa argument in products cases like *Honea* (and *Escola* itself) becomes much easier.

<sup>164.</sup> See Cal. EVID. Code § 646 (West Supp. 1978) and the accompanying Law Revision Commission Comment. Under "conditional" res ipsa, the trial judge merely determines whether reasonable minds could differ as to the appropriateness of res ipsa in the particular case. The jury then makes up its own mind on whether res ipsa is appropriate.

<sup>165.</sup> One defense counsel has advised me that in pre-Greenman days he was consistently able to secure defense verdicts in those cases in which plaintiff's counsel contented himself with a rcs ipsa argument. And an experienced plaintiffs' lawyer reports that the lesson of his experience is that the doctrine should be renamed "res ipsa loser." Statement of Leonard Mandel, moderator of the California Continuing Education of the Bar Session on Products Liability: Pleading, Practice, and Proof, Los Angeles, September 16, 1978. But see Whitford, Strict Products Liability and the Automobile Industry: Much Ado About Nothing, 1968 Wis. L. Rev. 83, 108-09.

<sup>166.</sup> Ybarra v. Spangard, 25 Cal. 2d 486, 489, 154 P.2d 687, 689 (1944). Of course, on its multiparty facts, the res ipsa issue in *Ybarra* itself was anything but simple.

<sup>167.</sup> Argument of counsel in Byrne v. Boadle, 2 H. & C. 722, 724, 159 Eng. Rep. 299, 300 (Exch. Ch. 1863).

the highly intelligent function of a "negligence shortcut." <sup>168</sup> In most of these defect cases, however, negligence principles justify liability only insofar as they are extended by certain rules of vicarious liability, and it should not be forgotten that vicarious liability embodies strict liability of a limited but important sort. <sup>169</sup>

In a few remaining cases that get somewhat awkwardly subsumed under the heading of "inanufacturing defect," the problem with the specific product (usually a food or medical product) is originally attributable not to any mishap but rather to a flaw or impurity in some resource which is an ingredient in the production process. For this type of product defect, no inference of negligence immediately arises, by res ipsa or otherwise. Certain negligence claims may remain possible, however, such as negligence in the manufacturer's choice of ingredient source, 170 negligence in the failure to separate out the flaw during processing, and negligence in the failure to detect the impurity during inspection and testing.<sup>171</sup> Even if the facts of the individual case for some reason do not support a negligence finding, it remains true that the manufacturer usually is in a good position to achieve risk reduction in the near future by identifying more sophisticated methods of resource selection or developing more imaginative techniques for inspection and testing.

If strict hability applies in these impurity cases, its purpose would be to "buy off" numbers of uncertain or difficult-to-prove negligence claims and to give the manufacturer a strong short-run incentive to innovate in inspection, testing, and resource selection. This incentive would resemble the incentives characteristic of genuine strict liability—but with the important difference that the incentive would be directed at very specific product risks. <sup>172</sup> Interesting issues are obviously at

<sup>168.</sup> See Franklin, Tort Liability for Hepatitis: An Analysis and a Proposal, 24 STAN. L. Rev. 439, 461 (1972). See also Prosser, supra note 58, at 799-800.

<sup>169.</sup> The equivalence of strict "defect" liability and an advanced negligence system is suggested by Ford Motor Co. v. Mathis, 322 F.2d 267 (5th Cir. 1963) (applying Texas law), holding that a manufacturer is vicariously liable for the negligence of its suppliers. In reaching this "sound and realistic" conclusion, id. at 273, the court relied on a "public policy" passage from Justice Traynor's Escola concurring opinion, id. at 143 n.10, an opinion which, of course, advocates strict liability.

The entire subject of vicarious liability has been greatly underdiscussed in recent years. We therefore lack a firm basis for evaluating the *Mathis* holding in its negligence system setting.

<sup>170.</sup> See Franklin, supra note 168, at 439, 444-45, 447-49.

<sup>171.</sup> Negligence law imposes a strong inspection requirement on manufacturers. *See* Sheward v. Virtue, 20 Cal. 2d 410, 126 P.2d 345 (1942); Edison v. Lewis Mfg. Co., 168 Cal. App. 2d 429, 336 P.2d 286 (2d Dist. 1959); MacPherson v. Buick Motor Co., 217 N.Y. 382, 111 N.E. 1050 (1916).

<sup>172.</sup> The safety incentives afforded by a genuine strict liability rule (see notes 60-64 and accompanying text supra) are of an inexhaustible and hence long-run character. Since in the impurity cases there is a particular, limited safety problem, the assumption that the problem can be dealt with by short-term innovations, while not valid in all cases, seems generally reasonable.

stake here. As for the law there is a correspondingly interesting complication to report: in cases involving "natural" and evidently undetectable impurities, products liability has repeatedly declined to take the leap. From the inception of implied warranty in the 1930's<sup>173</sup> to contemporary problems of hepatitis-infected blood,<sup>174</sup> courts and legislatures have been remarkably hesitant to impose the strict liability burden.<sup>175</sup> It is frankly uncertain, therefore, whether the existing rule of strict liability actually intends to step meaningfully beyond negligence in order to give manufacturers short-run safety incentives.<sup>176</sup>

Given this uncertainty, all that can confidently be said about the manufacturing defect cases is that strict hability serves as a shortcut into a sophisticated negligence system, one that is laden with certain vicarious liability (and hence strict hability) elements. In *design* defect cases, by comparison, it is far from clear that strict hability performs even this limited function. Technically speaking, the issue in a negligence action should be whether the manufacturer's conduct in reaching a design decision was unreasonable. But in practice, even in negligence cases the focus tends to shift from the unreasonableness of the design

<sup>173.</sup> See Mix v. Ingersoll Candy Co., 6 Cal. 2d 674, 59 P.2d 144 (1936) (no liability for "natural" chicken bone in chicken pie). A recent decision in a similar vein is Coffer v. Standard Brands, Inc., 30 N.C. App. 134, 226 S.E.2d 534 (1976). See generally Prosser, supra note 58, at 807-10.

<sup>174.</sup> See McDonald v. Sacramento Med. Fonnd. Blood Bank, 62 Cal. App. 3d 866, 133 Cal. Rptr. 444 (3d Dist. 1976) (declaring the obvious meaning of Cal. Health & Safety Code § 1606 (West 1970)); Brody v. Overlook Hosp., 127 N.J. Super. 331, 317 A.2d 392 (1974), aff'd per curiam, 66 N.J. 448, 332 A.2d 596 (1975). With the Illinois legislature having displaced Cunningham v. MacNeal Memorial Hosp., 47 Ill. 2d 443, 266 N.E.2d 897 (1970), see Ill. Rev. Stat. ch. 91, §§ 181-183 (Supp. 1978), it is unclear which jurisdictions, if any, presently impose strict liability for the supply of infected blood.

<sup>175.</sup> Under Barker, the question is whether the deviation-from-the-normal-product standard for identifying liability-producing manufacturing defects is to be applied without exception or qualification. The Barker dictum setting forth that standard does not specifically refer to any exceptions. 20 Cal. 3d at 429, 430, 573 P.2d at 453, 454, 143 Cal. Rptr. at 235, 236. For the Restatement's endorsement of an exception, see Restatement (Second) of Torts § 402A, Comment k (1965). The Department of Commerce's Draft Uniform Product Liability Law includes a similar exception. Draft Uniform Product Liability Law, 44 Fed. Reg. 2996, 2998, 3006 (1979) [hereinafter cited as Uniform Law].

<sup>176.</sup> The carrier test described by Professor Franklin, *supra* note 168, at 444-45, has become more sophisticated since his 1972 article. Still, the test is only able to identify blood units with a hepatitis B infection. Hepatitis B has always been less common than hepatitis A, which remains beyond the reach of existing testing and which has become, if anything, more virulent in recent years. Interview with Dr. Gary Gitnick, UCLA School of Medicine, in Los Angeles, California (Nov. 15, 1978). The overall blood hepatitis problem therefore is about as great now as it has ever been. How much more progress would have been made had courts and legislatures been willing to provide strict-hability incentives is obviously an interesting, important, and uncertain question. The matter is complicated by the division in function between blood banks and hospitals, the fact that medical research is largely conducted by pharmaceutical houses and public agencies, and the extent to which blood transactions operate outside of ordinary private market processes.

decision to the unreasonableness of the design itself.<sup>177</sup> And since unreasonableness as a negligence notion is measured in risk-benefit terms, the negligence issue in design cases assumes a form almost identical to the defect issue under strict liability—especially given *Barker*'s risk-benefit defect prong. Moreover, negligence law's willingness to blur the distinction between conduct and product makes sense. Since design decisions are made deliberately by manufacturers' design officials, an unreasonable decision almost necessarily leads to an unreasonable design, and conversely an unreasonable design is almost always the consequence of an unreasonable design decision. Perceiving this, courts in some jurisdictions have found it meaningless to apply strict liability in design cases.<sup>178</sup>

In a limited number of design situations, however, the equivalence of the negligence and strict liability theories can break down. The two theories remain equivalent so long as the relevant risks and benefits either are known by the manufacturer's design officials or could reasonably be known by them. What if those officials are unaware of a relevant risk or benefit at the time they reach their design decision, and if their lack of awareness is reasonable and nonnegligent? To take extreme examples, what if the risk that the product contains is both unknown and unknowable at the time the product is designed and sold? Or what if a safety device capable of eliminating or reducing a product's risk at acceptable cost is not invented until after the time of the product's design and sale? Clearly, negligence principles would not afford a recovery in either of these situations. To the extent that recoveries are authorized by strict liability, that doctrine does make a difference. Unfortunately, however, the results that strict liability actually reaches in cases of this sort remain somewhat uncertain. Since these cases lie on the outskirts of the Greenman-Barker doctrine, consideration of them helps clarify that doctrine's boundaries. 179 A discus-

<sup>177.</sup> See Noel, supra note 21, at 818, 824, 825, 834, 836, 844. The Noel article is especially useful because it was written at just about the dawn of strict liability. See id. at 876-77.

<sup>178. &</sup>quot;[A]s to a defect in design [strict liability] has no special meaning. . . . [I]t is wholly illogical to speak of a defective design even though the manufacturer has 'exercised all possible care' in the preparation of his product." Volkswagen of America, Inc. v. Young, 272 Md. 201, 220-21, 321 A.2d 737, 747 (1974).

Pike v. Frank G. Hough Co., 2 Cal. 3d 465, 467 P.2d 229, 85 Cal. Rptr. 629 (1970) was the first California case to clearly apply strict liability to matters of product design. But the *Pike* court was *also* willing to give negligence doctrine a rather full design application; and the court's negligence reasoning seems almost interchangeable with its strict liability reasoning.

<sup>179.</sup> While as boundary-setters these cases have considerable analytical importance, the truth remains that they are factually unrelated to the great bulk of product design claims. In this regard, see G. FLETCHER, RETHINKING CRIMINAL LAW 143 (1978), warning against a "preoccupation with borderline cases."

sion of the issues they raise will be presented in the final section of this Foreword.

## B. The Definition of Design Defect: Barker's Two Prongs

## 1. The Tort-Based Risk-Benefit Prong

There can be little doubt about the correctness of the risk-benefit standard for design defect set forth in *Barker*. <sup>180</sup> That standard is a natural outgrowth of the basic negligence principle, and can find justification in the fairness and accident prevention ideas which support that principle. *Cronin*'s terseness had encouraged doubts at the trial level as to whether a "balancing" approach was permissible once an apparently safer design alternative had been identified. By clearly legitimating the jury's full consideration of "trade-off" evidence, *Barker* clarifies the law in a welcome manner. <sup>181</sup> *Barker*'s holding on burden of proof is troublesome, however. That holding specifies that once the plaintiff shows that the product's design is the proximate cause of his injury, the manufacturer can escape liability only by verifying that the design is indeed risk-beneficial. <sup>182</sup>

This holding can be seen as responsive to a certain practical problem. Prior to *Barker*, lawyers knew that proving a design defect was an expensive and uncertain endeavor. 183 As a result, the victim with an injury "priced" at less than \$25,000 often encountered difficulties in finding a high-quality lawyer to take his case, even when the facts on the hability issue were reasonably good. It has been suggested that the implicit purpose of the *Barker* burden-of-proof rule is to enable competent lawyers to "small budget" such a case and thereby induce them

<sup>180.</sup> Under that standard, it is clear that the manufacturer's pre-sale knowledge of some hazard in the product's design by no means suffices to establish liability. Rather, the standard gives the fact-finder the opportunity to impose liability if its risk-benefit calculation reaches an opposite result from any favorable risk-benefit calculation the manufacturer may have originally made.

<sup>181.</sup> Barker's hostility to the language of "reasonableness" may seem surprising. In tort law, "reasonableness" is well understood as calling for a risk-benefit balancing. See RESTATEMENT (SECOND) OF TORTS §§ 291-293 (1965). The word carries essentially the same meaning in the law of public product regulation. See 15 U.S.C. § 2056(a) (1976); Aqua Slide 'N' Dive Corp. v. Consumer Prod. Safety Comm'n, 569 F.2d 831 (5th Cir. 1978).

<sup>182.</sup> This burden-of-proof idea had not been mentioned (so far as 1 know) in any of the law reviews. In the briefs before the court in *Barker*, it was no more than hinted at by one amicus. *See* Brief for Amici Curiae (Siegfried Hesse & Peter Elkind), at 7; Barker v. Lull Eng'r Co., 20 Cal. 3d 413, 573 P.2d 443, 143 Cal. Rptr. 225 (1978).

<sup>183.</sup> By now there is available to plaintiffs a substantial supply of expert witnesses who are competent to consult and testify on a wide range of product design issues. These experts charge their fees, however. Moreover, manufacturers have a comparative advantage. While a single tire company can retain an expert witness almost full-time, even a leading plaintiffs' lawyer is likely to need a tire expert only once or twice a year. Employment is thus more secure on the defense side. For the battle of expert testimony in *Barker* itself, see 20 Cal. 3d at 420-22, 573 P.2d at 447-49, 143 Cal. Rptr. at 229-31.

to provide representation.<sup>184</sup> Alternatively, the reduction in the burden of proof can be seen as an attempt to relieve the victim of the need to retain a lawyer who is already a products specialist.

Proving a product case could be rendered somewhat less difficult were products law merely to recognize techniques of proof developed by negligence law during the 129 years of its California legal career. Assume that a new car's brakes fail ten miles away from the showroom, thereby causing an injury. These facts clearly bespeak the existence of some defect in the brakes at the time the car was sold. While the supreme court has failed to realize this, 185 it seems obvious that the plaintiff should be allowed to prove defect by some strict-liability version of the negligence-oriented doctrine of res ipsa loquitur. 186 Now assume that a product is lacking a safety device common in similar products on the market. The one product's failure to comply with industry custom should be deemed strong evidence of its defectiveness. Moreover, an industry custom analysis can probably address itself to the performance of a product, as induced by its design, as well as to the actual composition of that design: if the product's design-induced performance is plainly less safe than the performance of comparable products, the burden of explanation should be imposed on the manufacturer.187

Even if accepted in the aggregate, however, these case-proving techniques would still leave many worthy products plaintiffs—especially those whose claims are for small amounts—with a substantial burden. This burden may well indicate some problem for the tort system. But both the extent of this problem<sup>188</sup> and its actual ramifica-

<sup>184.</sup> Telephone interview with Ned Good, Member of the California State Bar (Nov. 10, 1978).

<sup>185.</sup> See, e.g., Jiminez v. Sears, Roebuck & Co., 4 Cal. 3d 379, 482 P.2d 681, 93 Cal. Rptr. 769 (1971), in which the court allowed a plaintiff to plead negligence in addition to strict liability on the idea that the negligence theory enables the plaintiff to rely on res ipsa.

<sup>186.</sup> See Henningsen v. Bloomfield Motors, Inc., 32 N.J. 358, 409-10, 161 A.2d 69, 97-98 (1960). In such a case, the plaintiff should not even be required to "declare" whether the defect is one of inanufacture or of design—a requirement that *Barker* seemingly imposes.

<sup>187.</sup> This variation in the custom theme is suggested by Culpepper v. Volkswagen of America, Inc., 33 Cal. App. 3d 510, 109 Cal. Rptr. 110 (4th Dist. 1973). In Culpepper, a VW bug rolled over when the driver turned its front wheel sharply (18 degrees) while traveling at 55 miles per hour. The court of appeal affirmed a verdict for plaintiff mainly on the basis of expert testimony that for cars driven in America, there is an "implied standard" not to roll over when being driven in this fashion. This evidence as to performance subordinated what little evidence the plaintiff presented concerning any of the VW's particular design features. Culpepper's direct emphasis on product performance is consistent with products liability's warranty basis, since the warranty concept of "fitness for use" has a strong performance orientation. Culpepper is commended in Barker, 20 Cal. 3d at 430, 573 P.2d at 454, 143 Cal. Rptr. at 236.

<sup>188.</sup> In the area of auto accident claims, minor injury claimants tend to be overcompensated in comparison to their out-of-pocket losses, while serious injury claimants are undercompensated. See New York Ins. Dep't, Automobile Insurance. . . . For Whose Benefit? 27 (1970). This

tions<sup>189</sup> require further study. In any event, even conceding the problem, it does not follow that the *Barker* rule provides an intelligently adapted solution.

A preliminary observation is that the rule possesses an incredible potential application. It is hard to conceive of any product-related accident which would not permit some claim that the accident was caused by something in the product's design. 190 Until now, for example, the very paradigm of a product that is dangerous but not defective is a knife that cuts. 191 Yet under Barker, when a knife cuts its user the burden evidently shifts to the manufacturer to prove that the knife's design is non-defective, since plainly a design feature of the knife—its sharp blade—has been a proximate cause of the injury.<sup>192</sup> Also, by now it is known with near certainty that there is something in the design of a cigarette which is carcinogenic. Therefore under Barker the plaintiff in a cigarette cancer case can establish defect easily, and the burden of proof evidently shifts to the cigarette manufacturer to prove that the design of the cigarette is not defective after all. 193 Consider a typical automobile accident, one in which a car is being driven at 75 miles per hour when the driver sees an obstacle 275 feet ahead; unable to stop in time, the car hits the obstacle and the motorist goes through the windshield, suffering serious injury. These injuries seem proximately caused by the product's design massnuch as the car is designed to operate at speeds as fast as 75 miles per hour, the car's brakes are not capable of stopping the car within 275 feet, 194 the car's glass windshield produces serious injuries upon impact, and so on.

That some of these assessments may seem confusing or perplexing points to another problem with the *Barker* rule. The rule places an enormous burden on the concept of a "product design that proximately

same pattern has been found in products cases, despite the high threshold of proof such cases entail. See Insurance Services Office, Product Liability Closed Claim Survey: A Technical Analysis of Survey Results: Highlights 4 (1977). Of course, the class of "claimants" does not include all "victims."

<sup>189.</sup> Because the threshold of proof is so low in auto claims—all it takes is the testimony of the victim that the motorist was speeding—insurance companies, to avoid uneconomic litigation, are required to settle small "nuisance" claims for excessive amounts. A higher threshold thus is not without advantage.

<sup>190.</sup> An Arizona court has rejected the *Barker* burden-of-proof rule for what amounts to this reason. Brady v. Melody Homes Mfr., [1978] PROD. LIAB. REP. (CCH) ¶ 8303 (Ariz. App. 1978).

<sup>191.</sup> See Traynor, supra note 32, at 367.

<sup>192.</sup> Professor Epstein agrees with this assessment of how the *Barker* rule works. Epstein, *supra* note 97, at 651.

<sup>193.</sup> Melvin Belli is presently litigating a cigarette cancer case in San Francisco, to the dismay of columnist George Will. Will, *Danger: A Smoky Assault on an Industry*, L.A. Times, Sept. 29, 1978, § 2, at 7, col. 4.

<sup>194.</sup> Does it matter whether this braking distance is above or below the average for other cars? See note 187 and accompanying text supra.

causes injury," a burden which the concept seems ill-equipped to handle. 195 Is it or isn't it correct that the design of the car's engine, brakes, or windshield proximately causes the victim's injuries? People fall off ladders all the time, and the fact that ladders are both high and in some general way unstable enables these falls to occur. Does it or doesn't it follow that in every case of a person's falling off a ladder, the ladder's design proximately causes the fall? Also, when the design of a product is satisfactory as far as it goes but is lacking a possibly useful safety device, in what sense does the design itself proximately cause injury? 196

While the *Barker* opinion steers clear of the word "presumption," both the court's articulation of its rule and the court's reference to section 605 of the Evidence Code<sup>197</sup> verify that the rule does amount to a presumption. That is, proof that the product's design proximately caused the victim's injury creates a rebuttable presumption that the design is defective in the risk-benefit sense. So characterized, the *Barker* rule sounds a bit like res ipsa loquitur—a rule which, thanks to *Escola*, can be invoked in most manufacturing defect cases argued under a negligence theory. In such a case, res ipsa is understandable enough; if a properly handled cola bottle explodes, it is reasonable to assume some negligence on the bottler's part. By contrast, the *Barker* rule lacks this reasonable, common sense quality.<sup>198</sup>

To be sure, *Barker* allows the manufacturer to rebut the presumption of defect. <sup>199</sup> A further *Barker*-related confusion concerns how this

- 2. The loader lacked seat belts or a roll bar to protect the operator in the event of a rollover.
- 3. The loader's transmission lacked a "park" position. (Had the loader been in "park," it would have been more stable.)
- 4. The loader's "leveling" mechanism lacked an automatic lock. (The mechanism, for whatever reason, was not "on" at the time of the accident.)
- 5. The leveling mechanism was so located as to make it vulnerable to inadvertent bumpings turning it "off."
  - 6. The loader's wheel base was too narrow and hence unstable.
- 20 Cal. 3d at 420-21, 573 P.2d at 447-48, 143 Cal. Rptr. at 229-30.

<sup>195.</sup> The Oregon Supreme Court reads *Barker* as holding that the plaintiff can go to the jury in a design case so long as he can show that the "product caused the injury." Wilson v. Piper Aircraft Corp., 282 Or. 411, 579 P.2d 1287 (1978). This seems to misstate the *Barker* rule—but that rule is elusive enough to encourage misstatement.

<sup>196.</sup> In Barker itself, four of the plaintiff's six design defect claims related to design omissions. These six claims are listed below, the omission claims first.

<sup>1.</sup> The high-lift loader was without "outriggers"—mechanical arms extending away from the machine—which would have provided the loader with greater stability.

<sup>197.</sup> CAL. EVID. CODE § 605 (West 1966). See 20 Cal. 3d at 432, 573 P.2d at 453, 143 Cal. Rptr. at 237.

<sup>198.</sup> It will therefore bedevil the lower courts. In Garcia v. Joseph Vince Co., 84 Cal. App. 3d 868, 148 Cal. Rptr. 843 (2d Dist. 1978), a too-sharp-edged sabre (manufacturer unknown) wielded by one fencer pierced the mask of another fencer, causing injury. The latter sued the manufacturer of the mask. The court of appeal's opinion—affirming a nonsuit—makes clear that the court has little idea how the *Barker* rule works.

<sup>199.</sup> Under Barker, even when the manufacturer effects a rebuttal, the burden of persuasion

rebuttal process works. In the knife case, for example, perhaps the knife manufacturers can easily show, relying on little more than the jury's pooled experience, that a knife needs a sharp blade if it is to function as a knife. But how can one preclude the possibility of some cagelike safety device for the knife that would minimize this otherwise inevitable risk? If an auto accident ignites a gas tank, it is apparently true that the location of the gas tank is a design feature of the car that has proximately caused the injury.<sup>200</sup> To rebut the *Barker* presumption of defect, must the car manufacturer rule out, with trade-off evidence, every other possible gas tank location?<sup>201</sup> Assuming in *Barker* itself that the circumstances of the accident succeed in shifting the burden of proof, how does the manufacturer discharge this burden? Must it anticipate (and refute) all six of the defect allegations that *Barker*'s counsel—unaware of the eventual *Barker* rule—presented at the original trial?<sup>202</sup>

The heart of the problem is this: one simply cannot talk meaning-fully about a risk-benefit defect in a product design until and unless one has identified some design alternative (including any design omission) that can serve as the basis for a risk-benefit analysis. If the *Barker* rule is read literally, however, it fails to require the plaintiff even to point to an alternative of this sort. Within the burden-of-proof jurisprudence, one respected canon is that the burden should be placed on the party who has control of or access to the relevant information;<sup>203</sup> this is the canon upon which *Barker* properly relies. But another respectable canon is that the burden of proof should not be placed so as to require a party to prove a negative.<sup>204</sup> This canon the *Barker* rule violates.<sup>205</sup>

remains with the manufacturer. 20 Cal. 2d at 432-33, 573 P.2d at 453, 143 Cal. Rptr. at 237. I doubt that this makes much of a difference in practical terms. A perceived 50-50 "tie" in the evidence is probably rare; and the plaintiff's lawyer who argues to the jury that his client should win in the event of such a tie would be unstrategically confessing the weakness in his case. See generally Comment, The California Evidence Code: Presumptions, 53 Calif. L. Rev. 1439, 1455-57 (1965).

<sup>200.</sup> See Self v. General Motors Corp., 42 Cal. App. 3d 1, 116 Cal. Rptr. 575 (2d Dist. 1974).

<sup>201.</sup> In general, evidence rebutting a § 605 presumption does not warrant a directed verdict for defendant unless it is so effective that it "compels belief." See Comment, supra note 199, at 1453. With respect to the Barker rule as stated, the directed verdict problem can raise a difficult question of "belief in what?"

<sup>202.</sup> See note 196 supra.

<sup>203.</sup> See Cleary, Presuming and Pleading: An Essay on Juristic Immaturity, 12 STAN. L. Rev. 5, 12 (1959).

<sup>204.</sup> See id. at 11. See also J. MAGUIRE, EVIDENCE: COMMON SENSE AND COMMON LAW 179 (1947).

<sup>205.</sup> In particular cases this violation may be harmless enough. In Korli v. Ford Motor Co., 84 Cal. App. 3d 895, 149 Cal. Rptr. 98 (2d Dist. 1978), the rear door of a 1965 Lincoln Continental was "rear-hinged" rather than "front-hinged." Rear-hinging produces a certain risk (of the door flying open if opened slightly while the car is inoving rapidly), but it also provides a certain benefit

Yet while the *Barker* burden-of-proof rule thus seems rife with difficulties, in practice the rule may not turn out to be all that important. The analysis above has impliedly assumed that plaintiffs will seek to exercise their Barker rights. However, my discussions with plaintiffs' attorneys make clear that in a typical case, a plaintiff who has satisfactory facts will choose to ignore this aspect of Barker. Barker allows the plaintiff, having shown that the product's design caused his injury, to close his case and wait for the manufacturer to explain to the jury why that design is sensible after all; once the manufacturer has presented its pro-product evidence, the plaintiff can then bring forward his own evidence in an effort to counter the defense's presentation. Yet it would entail very poor trial strategy for a plaintiff to rely on this sequence, since it puts him on the defensive by allowing the manufacturer to get to the jury first with its explanation of the product's design, and why that design is a good one. If his facts are good, the plaintiff has a clear tactical interest in getting the jury to consider his version of the design issue first, before the manufacturer has a chance to tell its side of the story. Wishing to convey to the jury the strength of his case, the plaintiff will want to come out "with all guns blazing," presenting his strongest evidence as to the impropriety of the product's design.

Therefore, as sweeping as the *Barker* burden-of-proof rule may be, it may create a right which most products plaintiffs will decline to exercise. Indeed, the pertinent question turns out to be this: in what limited class of products cases will the plaintiff choose to avail himself of the *Barker* rule? Here attention can return to the victim with a meritorious, but small, damage claim. Will the *Barker* rule make it feasible for this victim to find a competent lawyer able, by relying on that rule, to small-budget his case? Perhaps this would be the result, but it is doubtful. If the facts on hability are favorable enough, the lawyer, needing to win the case in order to secure his contingent fee, retains an incentive to make his strongest pitch to the jury; and that pitch may well involve the waiver of his *Barker* rights.<sup>206</sup>

<sup>(</sup>easy ingress and egress). Given what we all know about automobiles, there is a single clear-cut design alternative—front-hinging—with which the car's rear-hinged design can be compared.

The Korli court, which had refused to allow the plaintiff to get to the jury prior to Barker, 69 Cal. App. 3d 115, 137 Cal. Rptr. 828 (2d Dist. 1978) (official reports advance sheets only) (decertified opinion), persisted in this refusal after Barker, on the plainly anti-Barker grounds that products liability does not allow "lay juries to simply make value judgments as to the relative desirability of one design over another." 84 Cal. App. 3d at 906, 149 Cal. Rptr. at 105. The court also reasoned that only the victim's opening of the car door, and not the door's rear-hinging, was the proximate cause of the accident. This reasoning highlights the uncertainties in Barker's proximate cause concept.

<sup>206.</sup> Likewise, even under *Barker* the victim still must retain a lawyer who is sophisticated about products, given the victim's eventual need to cope with the manufacturer's rebuttal "trade-off" evidence.

Rather, the class of cases in which the *Barker* burden-of-proof rule seems to offer the clearest practical help are those in which the victim has suffered severe injuries, but in which the facts suggesting any design defect are very doubtful or weak. Given the frailty of the liability claim, without *Barker* the plaintiff might well succumb to summary judgment or a directed verdict. Under *Barker*, however, once the burden of proof has been shifted by the plaintiff's limited showing, only in a few cases will the manufacturer be able to offer the kind of unmistakable evidence that overcomes the defect presumption as a matter of law.<sup>207</sup> In all remaining cases, the issue of defect will therefore go to the jury, thin as the hability facts may be.

What are the implications of consigning such cases to the jury? Given the possibility of jury sympathy with a severely injured victim, the jury may sometimes cut corners on the evidence in order to grant the victim a recovery. These cases are, by hypothesis, wrongly decided. But it is liardly clear that such results would predominate. As noted, products defendants win at least half of all jury trials,<sup>208</sup> and juries sometimes resist the strict hability doctrine, not understanding its logic or doubting its fairness.<sup>209</sup> The *Barker* burden-of-proof rule is poor in its natural logic, and it dramatizes the strict liability issue in a rather queer manner. As the rule is fed to the jury, therefore, verdicts can be expected that are confused and erratic.

In sum, the *Barker* burden-of-proof rule either covers everything or its coverage is anyone's guess. Once *Barker* has shifted the burden of proof, what happens next is something of a mystery. And counsel's selective assertion of the *Barker* rule is likely to lead to unsatisfactory results. Given these assessments, the *Barker* rule seems wrong.<sup>210</sup> One is therefore led to consider a return to what may have been the law professors' pre-*Barker* understanding: that the plaintiff must carry the burden of showing a risk-beneficial design alternative.<sup>211</sup> But as it happens, this understanding does not accurately reflect what lawyers now tell me was sometimes happening at the trial level between *Cronin* and *Barker*. The trial process frequently seems to have worked as follows: the plaintiff introduced evidence establishing the existence of a feasible<sup>212</sup> design alternative that would have prevented his injury. At this

<sup>207.</sup> See note 201 supra.

<sup>208.</sup> See text at note 99 supra.

<sup>209.</sup> See text at note 100 supra.

<sup>210.</sup> It has already been rejected as "not . . . persuasive" by the Oregon Supreme Court. Wilson v. Piper Aircraft Corp., 282 Or. 411, 579 P.2d 1287 (1978) (denial of petition for rehearing).

<sup>211.</sup> This is the apparent holding of Wilson v. Piper Aircraft Corp., 282 Or. 61, 577 P.2d 1322 (1978).

<sup>212. &</sup>quot;Feasible" here means nothing more than "it can be done."

point, whatever the law said, some juries expected the manufacturer to introduce whatever evidence it possessed showing that the plaintiff's design proposal would not have been a good idea—that it would have been too costly, would have unduly interfered with the product's performance, would have created additional safety hazards, or whatever. The jury's expectation in this regard obviously grew out of its intuitive perception of the sound access-to-information burden-of-proof criterion. Yet since the resulting practice also spared the manufacturer the obligation of proving a negative, it equally complied with the other valid criterion. Also, it avoided any overburdening of the proximate cause concept. So long as judges are willing to enter directed verdicts when the manufacturer's trade-off evidence is strong enough, this post-Cronin, pre-Barker practice seems an intelligent, balanced solution to the burden-of-proof problem,<sup>213</sup> one which reconciles the criteria that Barker places in conflict. Given the intelligence of this solution, the Barker rule should be either modified or "interpreted" 214 to provide for its legalization. That is, once the plaintiff identifies a feasible design alternative which would have prevented his injury, the responsibility should rest on the manufacturer to show why that alternative would not have been risk-beneficial.

## 2. The Contract-Based Consumer Expectations Prong

Barker is right on one syllogistic point. Since Cronin merely held that the failure to satisfy consumer expectations is not a necessary condition for liability, the Cronin holding is not logically inconsistent with Barker's indication that the failure to satisfy these expectations is a sufficient liability criterion. Its limited holding apart, however, the Cronin opinion seemed almost to disdain the consumer expectations idea. The revival of consumer expectations in Barker is therefore something of a surprise. And it could be seen as a welcome surprise, since the consumer expectations standard attempts both to take advantage of strict hiability's legitimate "warranty heritage" and to take account of limited consumer knowledge of particular product hazards. 217

<sup>213.</sup> This assessment is in line with the Fifth Circuit's reasoning in Mitchell v. Fruehauf Corp., 568 F.2d 1139, 1143-45 (5th Cir. 1978) (applying Texas law).

<sup>214.</sup> Defense lawyers are presently developing the argument that in order to show that a "product design has proximately caused" the injury, the plaintiff must prove a design alternative which, had it been used, would have prevented the plaintiff's injury. I regard this an improbable definition of the *Barker* coucept, but insofar as it leads to the right result I am in sympathy with the lawyers' efforts.

<sup>215.</sup> See Cronin v. J.B.E. Olson Corp., 8 Cal. 3d 121, 132-33, 501 P.2d 1153, 1161-62, 104 Cal. Rptr. 433, 441-42 (1972).

<sup>216. 20</sup> Cal. 3d at 429-30, 573 P.2d at 454, 143 Cal. Rptr. at 236.

<sup>217.</sup> See notes 118-24 and accompanying text supra.

Examined more closely, the prong is effective in bolstering the support for already recognized products liability principles. But as an independent basis for products liability verdicts, its value is burdened by doubts. These doubts can be explained by considering first, the definition of "consumer," and second, the nature of the consumer's "ordinary expectations."

### a. Who Is a "Consumer"?

Under the law of warranty—the wisdom of which the prong is intended to carry forward—the "consumer" is, of course, the retail purchaser of the product. Likewise, under the Restatement the "consumer" whose "expectations" are legally relevant is the product purchaser, as section 402A's explicit language makes clear. Yet, in California and in other jurisdictions, the strict products liability rule has been interpreted as allowing suit by almost any victim of a product-related accident, including employees who are injured by products purchased by their employers, passengers and pedestrians injured in accidents involving automobiles driven by car owners, and students injured by products purchased by their schools.

How does *Barker*'s consumer expectations prong work in cases brought by nonpurchasers like employees, passengers, students, and bystanders? Taking that prong in conjunction with the case's facts, the *Barker* opinion can be understood as indicating that the injured em-

A jury considers the consumer expectations question subsequent to the accident in which the product has performed in a certain way. Perhaps a jury will find "consumer" expectations denicd if it—the jury—feels that a properly designed product would have performed better. So utilized, the consumer expectations prong amounts to the risk-benefit prong looked at from a res ipsa loquitur point of view. Res ipsa can claim a significant role in the proof of products cases. See notes 185-86 and accompanying text supra. But to suggest that a res ipsa analysis is appropriate in every product design case would be plainly wrong. And even if res ipsa "applies" on the risk-benefit issue, the manufacturer is entitled to rebut with trade-off evidence. Yet under Barker's consumer expectations prong, the manufacturer has no such opportunity—a finding that consumer expectations have been denied is conclusive of liability. Given the finality under Barker of a negative consumer expectation finding, and given that Barker expressly advances the consumer expectations standard as an alternative to the risk-benefit standard, it is clear that Barker's consumer expectations test cannot be regarded as inerely a res ipsa approach to risk-benefit.

<sup>218.</sup> See W. WARREN, W. HOGAN, & R. JORDAN, supra note 85, at 3, 76-79. Thus, California implied warranty law imposes a requirement of horizontal privity (with narrow exceptions, one of which covers members of the buyer's family). Hauter v. Zogarts, 14 Cal. 3d 104, 114 n.8, 534 P.2d 377, 383 n.8, 120 Cal. Rptr. 681, 687 n.8 (1951). The horizontal privity issue concerns who can sue in addition to the product's actual buyer. See Morrow v. New Moon Homes, Inc., 548 P.2d 279, 287 (Alas. 1976).

<sup>219.</sup> RESTATEMENT (SECOND) OF TORTS § 402A, Comment i (1965).

<sup>220.</sup> See Barker itself (although there the product was leased to the employer rather than sold).

<sup>221.</sup> See Elmore v. American Motors Corp., 70 Cal. 2d 578, 451 P.2d 84, 75 Cal. Rptr. 652 (1969).

<sup>222.</sup> See Dudley Sports Co. v. Schmitt, 151 Ind. 217, 279 N.E.2d 266 (1972).

ployee is a "consumer" whose expectations matter. Likewise, since in the course of discussing consumer expectations the *Barker* opinion drops an approving reference to the court's earlier "bystander" ruling in *Elmore v. American Motors Corp.*,<sup>223</sup> the opinion permits the inference that even the bystander—and a fortiori the passenger and the student—are legally relevant "consumers" as well.

If this is Barker's intended meaning, Barker seems mistaken. Strict liability's tort dimension categorically justifies the lawsuits against manufacturers by these various product-accident victims, and in their suits these victims should be free to rely on the tort-oriented risk-benefit liability standard. But Barker fails to explain why the law should attach decisive significance<sup>224</sup> to these persons' pre-accident product expectations. The whole purpose of warranty's protection of consumer expectations is to make sure that the product which the purchaser acquires is of the quality he reasonably assumes it to be:<sup>225</sup> the purchaser should get the full benefit of an "honest" sales transaction. 226 When the consumer-expectations prong is extended beyond purchasers to employees, passengers, students, and bystanders, it exceeds or abandons this basic rationale. Assume that an employer buys a factory machine knowing that it is lacking in a possibly effective but expensive safety device; that a person buying an automobile chooses one with a sharp hood ornament potentially dangerous to pedestrians;<sup>227</sup> or that a high school buys unpadded football helmets because its football coach likes the solid "whack" that unpadded helmets provide upon contact.<sup>228</sup> Persons victimized by these products should doubtless be allowed to proceed against the manufacturer under the tort-based riskbenefit standard.<sup>229</sup> But to allow them to sue the manufacturer on

<sup>223. 70</sup> Cal. 2d 578, 451 P.2d 84, 75 Cal. Rptr. 652 (1969).

<sup>224.</sup> See note 217 supra.

<sup>225.</sup> See W. WARREN, W. HOGAN, & R. JORDAN, supra note 85, at 26.

<sup>226.</sup> See Professor Twerski's discussion of an "honest product." Twerski, From Defect to Cause to Comparative Fault—Rethinking Some Product Liability Concepts, 60 MARQ. L. REV. 297, 314 (1977). The Twerski article, not cited by Barker, anticipates Barker's two-prong holding.

<sup>227.</sup> See Knippen v. Ford Motor Co., 546 F.2d 993 (D.C. Cir. 1976).

<sup>228.</sup> See Underwood, An Unfolding Tragedy, Sports Illustrated, Aug. 14, 1978, at 69, 73, 78, 80: "Coaches want to hear noise. They love noise. Equipment manufacturers know that coaches, not physicians, buy helmets."

<sup>229.</sup> For that matter, the pedestrian and the student have possible negligence claims against the auto purchaser and the school for their choice of products. See, e.g., Gerrity v. Beatty, 7 Ill. 2d 47, 373 N.E.2d 1323 (1978). And the employee injured by the product selected by the employer is entitled to a workers' compensation recovery from the employer. To state the matter in general terms, a contract between X and Y can impose significant costs or risks upon others. When this happens, the law needs to consider imposing hability on the contracting parties.

As for the manufacturer's liability, the interesting question is whether its willingness to provide its purchasers with some measure of choice should have any extenuating effect upon the third party's claim of risk-benefit defect. Is the provision of choice itself a species of "benefit"?

grounds that their own expectations have been denied seems without justification.

Moreover, since consumer expectations typically develop around the sales transaction, when the victim is other than the product purchaser the process of identifying the victim's product expectations becomes difficult, to say the least. An employee ordered by his employer to work with a particular product has little occasion to form expectations about that product; and a person accepting a ride in another's car ordinarily gives that car no thought. When an automobile injures a pedestrian or the occupant of another vehicle, any inquiry about the victim's expectations vis-à-vis that automobile is meaningless.

It is possible, however, that the Barker opinion does not intend these various applications of its consumer expectations prong; the Barker "consumer" may be no one other than the product purchaser.<sup>230</sup> Significantly, however, even if this is correct, it does not necessarily follow that the prong has no pertinence to the claims of nonpurchaser product victims. Every injury-inflicting product was originally purchased by someone, and that purchaser may have intended, at least implicitly, to provide some safety protection to the victim—or, more precisely, to minimize the accident risk which the product projects upon that victim. If so, the intended third party beneficiary doctrine can be invoked to give the victim the legal benefit of the purchaser's expectations. Reasoning of this sort is not at all disingenuous;<sup>231</sup> the third party beneficiary doctrine rule is an integral part of modern contract law.<sup>232</sup> In pursuit of that reasoning, it can be assumed that car buyers possess a concern for the safety of family and acquaintances who at their invitation or with their permission drive the car or accept a ride in it. The product victim in Barker was an employee. As a general matter, employers buying factory machinery assumedly prefer to minimize the likelihood of employee injuries, at least for the reason that those injuries impose substantial direct (workers' compensation) and indirect<sup>233</sup> monetary burdens upon the employer.

<sup>230.</sup> In a different context, the opinion refers disjunctively to "consumers, users, or bystanders." 20 Cal. 3d at 434, 573 P.2d at 457, 143 Cal. Rptr. at 239.

<sup>231.</sup> Indeed, it was relied on by Justice Cardozo in justifying liability in *MacPherson*. MacPherson v. Buick Motor Co., 217 N.Y. 382, 393, 111 N.E. 1050, 1054 (1916).

<sup>232.</sup> In the *Barker* context, since the purchaser's safety expectations are themselves typically implicit, there is no overwhelming harm in the concession that the intention to benefit is implicit also. However, this doubling-up of the implicitness in the purchaser's expectations is certainly troublesome, and reduces one's ability to muster enthusiasm for an expectations analysis.

<sup>233.</sup> These indirect costs—including the disruption of the assembly line and the cost of machine repair—generally exceed the costs of workers' compensation. See NATIONAL COMMISSION ON STATE WORKMEN'S COMPENSATION LAWS, COMPENDIUM ON WORKMEN'S COMPENSATION 6 (1973). Because the employer's intention, though explainable in employer-cost terms, is essentially to prevent employee injuries, it is proper to regard the employee as an intended benefi-

While some form of third party beneficiary reasoning thus seems in order, that reasoning contains both an important special feature and important limitations. The special feature is that in the third party's lawsuit, the person whose expectations are to be honored is not the third party plaintiff-victim but rather the product purchaser; this feature provides a basic guide for the resulting expectations inquiry.<sup>234</sup> The relevant limitations are present at both the particular and the general level. As earlier illustrations have made clear, 235 the facts of a particular case can easily negate the assumptions that would otherwise support an intended beneficiary claim. And at some general point the entire beneficiary reasoning attenuates. It is doubtful, for example, that product purchasers typically intend to confer meaningful safety protection upon mere bystanders.<sup>236</sup> Since the bystander's right to sue is the strongest proof of product liability's pure tort element,237 it is hardly surprising that Barker's contract-related prong encounters difficulties in reaching the bystander.

### b. What Are "Ordinary Expectations"?

When the victim is the product purchaser or that person's intended beneficiary, the warranty foundation of strict liability gives good reason for attending to the purchaser's product expectations. But the problem remains of ascertaining, in any satisfying way, what those expectations are.

Expectations can be fostered by communications about the product from the manufacturer to the product purchaser. Assume the manufacturer has issued statements or advertisements praising the product. If those statements include claims that meet minimum standards of

ciary. Given both the economic relationship between employer and employee and the former's legal liability for the latter's injuries, the employee can almost be regarded as a creditor beneficiary.

<sup>234.</sup> This is in a way helpful news for the consumer expectations test, since an institutional purchaser like an employer or school may have contemplated its purchase in a way that facilitates the identification of safety expectations.

<sup>235.</sup> See notes 227-28 and accompanying text supra.

<sup>236.</sup> See Vetri, Products Liability: The Developing Framework for Analysis, 54 Or. L. Rev. 293, 297 (1975). There is an obvious and interesting question here as to the incidence of purchaser altruism.

<sup>237.</sup> There can be questions about the relationship between *Barker's* "ordinary consumer" and the product's actual consumer/purchaser in the particular case. What if the particular consumer has a higher expectation for the product's safety (induced, perhaps, by the comments of an acquaintance) than the "ordinary" consumer has? It seems clear that the *Barker* rule would not take this expectation into account. Conversely, what if the specific consumer, given his actual knowledge at the time of sale, has lower expectations for the product than those of ordinary consumers? If the purchaser's lower expectations result from information conveyed to him by the product manufacturer or seller, those expectations (rather than general consumer expectations) should be deemed controlling. But if his reduced expectations derive from his own investigatory efforts, the question is much more difficult.

specificity and materiality, and if the product's failure to comply with these claims results in an injury, the victim has no need to rely on anything in *Barker*; the Restatement doctrine of false product representation<sup>238</sup> and the U.C.C. doctrine of express warranty<sup>239</sup> can be called upon to assure a recovery.<sup>240</sup> A consumer expectations analysis is undeniably helpful in explaining the rationale for those doctrines; yet the doctrines themselves do not justify the *Barker* prong, given their clear recognition in pre-*Barker* law and the advantage of maintaining their doctrinal independence. Now, what if the manufacturer's statements commending its product are either too vague or too trivial to qualify as false representations or express warranties? Insofar as the Restatement and the U.C.C. have good reasons for deliberately declining to take these statements into account, it is very difficult to see how or why they should be ruled relevant to a *Barker* consumer expectations claim.<sup>241</sup>

So much for "affirmative" communications. What about "negative" communications in the form of warnings about the product's dangers? As *Barker* recognizes, when a product's defect is "patent" or obvious, its obviousness usually undermines any claim that the defect contravenes the purchaser's product expectations. Similarly, receipt of a warning lowers the purchaser's reasonable expectations in a way that prevents him from later arguing that his expectations were defeated by the warned-of product hazard.<sup>242</sup>

<sup>238.</sup> RESTATEMENT (SECOND) OF TORTS § 402B (1965).

<sup>239.</sup> CAL. COM. CODE § 2313 (West 1964).

<sup>240.</sup> See Hauter v. Zogarts, 14 Cal. 3d 104, 534 P.2d 377, 120 Cal. Rptr. 681 (1975).

<sup>241.</sup> To this extent I am unable to agree with the thesis expounded by Professor Shapo in his marvelously rich monograph, Shapo, A Representational Theory of Consumer Protection: Doctrine, Function, and Legal Liability for Product Disappointment, 60 VA. L. Rev. 1109 (1974). The Shapo thesis is that a manufacturer's portrayal of its product-largely through advertising-should be the "initial" as well as the "principal" factor considered in determining the extent of the manufacturer's liability. Id. at II15. The thesis works well if the "portrayal" is concrete enough to entail a U.C.C. express warranty or a Restatement product representation. Absent this concreteness, the thesis does not easily test out. Consider, for example, the advertisements for Datsun automobiles, advertisements that have always praised the car for both economy and quality, but with varying emphases. For several years, this advertising stressed economy through the slogan, "Datsun Saves." After a well-publicized change of advertising agencies, in 1977-78 Datsun's message became "We Are Driven," suggesting quality and performance. With inventories swelling in dealers' lots in fall 1978, its advertising shifted to "We Are Dealing," pointing to temporary low prices. To my mind, these changes in advertising themes, conspicuous though they are, do not justify a legal rule that measures Datsun's personal injury liability to its 1976 purchasers by standards less demanding than those applicable to its 1977-78 purchasers. Nor should Datsun's hability differ in any material respect from Toyota's ("If You Can Find a Better-Built Small Car, Buy It").

<sup>242.</sup> The manufacturer's opportunity to control expectations by issuing warnings further verifies that it would be wrong to classify nonpurchasers as "consumers," for purposes of the consumer expectations prong. What if, after *Barker*, a product purchaser, having been given an entirely adequate warning by the manufacturer, turns the product over to another person without conveying the warning to that person (or, while using the product himself, injures a bystander without warning the bystander of the product's danger)? Under *Barker* as written, it seems that

Of course, given the received "defect" typology, 243 warnings of this sort are hardly at the option of the manufacturer. If a product contains a hazard that is sufficiently substantial and unusual, the law renders the manufacturer liable if it fails to provide the purchaser with a warning of the liazard so that the purchaser may make an "informed choice" as to whether to buy the product in the first place. Any warnings given by the manufacturer under the threat of liability can correct what might otherwise be the consumer's misimpressions. Thus the warning requirement in products liability law, whether it is violated or complied with, deals directly with most of the cases in which *Barker*'s consumer expectations prong has a possible application. 245

Because it embodies a direct response to the problem of limited purchaser knowledge of product hazards that economic theory is required to recognize, the warning obligation which products liability imposes is in general admirable. But while it is a direct response, it may not be a complete response. One is hesitant to conclude that recognizing the warning obligation causes the consumer expectations issue to disappear. For one thing, since a warning is required only for products that pose hazards which purchasers might not expect, even that requirement necessitates some identification of purchasers' expectations.<sup>246</sup> Moreover, where the victim is complaining about the failure

the unwarned victim would be entitled to sue under a consumer-expectations theory, since the warning did not reach him and hence did not reduce his expectations.

It can be argued that a manufacturer should make an effort to warn even nonpurchasers of the hazards that its product may cause those persons to encounter. See W. Prosser, supra note 162, at 647. But the risk-benefit standard is the right way to define the scope of the manufacturer's obligation. Barker cuts against this by suggesting that an unwarned third party can utilize the consumer expectation prong even when the manufacturer's efforts to warn nonpurchasers, while unsuccessful in the individual case, were entirely reasonable. What can the manufacturer possibly do to warn product bystanders?

- 243. See note 6 and accompanying text supra.
- 244. See Borel v. Fibreboard Paper Prods. Corp., 493 F.2d 1076, 1088-89 (5th Cir. 1973) (applying Texas law); Davis v. Wyeth Labs., 399 F.2d 121, 124 (9th Cir. 1968) (applying Idaho law); RESTATEMENT (SECOND) OF TORTS §§ 388, 399, 402A, Comment k (1965). See also A. Schwartz, supra note 96, at 10, 18.
- 245. Even if a warning resolves the problem of consumer expectations, the product may still fail the risk-benefit test. Liability could therefore follow, absent some defense of assumption of risk. The status in products liability of the defense of "reasonable" assumption of risk—assumption of risk when it is not a mere "variant" of contributory negligence—is presently quite uncertain. See notes 145-47 and accompanying text supra.
- 246. A warning is often an effective means for reducing a product's risk. The manufacturer's obligation to warn can therefore be derived from *Barker*'s risk-benefit prong as well as tied in with its consumer expectations prong. For risk-benefit purposes a warning should perhaps be given so long as any significant minority of the product's consumers may be unaware of the product's hazard. The consumer expectations relevant to the obligation to warn are therefore not the same as those expectations the demial of which produces liability per se.

I should add that while the idea behind the warning obligation is excellent, in practice the requirement can become perplexing. It is never sufficiently clear what hazards must be warned of, what language the warning should use, and how large its letters should be.

to provide merely informational warnings (as compared to instructions for use), the victim's claim can raise a vexing problem of actual causation.<sup>247</sup> Even if the warning had been given, would the victim have bought the product anyway? But there is an even more serious problem in the informational warning context. Products law requires that the manufacturer's instructions as to safe product use be written in a way that is both specific in substance and clear in style.<sup>248</sup> Since the purchaser can read the instructions in the quiet of his own home, the requirements of explicitness and clarity are adequate to assure that the contents of the instructions are in fact communicated to the consumer. But if an informational warning is to achieve its objective, it must be appreciated by the consumer before he purchases the product. Given the circumstances of many retail sales (consider a hardware store on a Saturday morning), even if such a warning is inscribed on the product's package and is properly worded, there is no guarantee that the warning will actually be received by the consumer, let alone absorbed by him, before he reaches his decision to buy. "Effective" communication is what is needed, and this may often entail an oral delivery of the warning to the would-be purchaser, presumably by the product retailer. I leave open here the question whether the law should actually impose liability on the manufacturer for its failure to arrange for the effective transmission of informational warnings.<sup>249</sup> What is clear is that only an effective communication should be allowed to alter what would otherwise be regarded as the consumer's expectations.

In several ways the question of ordinary consumer expectations thus presents itself, and we need to know what those expectations include. Unfortunately, identifying their substance, or even developing a methodology for identifying their substance, proves to be a frustrating task. There is a paucity of empirical studies providing any clear answers as to what ordinary consumers expect of the products they buy. The warranty literature suggests one answer: consumers expect products to be free of defects. But if one starts with this assessment, the *Barker* consumer expectations standard becomes infinitely in-

<sup>247.</sup> Compare Haft v. Lone Palm Hotel, 3 Cal. 3d 756, 478 P.2d 465, 91 Cal. Rptr. 745 (1970)
with Cobbs v. Grant, 8 Cal. 3d 229, 245-46, 502 P.2d 1, 11-12, 104 Cal. Rptr. 505, 515-16 (1972).
248. See Anderson v. Klix Chem. Co., 256 Or. 199, 472 P.2d 806 (1970).

<sup>249.</sup> Cf. Vandermark v. Ford Motor Co., 61 Cal. 2d 256, 391 P.2d 168, 37 Cal. Rptr. 896 (1964) (manufacturer strictly liable for retailer's failure to properly assemble final product).

<sup>250.</sup> Cf. Whitford, Strict Products Liability and the Automobile Industry: Much Ado About Nothing, 1968 Wis. L. Rev. 83, 148 (indicating that only one-third of new-car buyers even expect the manufacturer to compensate them for their out-of-pocket losses if a defect in the car causes injury; four-fifths expect compensation for the cost of car repairs).

<sup>251.</sup> See note 153 supra. This assessment would not necessarily apply, however, to the purchase of used products. See L. Frumer & M. Freidman, 2 Products Liability §§ 16A[4][b][iv], 19.03[5] (1978).

determinant: the product is defective if it defeats consumer expectations, and it defeats consumer expectations if it is defective. Also, if in this context "defect" means a manufacturing defect<sup>252</sup> or a design defect determined by risk-benefit balancing, then the assessment, while accurate enough as to consumers' implicit expectations, loses all independent force as a basis for hability; any verdict reached via the consumer expectations approach can be independently reached by applying the regular manufacturing defect rule or *Barker*'s risk-benefit design defect prong.

To an increasing extent, products cases—including *Barker* itself—involve sophisticated products with complicated designs. These products are available for a wide range of foreseeable uses, many of them "improper." If the question is what the ordinary consumer's "expectations" are for such a product's safety performance, the best answer probably is that while he may have no specific expectations for the product at all, he does generally trust that the product has been intelligently designed in light of foreseeable contingencies with the consumer's safety in mind.<sup>253</sup> But if this is the case, the "user-oriented" expectation standard collapses into the "manufacturer-oriented" risk-benefit standard. As one court has put it, "[t]he two standards are the same because a seller acting reasonably would be selling the same product which a reasonable consumer believes he is purchasing."<sup>254</sup>

The frailty of the consumer expectations formulation as an autonomous liability standard can be additionally clarified by considering the problems that arise in attempting to render it operational for litiga-

<sup>252.</sup> Here, the problem is that under Barker the consumer expectations standard is available only for design defects—manufacturing defects being covered by another standard. See notes 7-8 and accompanying text supra. Barker evidently requires the plaintiff to "declare" his defect type. The consumer expectations standard, therefore, offers surprisingly little help in what should be the simple case of the new car which is destroyed when a tire explodes 10 miles away from the new car dealer's showroom. A res ipsa-type argument should be available to make these cases easy. See notes 186-87 and accompanying text supra.

<sup>253.</sup> See Hagans v. Oliver Mach. Co., 576 F.2d 97, 100 (5th Cir. 1978) (applying Texas law); Henderson v. Ford Motor Co., 519 S.W.2d 87, 93 (Tex. 1974). See also Back v. Wickes Corp., 78 Mass. Adv. Sh. 1874, 378 N.E.2d 964, 970 (1978) (accepting Barker's risk-benefit analysis as test for implied warranty liability under the U.C.C.).

The evaluation in the text seems correct when an unsophisticated ordinary person purchases a complicated product. When the purchaser is itself a sophisticated entity like an employer or a school, the identification of more specific expectations may prove feasible. See note 234 supra.

<sup>254.</sup> Phillips v. Kimwood Mach. Co., 269 Or. 485, 493, 525 P.2d 1033, 1037 (1974). Having recognized that the two standards are virtually identical, the *Phillips* court indicated its preference for the manufacturer-oriented standard. In Brown v. Link Belt Corp., 565 F.2d 1107, 1111 (9th Cir. 1971) (applying Oregon law), the court found no error in the giving of a consumer-oriented standard, given its proximity to the proper standard. In Allen v. Rodgers Mach. Mfg. Co., 268 N.W.2d 830 (Iowa 1978), the Iowa Supreme Court, having noted that both the consumer expectations test and the manufacturer-oriented test end up in the same risk-benefit balancing, chose to remain with the consumer test.

tion. Assume the product victim merely demonstrates the existence of some hazard in the product's design. Is the victim entitled, without more, to have his case submitted to the jury, on the theory that the jurors themselves are ordinary consumers who can identify such consumers' expectations? If the circumstances of the accident are in any way complicated, this seems unsatisfactory. As the Oregon Supreme Court has stated in the context of a motor vehicle accident:

High speed collisions with large rocks are not so common... that the average person would know from personal experience what to expect under the circumstances.... The jury would therefore be unequipped, either by general background or by facts supplied in the record, to decide whether this wheel failed to perform as safely as an ordinary consumer would have expected.<sup>255</sup>

If, then, in a not-easy case the mere existence of some design danger does not alone supply a basis for the jury's consumer-expectations factfinding, what evidence can the victim present that is both admissible and entitled to substantial weight? The victim's own after-the-fact testimony that the product failed to meet his expectations? The testimony of some man-on-the-street, selected by the victim and designated by the victim as a typical consumer? Of course, under the risk-benefit standard the testimony of expert witnesses is quite appropriate, and there are many experts competent to testify on matters of risk-benefit product design. But one can hardly imagine what credentials a witness must possess before he can be certified as an expert on the issue of ordinary consumer expectations.<sup>256</sup>

In anything resembling a difficult case, therefore, the consumer expectations standard is unable to stand on its own, and raises the prospect of haphazard, impressionistic jury decisionmaking.<sup>257</sup> Especially since a finding of a denial of consumer expectations is dispositive of liability—no presentation of trade-off evidence can counter or rebut it—this prospect is disquieting. There may be a class of "easy" cases, however, in which the standard is in order. In *Hauter v. Zogarts*, <sup>258</sup> a mother bought, as a present for her son, a "Golfing Gizmo"—a device for unskilled golfers to use in improving their games. The Gizmo was so designed, however, that if the player hit underneath the golf ball, the ball was likely to double back and strike the player. Hitting at balls in such a way is exactly the kind of thing that inexperienced golfers—who comprise the Gizmo's intended market—are likely to do. Fred Hauter

<sup>255.</sup> Heaton v. Ford Motor Co., 248 Or. 467, 473, 435 P.2d 806, 809 (1967).

<sup>256.</sup> See id. at 478-79, 435 P.2d at 811 (O'Connell J., dissenting).

<sup>257.</sup> Its aversion to an "'overkill' of subjectivity" in jury decision:naking has led the Department of Commerce to eschew the consumer expectations approach in its Draft Uniform Products Liability Law. Uniform Law, *supra* note 175, at 3005.

<sup>258. 14</sup> Cal. 3d 104, 534 P.2d 377, 120 Cal. Rptr. 681 (1975).

suffered brain dainage when the golf ball struck him on the head. The supreme court granted him a recovery as a matter of law, relying in part on the U.C.C. theory of implied warranty: the product was obviously "not fit for the ordinary purposes for which such goods are used." <sup>259</sup>

The court's later *Barker* opinion, in explaining its consumer expectations prong, relies on Justice Traynor's *Greenman* observation that "implicit in [a product's] presence on the market . . . [is] a representation that it [will] safely do the jobs for which it was built." <sup>260</sup> In *Hauter*, the victim's use of the product was wholly reasonable and as intended by the manufacturer, and there were no external forces, either behavioral or environmental, that contributed to the accident. In cases which comply with these restrictive conditions, it seems meaningful to say, in line with *Greenman*, that what the consumer assumes<sup>261</sup> is that the product is flat-out "safe." <sup>262</sup>

Even here, however, a warning analysis cannot be avoided. If a warning of the product hazard is not given to the Gizmo's purchaser, that failure sustains liability standing alone. If, on the other hand, a warning has been effectively communicated, the consumer expectations argument is defeated. The warning analysis thus retains a certain ultimate priority. Still, in cases like Hauter the nature of the design hazard has an important impact. The relationship of that hazard to normal product use generates the warning obligation in the first place. Given that relationship, if a warning has not been issued the law should be more than willing to resolve any cause-in-fact ambiguity in favor of the plaintiff, since it is natural to assume that no rational purchaser, knowing of the hazard, would have purchased the product.263 And if a warning has been formally given, the same assumption can strengthen a claim that the communication of the warning was not sufficiently effective. The factfinder should be reluctant to believe that the purchaser of such a product was meaningfully informed.

<sup>259.</sup> CAL. COM. CODE § 2314(2)(c) (West 1964). For similar implied warranty reasoning, see McCabe v. L.K. Liggett Drug Co., 330 Mass. 177, 112 N.E.2d 254 (1953) (coffee maker designed so that it exploded when properly used).

<sup>260. 59</sup> Cal. 2d at 64, 377 P.2d at 901, 27 Cal. Rptr. at 701.

<sup>261.</sup> In *Hauter*, these are the expectations of the mother, with her son as the intended third party beneficiary.

<sup>262.</sup> See Brief for Amici Curiae (Siegfried Hesse & Peter Elkind), at 10-11, in Barker. As Hauter suggests, implied warranty is also available in such a case. But one can agree with Justice Traynor about the inaptness of implied warranty's "reasonable time" notice requirement in the personal injury setting. See text accompanying notes 148-49 supra.

<sup>263.</sup> See Twerski, Weinstein, Donaher, & Piehler, supra note 103, at 504-05.

#### IV

#### BOUNDARIES OF STRICT PRODUCTS LIABILITY

# A. "Hindsight" Evaluation of Risks and Benefits

The previous discussion of the relationship between negligence and strict defect hability in matters of product design left open what the strict-liability result should be in each of two cases. In Case A, the product contains a hazard which the manufacturer neither knows of nor could reasonably know of at the time of the product's design and sale. With knowledge, the manufacturer could easily have reduced or eliminated the hazard, either by modifying the product or by issuing instructions or a proper warning. In Case B, the product contains a hazard which, though fully known, is nevertheless unpreventable by the manufacturer at the time of the product's sale; the hazard subsequently becomes preventable when new safety technology is developed.

Case A raises the issue of "unknowable" dangers, which a recent federal study, having canvassed the case law nationwide, concludes are beyond the reach even of strict hability. Case B presents the issue of "state of the art" in strict hability—"state of the art" not in the weak sense of industry custom, the strong sense of the full range of design options technologically available at the time of the product's sale. These Cases can be placed in context by noting the kinds of products they are likely to involve. Case B has special relevance for "old" products—products sold many years ago but which are still in use and hence still capable of causing injuries. Case A has special relevance for pharmaceutical products. Here, the hazards unknowable

<sup>264.</sup> See text following note 178 supra.

<sup>265.</sup> See Final Report, supra note 6, at II-9. For California's contribution to this case law, see Christofferson v. Kaiser Found. Hosps., 15 Cal. App. 3d 75, 92 Cal. Rptr. 825 (1st Dist. 1971). 266. Compliance with custom clearly does not negate the possibility of defect. See Final Report, supra note 6, at VII-34 through 37.

<sup>267.</sup> Both Cases test the maxim that strict liability dispenses with the "scienter" requirement. See Keeton, supra note 39, at 38; Wade, supra note 39, at 834-35. Especially in Case B, that maxim coines into conflict with the standard strict liability instruction requiring that the defect exist in the product "when it left possession of the defendant." BAJI, CALIFORNIA JURY INSTRUCTIONS, CIVIL, 9.00.3, 9.00.5 (1977). For an endorsement of liability in Case B, see Phillips, supra note 73, at 120-21. The Department of Commerce's Draft Uniform Products Liability Law is explicitly hostile to a "hindsight" approach; it would deny liability all of the time in Case A and most of the time in Case B. Uniform Law, supra note 175, at 2998-99, 3005, 3006-07.

<sup>268.</sup> For an example of a preliminary Case A problem followed by an interesting Case B problem, see *The Devils in the Product Liability Laws*, Bus. Week, Feb. 12, 1979, at 72, 75: "Some years ago . . . Black & Decker Mfg. Co. realized that metal housings on power tools sold to consumers could present a shock hazard. The company 'changed to plastic as soon as the state of the art got to the point where plastics could take the abuse,' [according to the statement of a company official]."

<sup>269.</sup> The federal study's review of appellate products opinions determined that in 13% of the cases the product allegedly causing the injury was more than 20 years old. Final Report, supra

at the time of sale may not manifest themselves until many years later; or, unlike Case B products, their hazards can erupt quite promptly after the drug is brought to market.

What results does *Barker* suggest in these Cases? In its opinion, the court twice indicates that the jury's risk-benefit determination should be rendered on the basis of "hindsight," and the opinion makes clear that these determinations can be adverse to the manufacturer even if the manufacturer "took reasonable precautions in an attempt to design a safe product." These "hindsight" references can easily be interpreted as mandating liability in Cases A and B. Other passages in *Barker*, however, cast doubt on the propriety of this interpretation. Thus, the opinion states that the only product "misuses" for which a manufacturer can be held liable are those that are "reasonably foreseeable." And the opinion explicitly reserves for later decision the "state of the art" issue. In all, it seems prudent to regard Cases A and B as presenting open questions. For these questions, there are no easy answers.

At a doctrinal level, the basic issue is whether the products in A and B are "defective." Since the defect standard is to be administered by the jury, the law's definition of defect must be one that ordinary jurymen can respect. As a matter of ordinary language use, to call Product B defective seems very strange. But it is not at all difficult to appreciate the defect in Product A—it was there all along, even if unobserved. Of course, under products law "defect" is a proxy for "hability." Community notions of legal responsibility may well correlate with the community's understanding of the meaning of "defect." My sense is that those notions would incline towards liability in Case A as an acceptable, though strict, application of the basic idea that a manufacturer is responsible for the products it sells. In Case B, however, the community's sense of fairness would probably be offended by the strongly ex post facto character of a liability imposition, 275 given the

note 6, at VII-20. One Massachusetts company has recently been sued for two industrial presses built in 1895 and 1897. See Inflation in Product Liability, Bus. Week, May 31, 1976, at 60.

<sup>270. 20</sup> Cal. 3d at 431, 435, 573 P.2d at 454, 457, 143 Cal. Rptr. at 236, 239.

<sup>271.</sup> Id. at 434, 573 P.2d at 457, 143 Cal. Rptr. at 239.

<sup>272.</sup> The one time the *Barker* opinion formally states the risk-benefit test in a section heading, it includes no mention of hindsight. 20 Cal. 3d at 428, 573 P.2d at 452, 143 Cal. Rptr. at 234. And if, as the opinion indicates, the basic purpose of the risk-benefit test is to give recognition to "the complexity of, and trade-offs implicit in, the design process," 20 Cal. 3d at 432, 573 P.2d at 456, 143 Cal. Rptr. at 238, a "hindsight" approach would seem unwarranted.

<sup>273. 20</sup> Cal. 3d at 426-27, 573 P.2d at 452, 143 Cal. Rptr. at 234.

<sup>274.</sup> Id. at 422 n.4, 573 P.2d at 449 n.4, 143 Cal. Rptr. at 231 n.4.

<sup>275.</sup> A special ex post facto problem arises when application of strict liability is sought against a manufacturer for a product manufactured and sold prior to the jurisdiction's adoption of the strict liability rule. See Wansor v. George Hantscho Co., 570 F.2d 1202 (5th Cir. 1978).

manner in which any Case B claim is created by a technological advance occurring after the product's sale. Strict liability may be sufficiently fair in a way that ex post facto liability is not.

The two Cases can be further considered from the perspective of the accident prevention goal that Barker's risk-benefit prong incorporates. The stipulation that the product satisfied all risk-benefit standards at the time of its sale indicates that the accident prevention principle inplicit in negligence law does not call for liability. As noted, however, a genuine strict liability rule could claim the advantage of giving manufacturers strong incentives to accelerate the future of safety developments.<sup>276</sup> A "hindsight" approach would move beyond negligence in the direction of genuine strict hability by strengthening the manufacturer's incentives to engage in safety research prior to the product's sale. After that sale, however, a hindsight rule would contain a limiting condition sharply separating it from genuine strict liability. While in Cases A and B knowledge of the product's "risk" or of the "benefit"-related technology is lacking at the time of the product's sale, the knowledge must become available, or the new technology must be developed, prior to the time of the plaintiff's lawsuit. Otherwise, even with hindsight, no defect can be identified.

The requirement that the knowledge or technology come into being by the time of the lawsuit prevents a hindsight rule from affording, subsequent to the product's sale, the safety incentives associated with genuine strict liability. Worse, the requirement may even suggest that hindsight liability could negatively operate as a depressant upon the safety discovery process. Consider the product manufacturer thinking of expending funds for either testing existing products or conducting research into possible new safety devices. Under a "hindsight" rule, if the manufacturer's expenditure is successful the new hazard information it uncovers or the new safety technology it develops can be used as decisive evidence against it in later suits involving products sold at an earlier date. Insofar as the manufacturer is able to predict these liability consequences, it could be dissuaded from undertaking projects in product safety research.<sup>277</sup>

<sup>276.</sup> See note 64 and accompanying text supra.

<sup>277.</sup> In Ault v. International Harvester Co., 13 Cal. 3d 113, 528 P.2d 1148, 117 Cal. Rptr. 812 (1974), a divided supreme court permitted evidence to be admitted in a strict liability action of a manufacturer's post-accident change or "repair" of its product's design. There is no reason to believe that the revised design in Ault—malleable iron in place of aluminum in a motor vehicle gearbox—was in any way unavailable at the time of the vehicle's original design and sale. Ault does not therefore represent Case B.

Moreover, the Ault court did not really deny that allowing juries to consider the manufacturer's post-accident design improvements might inhibit manufacturers from implementing such improvements. Rather, the court's perception (probably accurate) was that such an inhibition is effectively overcome by the manufacturer's strong incentive to redesign its product promptly so as

This disincentive would adversely affect the real world, however, only insofar as it is manufacturers who by their affirmative efforts are responsible for society's product safety advances. Manufacturers are clearly in a good position to seek out information about previously unrecognized product hazards (the Case A problem),278 and activity by manufacturers in this regard is hardly uncommon. To a great extent, however, this information flows in to manufacturers without much of an effort on their part.<sup>279</sup> Also, in some instances the victim himself, by examining the product and reconstructing the accident, can figure out the product's hazard. Furthermore, the federal government has now launched an extensive program of product accident analysis, so as to acquire knowledge of dangers that existing products possess.<sup>280</sup> In Case B, the effective responsibility for researching new safety technology varies from one industrial setting to another. This responsibility often lies with the manufacturers themselves, either individually or at least as an industry. But frequently the research is undertaken by companies who serve (or who would like to serve) as the manufacturer's suppliers,<sup>281</sup> or by outside entities like governmental agencies or university research facilities. In both A and B, therefore, while hindsight liability is capable of deflecting proper safety incentives, this would probably happen only in a limited number of cases; given the background circumstances, my estimate is that the result would be less likely in A than in B.

Barker invokes hindsight as an aspect of the risk-benefit defect prong. One can ask how Cases A and B should be decided under Barker's other prong, concerning consumer expectations. Here the Cases diverge in analysis and possibly in results. In Case B, since the typical purchaser implicitly assumes no more than that the manufac-

to minimize its general liability exposure in the future. In the context of Cases A and B, it is difficult to identify any such offsetting incentives.

<sup>278.</sup> Negligence law, undoubtedly taking the manufacturer's good position into account, obliges manufacturers to test their products for hidden hazards. See Dalehite v. United States, 346 U.S. 15, 51-52 (1953) (Jackson, J., dissenting on other grounds); Borel v. Fibreboard Paper Prods. Corp., 493 F.2d 1076, 1089-90 (5th Cir. 1973) (applying Texas law); Noel, supra note 21, at 833-35.

<sup>279.</sup> Both the negligence rule of Hasson v. Ford Motor Co., 19 Cal. 3d 530, 564 P.2d 857, 138 Cal. Rptr. 705 (1977), and the recall provisions of the Federal Motor Vehicle Safety Program, 15 U.S.C. §§ 1411, 1412(b), 1414(a) (1976), seein to assume that imposing obligations on the manufacturers once knowledge is acquired of hazards in previously marketed products does not discourage the materialization of this knowledge.

<sup>280.</sup> See 15 U.S.C. § 2054(a) (1976), which sets up the Injury Information Clearinghouse.

<sup>281.</sup> Thus, in the power tool example described in note 268 supra, the burden of improving the durability of plastic obviously rested with plastics suppliers rather than with the manufactuers of power tools. I am told that there is keen competition between metals suppliers and plastics suppliers. For an indication that pharmaceutical houses are potential suppliers of bloodbanks, see Epstein, supra note 111, at 118.

turer has kept abreast with contemporary technology, it follows that the product does not defeat consumer expectations.<sup>282</sup> In Case A, by contrast, if the product hazard is unknown to the manufacturer, it is ahnost a fortiori unknown to product buyers. Given their lack of knowledge, the hazard in the Case A product could well be regarded as contrary to consumer expectations.

It is arguable, however, that a literal application of Barker's consumer expectations standard in Case A is mapt. While a consumer may not know of the particular product's hazard, as a result of living in the twentieth century he is probably aware of the phenomenon of products (especially drugs) containing unknowable hazards. If the concept of consumer expectations can be expanded to include this general awareness, the product may not frustrate these expectations after all.<sup>283</sup> But it is hardly certain that the contract basis for the Barker test permits the expectations question to be posed at this level of abstraction. Even assuming that an abstract expectations inquiry is proper, at the very least that inquiry should be comparative, looking to the expectations of the product manufacturer as well as those of the product purchaser. And here it is obvious that manufacturers are in a much better position than purchasers to estimate the incidence and severity of the hazards that their products may be later found to contain.<sup>284</sup> In this way, consumer expectations reasoning, while it is consistent with the result of no liability in Case B, buttresses the liability argument in Case A.

Additional factors pertinent to evaluating the hindsight issue concern the reliability of manufacturers' claims that particular cases do indeed fall within A or B, and the judicial system's ability to assess these claims. Manufacturers frequently allege that a product hazard was unknown and not reasonably knowable at the time of the product's sale. But often enough (though not invariably), we eventually learn that the manufacturers did indeed possess knowledge of the hazard, or at least had reason to know of it, from an early date.<sup>285</sup> Moreover, in light of the obligation negligence law imposes on manufacturers to test

<sup>282.</sup> See Bruce v. Martin-Marietta Corp., 544 F.2d 442, 447 (10th Cir. 1976) (applying Oklahoma law).

<sup>283.</sup> See A. Schwartz, supra note 96, at 583-86. Professor Schwartz would recognize consumer expectations liability only in the special case of the drug that causes the very disease it was meant to prevent. But is the polio vaccine that induces polio really all that different from a (hypothetical) polio vaccine that induces a heart attack in an ordinary person?

<sup>284.</sup> Cf. R. Posner, supra note 51, at 73-78 (justifying contract defenses of mutual mistake and impossibility).

<sup>285.</sup> See Weinstein, Did Industry Suppress Asbestos Data?, L.A. Times, Oct. 23, 1978, at I-A, col. 4; Harris, Story of DC-10 Defects Raises Serious Doubts About Safety Policies: The Hazard of Cargo Door Was Known Before Crash, Emerging Details Show, Wall St. J., Mar. 3, 1975, at 1, col. 6; Kramer, Vinyl-Cloride Risks Were Known by Many Before First Deaths, Wall St. J., Oct. 2, 1974,

their products for hidden hazards,<sup>286</sup> in many cases there will be room for a strong suspicion that a reasonable testing effort would have revealed the hazard in a timely fashion. Yet the art form of a lawsuit seems poorly suited to accomplish either the confirmation or the demial of suspicions of this sort, given the lapse of time between the product's sale and the product lawsuit, and given the elusiveness of the "should have known" issue.<sup>287</sup> Taken in combination, these practical observations are sympathetic to liability in Case A: the difference between knowledge-now and knowledge-then may be something that it is intelligent for litigation to ignore.

This assessment seems especially useful when we recognize that many Case A situations illustrate that Case only in a modified form. In this modification—call it Case A-1—the product contains a hazard that the manufacturer knows about at the time of the product's original sale, but only in a vague or partial way; and the difference between the riskas-then-perceived and the risk-as-now-understood tips the scales of the risk-benefit balance.<sup>288</sup> Here the practical arguments for considering only present knowledge in determining liability seem unusually strong. Once the manufacturer concedes that it had some original knowledge of the product's risk, we may particularly doubt that its original knowledge was as limited as it now claims; we may be especially tempted to conclude that reasonable, noimegligent testing would have revealed the hazard more fully; and we may be sharply skeptical of the ability of judge and jury to reconstruct the exact extent of that prior knowledge. Liability thus seems in order in Case A-1.289 Moreover, given its matter-of-degree character, Case A-1 may be applicable to a much larger number of real-world situations than Case A, in all its purity. And

at 1, col. 1. On very early evidence linking cigarette smoking and lung cancer, see Pritchard v. Liggett & Myers Tobacco Co., 295 F.2d 292, 300 (3d Cir. 1961).

<sup>286.</sup> See note 278 supra. Since negligence law, for obvious reasons of practical administration, has not placed conspicuous obligations on manufacturers to engage in safety-device research, this point applies only weakly to Case B.

<sup>287.</sup> Case B's "state of the art" issue, given its greater external objectivity, seems more suitable for retroactive inquiry. Thus a 1979 court should be reasonably able to ascertain the qualities of plastic in 1970. See note 268 supra. This and the preceding footnote indicate that the proliability analysis in the accompanying text applies mainly to Case A.

<sup>288.</sup> There is a similar Case B variation. In Case B-1, the product's known hazard can be prevented by the utilization of a safety alternative that is quite expensive at the time of the product's original sale but becomes less expensive by the time of the victim's lawsuit. ("Expense" includes not only the monetary cost of the alternative but also any way in which the alternative impairs product performance. The power tool example, see note 268 supra, is thus of a B-1 character.) Since the practical problems which the shift from Case A to Case A-1 exacerbates do not fully pertain to Case B in the first place, see notes 286-87 supra, the Case B-1 variation does not require special discussion.

<sup>289.</sup> Case A-1 can itself be extended to cover situations where the manufacturer "should have had" partial knowledge of the hazard, although it had no actual knowledge. The practical complications that result from this extension suggest that liability is in order here as well.

since the boundary line between A-1 and A will often be indistinct,<sup>290</sup> the appraisal that liability is called for in Case A-1 reinforces the judgment that liability is a good idea in Case A as well.

In summary, several indicators, including community values, contract reasoning, and the effective capacity of hitigation, point toward liability in Case A, while safety incentive reasoning places at most a limited cloud over the liability idea. There is a dearth of criteria, however, approving of liability in Case B; and besides a moderate safety incentive problem, the community's sense of fairness may counsel against liability. *Barker*'s "hindsight" language is technically broad enough to include both Cases A and B. That language is, however, both so tersely advanced in *Barker* and so surrounded by somewhat contrary language as to call for further examination of the hindsight issue. That examination suggests that on balance a hindsight approach is probably sensible in Case A but that it would be improper in Case B.<sup>291</sup>

# B. Products So Designed that Their "Norm is Danger"

Footnote 10 of *Barker* raises the possibility, without deciding the question, of strict liability for products which, while free of defects in the risk-benefit sense, nevertheless "entail a substantial risk of harm . . . even if no safer design is feasible." These are products whose "norm is danger." <sup>293</sup>

<sup>290.</sup> Did the manufacturer have *no* knowledge (and no reason to know) of the hazard at the time of product sale, or rather did it have *some* knowledge (actual or constructive) of this hazard, although only of a limited or partial character? For observations on the undesirability of linedrawing of this sort, see Keeton, *Products Liability—Inadequacy of Information*, 48 Texas L. Rev. 398, 408-09 (1970).

<sup>291.</sup> It appears that the Oregon Supreme Court would impose hability in Case A but not in Case B. See Wilson v. Piper Aircraft Corp., 282 Or. 61, 577 P.2d 1322, rehearing denied, 282 Or. 411, 579 P.2d 1287 (1978). A recent Indiana statute establishes state-of-the-art as a "defense" to a products liability claim. IND. CODE ANN. § 34-4-20A-4(b)(4) (Burns Supp. 1978). As of this writing, the California Assembly (but not the Senate) has approved a bill stipulating that compliance with state-of-the-art creates a "rebuttable presumption" of non-defectiveness. Assembly Bill No. 382, 1979-80 Reg. Sess.

In a few instances the distinctions I see between Cases A and B can recede. Consider the safety device that is beyond the state of the art at the time of the product's sale not because of the limits of then-current technology but merely because nobody had yet thought of it. Consider also the unknowable product danger that is due only to a product misuse that was wholly unforeseeable at the time of sale or to an unforeseen change in the post-sale physical environment in which the product is asked to perform. In the case of the unforeseeable product misuse, full liability should probably be placed on the misuser.

<sup>292. 20</sup> Cal. 3d at 430 n.10, 573 P.2d at 455 n.10, 143 Cal. Rptr. at 237 n.10. This footnote is simply ignored in Garcia v. Joseph Vince Co., 84 Cal. App. 3d 868, 148 Cal. Rptr. 843 (2d Dist. 1978).

<sup>293. 20</sup> Cal. 3d at 430 n.10, 573 P.2d at 455 n.10, 143 Cal. Rptr. at 237 n.10. The court ventured this idea on its own; it had not been raised by counsel.

The ramifications of the idea referred to in footnote 10 can hardly be understated. Assume a product whose design somehow entails a substantial risk. Either there is or is not an appropriate design alternative. If there is, liability is authorized by *Barker*'s risk-benefit prong. If there is not, liability could still be imposed under the auspices of the "norm is danger" theory. If, therefore, the footnote 10 idea is eventually accepted as a supplement to the risk-benefit standard, "substantial risk" products would bear liability quite without regard to the availability of feasible design alternatives. Ironically, then, the "norm is danger" concept, while couched in terms of a risk-benefit analysis, would directly lead to the exclusion of that analysis; all "substantial-risk" products would be subject to what Part II of this Foreword called a rule of genuine strict liability.

It is difficult to believe that the Barker court would accept such a rule. That rule would render irrelevant all issues of risk-benefit as well as of consumer expectations—issues which the Barker court was at pains to explore. Additionally, the Barker opimion at several junctures indicates its warmess about genume strict hability,294 a warmess that is not without warrant, as Part II of this Foreword has suggested.295 Therefore, there is a need to seek a narrow exegesis of the tersely-stated footnote 10 idea. This search can be aided by considering particular products responsible for substantial risks. Of all the products in our society, motor vehicles are involved in the largest number of accidents. On the 1977 list compiled by the National Injury Information Clearing House,<sup>296</sup> bicycles rank first as an accident producer. Stairs hold the number two position, with power mowers ranking sixth and skateboards seventh (up from eighteenth the year before). Even if these products are flawlessly designed, it can be assumed that substantial risks remain.

Most of the accidents which give rise to these substantial risks, however, are immediately caused by human inexperience or carelessness—the carelessness of the victim himself or some third person. Since this carelessness is all too statistically predictable, it constitutes a "reasonably foreseeable" product "misuse" that manufacturers of cars, bikes, ladders, and skateboards are required to cope with for purposes of the risk-benefit design defect standard. But assuming no such defect, and conceding the primacy of victim or third-party carelessness as the

<sup>294.</sup> See notes 48, 50 and accompanying text supra.

<sup>295.</sup> See notes 65-83 and accompanying text supra.

<sup>296.</sup> NATIONAL INJURY INFORMATION CLEARINGHOUSE, 1977 CONSUMER PRODUCTS HAZARD INDEX (1978). The Clearinghouse's rankings (which do not include motor vehicles) reflect the absolute number of annual accidents, not the ratio of accidents to usage. For purposes of any norm-is-danger liability rule, it is probably the ratio and not the absolute number that should be the relevant factor.

accident cause, the fairness and accident prevention considerations noted in the earlier discussion of the genuine strict liability idea do not justify the assignment of significant liability to the manufacturer.<sup>297</sup>

Given this analysis, the most plausible interpretation of the "norm is danger" proposal would stipulate that a product possesses such a norm only if it is responsible for a major risk even when all relevant actors—including the product designer and the product user—exercise eminently reasonable care.<sup>298</sup> This formulation provides the footnote 10 concept with a precedent: the rule of strict liability for ultraliazardous activities,<sup>299</sup> a rule which the supreme court has wholeheartedly<sup>300</sup> (if only occasionally<sup>301</sup>) endorsed.

For most products that could be deemed ultraliazardous, however, the hazard is so conspicuous as to be appreciated by almost all the product's regular users. If the product has irregular users who may not be aware of the hazard, the manufacturer is under the clearest of products hability obligations to provide those users with a hazard warning. Since the failure to waru provides an independent basis for liability, for footnote 10 purposes we can assume that the product user is knowledgeable of the product's peril.

What if the victim is not the knowledgeable product user but rather some other uninvolved person? The core case of an ultrahazardous activity is blasting.<sup>303</sup> The blaster who is held hable obviously uses an explosive (and hence highly dangerous) product; yet suit is brought against the blaster rather than against the product's manufacturer. Indeed, in almost all ultrahazardous activity cases I know of, the entity carrying on the activity utilizes a product in one important

<sup>297.</sup> The person injured by a product user's carelessness has a negligence action against the user. When an injury is produced by the combination of the carelessness of the victim and the negligence of some other party, fairness requires that the victim bear a meaningful share of the accident cost. See Schwartz, supra note 75, at 725-76. When the victim's carelessness is joined with manufacturer conduct that is not at all negligent and a product that is in no way defective, the assignment of any significant liability to the manufacturer would be arguably unfair.

<sup>298.</sup> Footnote 10's norm-is-danger idea (and language) are drawn from Chief Justice Traynor's 1965 speech-article. See Traynor, supra note 32, at 367-69. The speech makes clear that infected blood is not a norm-is-danger product—indeed, its danger entails a clear deviation from a quite safe norm. (Less than 1% of all blood units are infected.) Infected blood is, rather, an example of a product with a special kind of manufacturing defect. See note 176 supra. But the element of unpreventability links up infected blood with norm-is-danger products, as Justice Traynor's discussion suggests.

<sup>299.</sup> RESTATEMENT OF TORTS §§ 519, 520(a), 524(2)(a) (1938).

<sup>300.</sup> See Luthringer v. Moore, 31 Cal. 2d 489, 190 P.2d 1 (1948).

<sup>301.</sup> As pointed out in Schwartz, supra note 75, at 700 n.17, the supreme court has not decided a single ultrahazardous activity case in the thirty years since Luthringer.

<sup>302.</sup> See note 244 and accompanying text supra. See also Canifae v. Hercules Powder Co., 237 Cal. App. 2d 44, 46 Cal. Rptr. 552 (3d Dist. 1965) (explosives).

<sup>303.</sup> See W. PROSSER, supra note 162, at 513.

way or another.<sup>304</sup> What this suggests is that a product must be joined with some use of the product before any ultrahazard is created. Consider the injuries suffered by the neighbor of the person employing explosives, by a person in the building which is being fumigated with a deadly gas, or by someone on the highway as a truck approaches carrying a highly volatile liquid. Even if the products themselves can be deemed ultrahazardous, the ultrahazard is created by a particular product use; and the law affords the victim a clear compensation right against the product user who is knowingly carrying out the ultrahazardous activity.305 Products like explosives, deadly gases, and volatile liquids can be used in a variety of ways, and the magnitude of the risk occasioned by the product greatly depends on which use its owner selects. Whether tort law's purpose is fairness or accident prevention, liability should probably remain on the product-using party conducting the ultrahazardous activity rather than being shifted back to the product manufacturer.

Even when the victim of the ultrahazardous product is the product user himself, the user's knowledge of the product's risk cuts against manufacturer liability. This knowledge weakens the inferences that could otherwise be drawn from the ultrahazardous activity precedent. That rule rests partly on the fairness goal of preventing any unjust enrichment of the party conducting the activity at the expense of the activity's victim. The Cigarettes can serve as an example of a norm-isdanger product. Consider the cigarette manufacturer that continues in business, knowing of the cancer risk. For every cigarette which this company sells for the sake of profit, there is a cigarette purchased by a consumer who also knows of the cancer risk but who is seeking the benefits of cigarette smoking. The basic fact of this benefit accruing to the consumer because of the consumer's choice plainly prevents the manufacturer's enrichment from being condemned as unjust. The manufacturer's enrichment from being condemned as unjust.

<sup>304.</sup> See, e.g., Luthringer v. Moore, 31 Cal. 2d 489, 190 P.2d 1 (1948) (exterminating vermin with hydrocyanic acid gas); Siegler v. Kuhlman, 81 Wash. 2d 448, 502 P.2d 1181 (1972) (transporting gasoline by truck).

<sup>305.</sup> This describes the tort law rule. The employer who furnishes its employee with an unpreventably dangerous work tool, see, e.g., Hagans v. Oliver Mach. Co., 576 F.2d 97, 101 (5th Cir. 1978), is liable under workers' compensation for any injuries that result.

<sup>306.</sup> For purposes of *Barker*'s contract prong, this knowledge surely undermines any claim that the product defeats the consumer's expectations.

<sup>307.</sup> See Keeton, Conditional Fault in the Law of Torts, 72 HARV. L. Rev. 401 (1959).

<sup>308.</sup> Should this evaluation be altered in favor of hability if the consumer's choice to use the product seems less "voluntary"? Assume a patient who can be cured only by treatment with a danger-norm drug. Escaping illness is a major benefit; indeed, it is only because the benefit seems so substantial that the appearance of choice is diminished.

The lack of apparent consumer choice impressed Justice Traynor as a reason for *not* imposing liability on manufacturers of norm-is-danger products. He proposed strict liability for an inherently dangerous drug only if "a reasonably close substitute exists," and not if the drug "must

Fairness apart, norm-is-danger liability could be thought helpful in accident prevention. By raising the product's price, such liability would reduce the product's sales and proportionately diminish the number of accidents that the product causes. Moreover, while by hypothesis there is no feasible safer design at the time of the product's sale, a manufacturer's economic interest in preventing a sales decline would give it a sharp incentive to conduct research seeking to discover a safer product design in the future.

This safety analysis is, of course, a restatement of the accident prevention reasoning associated with genuine strict liability.<sup>309</sup> The good news is that the norm-is-danger liability proposal, by excluding all cases in which the product accident is at least partly due to the substandard behavior of the victim or some other person, frees itself of the vulnerabilities that weaken genuine strict liability.310 The bad news is that the assumption that the consumer has knowledge of the product's danger-norm creates a new vulnerability. Strict hability can be counted on to produce advantageous safety effects only to the extent that consumers are unawarc of the product hazard;<sup>311</sup> if they do know of that hazard and hence recognize the product's "true" cost, the imposition of liability would not diminish the product's sales and hence would not succeed in fostering safety incentives. But perhaps this conclusion is premature. The conclusion results from an analysis which itself assumes that the product is sold by a profit-maximizing manufacturer in a competitive market. These are plainly limiting assumptions. It may well be, for example, that cigarette companies enjoy some degree of monopoly power<sup>312</sup> or that they do not always determine their prices with standard profit maximization in mind.313

If these are the economic realities, then consumer knowledge

be used despite the danger." Traynor, *supra* note 32, at 368-69. In a Traynor-like vein, Professor Wade would classify unavoidably dangerous products according to their utility, and would impose strict liability only on manufacturers of low utility products (like firecrackers) on grounds that the sale of these products may be per se inappropriate. Wade, *supra* note 47, at 767-68.

If a safe substitute drug exists, a reasonable view is that liability can be most aptly placed on the physician who chooses to use the more dangerous drug product. If selling firecrackers is wrong, buying and using them seems equally wrong.

<sup>309.</sup> See text accompanying notes 60-64 supra. These resource allocation arguments are undoubtedly part of the rationale for ultrahazardous activity strict liability.

<sup>310.</sup> See notes 65, 73-77 and accompanying text supra.

<sup>311.</sup> See notes 61-64 and accompanying text supra. Ultrahazardous activity law denies a recovery to the activity's "knowledgeable participant." See RESTATEMENT OF TORTS § 523 (1938). This person is the counterpart of the product user. See Gaston v. Hunter, 588 P.2d 326, 341 (Ariz. App. 1978).

<sup>312.</sup> On the significance of monopoly power, see G. CALABRESI, supra note 51, at 81-85.

<sup>313.</sup> For discussions of corporate pricing practices and how they deviate from classical theory, see *Pricing Strategy in an Inflation Economy*, Bus. Week, Apr. 6, 1974, at 43; *Flexible Pricing*, Bus. Week, Dec. 12, 1977, at 78. Additionally, some products, like drugs administered in hospitals, may be distributed in a manner that departs from the market pattern.

would not nullify the safety effects of a norm-is-danger liability rule. Even if this is so, however, the safety argument supporting that rule does not necessarily prevail. As the earlier discussions of genuine strict liability and the natural impurities cases<sup>314</sup> indicated, our existing products liability rule has never clearly made up its mind as to how far it should move beyond the negligence principle in order to establish future-directed safety incentives. The footnote 10 issue thus provides a crucible, although one highly dependent on particular economic findings, for testing the ambitiousness of products liability's accident prevention objective.

#### Conclusion

Strict products liability is a subtle rather than a sensational doctrine, as is often supposed. The law has refused even to consider a rule of genuine strict liability, not implausible though that rule may be. The existing moderate rule of products hiability hinges on the requirement of a "defect." Since "defect" means that there is something "wrong" with the product, it is accurate (if ironic) to understand strict liability as involving a "fault" system after all—one concerned with the fault in the manufacturer's product rather than the fault in its conduct. What becomes interesting is the attempt to identify those circumstances in which these two kinds of fault are *not* equivalent.

In manufacturing defect cases, products liability essentially provides a shortcut into, and a guarantee of the results supposedly available under, a sophisticated negligence system—one that has rejected privity, accepted res ipsa, extended itself (in a somewhat strict-liability fashion) via various vicarious liability rules, and attracted a proficient plaintiffs' bar. What conclusion strict liability reaches in the rare case of the unpreventable manufacturing defect is a question that remains intriguingly unanswered.

Barker's focus is on design defects. The design-defect problem implicates the question of the relationship between tort and contract principles within products liability. Negligence, a basic tort doctrine, and implied warranty, a basic contract doctrine, provided the two sources for the original strict products liability rule. Cronin, in disparaging "consumer expectations," seemingly buried products liability's contract element in favor of a curtly defined (indeed, undefined) tort alternative. Barker provides that tort element with a formal risk-benefit expression that reaches deep into the tort tradition. But at the same time, Barker unexpectedly revives products liability's contract tradition by endorsing an alternative consumer expectations liability test. Barker thus con-

<sup>314.</sup> See notes 173-76 and accompanying text supra.

firms the general jurisdiction of both tort doctrine and contract-warranty doctrine in products litigation. In earlier years, each of these doctrines had been somewhat hemmed in by privity limitations. But the privity rule in tort cases was deficient in its tort logic, while the counterpart rule in warranty cases made poor sense in strictly contractual terms, at least as applied to the ultimate product purchaser. The release from privity allowed both tort and contract to prosper in the products field.

In attesting to their continued prosperity, *Barker* implicitly suggests that within products liability tort and contract should coexist, each separate from and independent of the other. This indication of independence is valuable in a number of ways. Tort principles furnish the explanation for the bystander's right to sue. Contract principles explain the attention paid to false product representations, and they likewise help make clear the relevance of product warnings.

Barker's expectation of the separateness of tort and contract is vulnerable, however, in other respects. Barker fails to consider how the negation of a contract claim can weaken an otherwise promising tort claim. There has been no rush, for example, to impose strict hability on the sellers of used products, whose purchasers may have limited expectations. And if the purchaser of a new product has complete knowledge of a product hazard at the time of the sale, it is possible that a contract-related defense of assumption of risk will operate against a tort-defined hability claim. 316

Barker also declines to dig into the consumer expectations concept. The concept's contract basis suggests that only the product purchaser qualifies as the "consumer" whose expectations are to be considered, although certain third party product victims can be regarded as the purchaser's intended beneficiaries; these are matters that Barker does not discuss. Consumer expectations are often shaped by a manufacturer's communications about its products, whether they are praiseworthy or cautionary. But preexisting products liability doctrines of false representation and the obligation to warn are sufficient to give correct legal effect to these communications. "Consumer expectations" is helpful insofar as it provides a rationale—a unifying rationale—for these preexisting doctrines.

Communications apart, "consumer expectations" are perplexing to identify. There is an irony here. *Barker* found it necessary to elaborate on *Cronin* because *Cronin*'s simple "defect" requirement provided im-

<sup>315.</sup> See note 251 supra.

<sup>316.</sup> The assumption of risk issue is most dramatic when the consumer declines to purchase a safety-device option and then in his subsequent lawsuit alleges that the absence of the device rendered the product's design defective. See notes 145-47 and accompanying text supra.

adequate guidance to factfinders in difficult design cases. Yet the consumer expectations "prong" included in the Barker elaboration suffers from a similar inadequacy. Two lines of analysis can be staked out. First, consumers may expect products not to cause injury when properly used in a wholly normal environment. But if a product's design does so threaten injury, the manufacturer's primary liability is for its failure to warn. Second, consumers trust and expect that the products they buy come equipped with intelligent designs. But what this suggests is the partial convergence of the contract (consumer expectations) standard and the tort (risk-benefit) standard, since an intelligent design is essentially one that is risk-beneficial. While tort law obligates every person to act in risk-beneficial ways towards others, the contract relationship between manufacturer and consumer does add an important emphasis to that obligation. In the products context, tort and contract are thus able to harmonize, with the theory of the former being reinforced by the theory of the latter.317

Given the pertinence of both tort and contract theory, there is no reason to interpret products liability in terms of either tort vanquishing contract or contract circumventing tort.<sup>318</sup> At the operational level, however, the tendency towards convergence between the risk-benefit test and the consumer expectations test calls into question the separateness of tort and contract that *Barker* posits. Other jurisdictions, noting this convergence, have selected one test or the other, but have found no need to opt for both.<sup>319</sup> Since the risk-benefit test usually can do a better job in initiating and guiding the jury's dehberations, and since only it extends to all product victims, including the bystander, in ordinary situations it should be the test of preference. In light of the difficulties of identifying the particular purchaser's product expectations for the accident victim, the consumer expectations test, whatever its soundness in theory, is probably not worth the effort in practice.

With respect to this risk-benefit standard, Barker's professed shift in the burden of proof is more gallant than wise. But this aspect of Barker can be modified in a moderate way that makes good sense: once the plaintiff identifies a feasible design alternative that would have prevented his injury, the manufacturer should be required to explain why that alternative would not have been a good idea. "Hind-sight" should probably be permitted in risk-benefit appraisals when the

<sup>317.</sup> Likewise, the standard of liability in medical malpractice is derived from a complex interweaving of tort and contract. See D. LOUISELL & H. WILLIAMS, I MEDICAL MALPRACTICE § 8.03, at 194-200 (1960). See generally O'Connell, supra note 155.

<sup>318.</sup> See O'Connell, supra note 64, at 533-34, for a witty narrative of products liability history. See also G. GILMORE, THE DEATH OF CONTRACT 94 (1974) (suggesting that products liability may involve both tort and contract "swallowed up in a generalized theory of civil obligation"). 319. See notes 253-54 and accompanying text supra.

issue is the existence of a product-created risk that was previously unknown (or only partially known) by the manufacturer, but not when the issue is the development after the product's sale of new safety technology. Imposing liability on manufacturers of a narrow class of products whose norm is danger is perhaps defensible. But proponents of such a liability rule will need to show how market realities would convert the rule into a safety-research incentive operating upon manufacturers. They will then need to persuade courts that products hability is ambitious enough to step conspicuously beyond negligence, and beyond contract as well, to provide this incentive.

Barker is a feast of an opinion, in all. But it earns this evaluation more for the fundamental products hability issues it exposes or imphcates than for the correctness of the rules it espouses.