Torts

Page Keeton

Follow this and additional works at: https://scholar.smu.edu/smulr

Recommended Citation
Page Keeton, Torts, 35 Sw L.J. 1 (1981)
https://scholar.smu.edu/smulr/vol35/iss1/1

This Case Note is brought to you for free and open access by the Law Journals at SMU Scholar. It has been accepted for inclusion in SMU Law Review by an authorized administrator of SMU Scholar. For more information, please visit http://digitalrepository.smu.edu.
Torts

by

Page Keeton

I. Tort Liability of an Occupier of Land to an Employee of an Independent Contractor

In 1967 the Texas Supreme Court in Delhi-Taylor Oil Corp. v. Henry\(^1\) adopted the principle that an adequate warning to an independent contractor about dangerous conditions on the occupier's premises discharges the occupier's duty of care to the contractor's employees.\(^2\) The court's holding was based on two underlying assumptions: (1) that an employee may not recover for injuries sustained in the course of confronting a danger that he subjectively appreciates, either because he has voluntarily assumed the risk, or because there is no duty to warn one about a danger that he already appreciates;\(^3\) (2) that an adequate warning given to the employee concerning a nonappreciated danger satisfies the occupier's duty of care to such employee.\(^4\) The court noted that in many situations it would be impractical for the occupier to warn directly every employee of an independent contractor:

On many projects there are a number of independent contractors, each employing scores of workmen. The identities of some of the workmen will change from day to day. To impose the duty on the owner or occupier of the premises to know and to warn every workman on the project of a dangerous condition would subject him to an impossible burden.\(^5\)

In light of this "impossible burden," the court concluded that the duty to warn employees of dangers on the premises should rest with the independent contractor.\(^6\)

Admittedly, in certain situations an occupier would not be found negligent for its failure to warn a contractor's employees even if its duty of care was unlimited. The court in Delhi-Taylor could have taken a middle ground by concluding that each case would be dealt with on an ad hoc basis. Under this position, the question whether the occupier satisfied the

---

\(^1\) 416 S.W.2d 390 (Tex. 1967).
\(^2\) Id. at 393.
\(^4\) 416 S.W.2d at 390; see Paubel v. Hitz, 339 Mo. 274, 96 S.W.2d 369, 373-74 (1936); Keeton, Personal Injuries Resulting from Open and Obvious Conditions, 100 U. Pa. L. Rev. 629 (1952).
\(^5\) 416 S.W.2d at 394.
\(^6\) Id.
requirements of ordinary care in a particular situation would be one for the jury to decide, except in those cases in which reasonable persons could not disagree.\textsuperscript{7}

In any event, Delhi-Taylor is based on the premise that an invitee who elects to take a chance by voluntarily and intentionally encountering an appreciated danger ought not to recover, even when the defendant could be regarded as negligent in creating or failing to eliminate the danger. The right to exercise an informed choice is the extent of the protection to which the invitee is entitled, and this is reasonably assured to employees of independent contractors when an adequate warning of dangers not otherwise appreciated is given to a contract’s supervisor.

In the 1975 case of Farley v. M.M. Cattle Co.\textsuperscript{8} the Texas Supreme Court abolished voluntary assumption of the risk as a general defense in an action predicated on negligence.\textsuperscript{9} That the court intended to assert that under no circumstances may a defendant satisfy its obligations to another by warning him of an unappreciated danger is unlikely, however.\textsuperscript{10} The relationship between the defendant and the plaintiff may be such as to justify limiting the defendant’s duty of care to providing the plaintiff with an opportunity to make an informed decision about incurring a risk, as when the claimant is a licensee rather than an invitee.\textsuperscript{11}

In 1978 the supreme court in Parker v. Highland Park, Inc.\textsuperscript{12} abolished the orthodox common law rule that an occupier had no duty to warn an ordinary business invitee about an appreciated danger or a danger held to be obvious as a matter of law.\textsuperscript{13} The common law rule had been based largely on the notion that a right to an informed choice was the extent of the protection to which an invitee was entitled.\textsuperscript{14} In commenting on Parker in the 1979 Annual Survey, I made the following observation:

An employee of an independent contractor is a special kind of an invitee, and it is doubtful whether the opinion of the supreme court in Parker abolished the Delhi-Taylor “no-duty” rule. Even so, the issue seems to be one that is worth reopening in light of Parker.\textsuperscript{15} The issue now has been reopened. During this survey period, the Waco court of civil appeals concluded in Schley v. Structural Metals, Inc.\textsuperscript{16} that the Delhi-Taylor doctrine, which states that an adequate warning to or ap-

\begin{itemize}
  \item \textsuperscript{7} Keeton, Torts, Annual Survey of Texas Law, 22 Sw. L.J. 4, 9 (1968). “The alternatives here are either that there is no duty to do anything more than warn the independent contractor in all cases or that the question is one of whether ordinary care requirements are satisfied in the particular case by a warning to the independent contractor.” \textit{Id.} at 10.
  \item \textsuperscript{8} 529 S.W.2d 751 (Tex. 1975).
  \item \textsuperscript{9} \textit{Id.} at 758. The court stated, however, that its action would not affect “the current status of the defense in strict liability cases and cases in which there is a knowing and express oral or written consent to the dangerous activity or condition.” \textit{Id.} (emphasis added).
  \item \textsuperscript{10} See \textit{id.} at 760 (Reavley, J., dissenting).
  \item \textsuperscript{11} See Keeton, \textit{Torts, Annual Survey of Texas Law}, 33 Sw. L.J. 1, 15-16 (1979).
  \item \textsuperscript{12} 565 S.W.2d 512 (Tex. 1978).
  \item \textsuperscript{13} \textit{Id.} at 517.
  \item \textsuperscript{14} See Harvey v. Seale, 362 S.W.2d 310, 312-13 (Tex. 1962).
  \item \textsuperscript{15} Keeton, \textit{supra} note 11, at 17.
  \item \textsuperscript{16} 595 S.W.2d 572 (Tex. Civ. App.—Waco 1979, writ ref’d n.r.e.).
\end{itemize}
preciation of danger by an independent contractor's supervisor discharges an occupier's duty of care to the contractor's employees, has not survived *Parker*. In *Schley* two employees of an independent contractor received a severe electrical shock when the boom of a crane came into contact with an electrical transmission line carrying 60,000 volts. One employee was killed, and the other was seriously and permanently injured. The plaintiffs sued the defendant occupier on negligence theories, alleging that the defendant had failed to warn them adequately about the dangers related to the work and to the presence of the transmission line. In response to the special issues submitted, the jury found negligence on the part of the defendant in failing to warn, but also found that such negligence was not a proximate cause of the occurrence. The jury also determined, however, that the occupier was negligent in failing to request and agree to pay an electric company to install the electric lines underground, and that this negligence was a proximate cause of the accident. Finally, the jury found that the supervisory personnel of the independent contractor had adequate knowledge of the danger prior to the occurrence. On the basis of the above findings, the trial court rendered a take-nothing judgment against the plaintiff.

The court of civil appeals, in reversing, concluded that *Parker* must necessarily be regarded as "setting aside" *Delhi-Taylor*. This conclusion was based on the following propositions: (1) a contractor's employee is an invitee; (2) under *Parker* an invitee can recover against the occupier, even though the invitee appreciates the danger, because the duty of care cannot necessarily be satisfied by providing the invitee with a right to an informed choice when there is a feasible way to eliminate the danger; (3) *Delhi-Taylor* states that an adequate warning to an independent contractor's supervisor will satisfy the occupier's duty of care and therefore the employee could not recover even when unaware of the danger. The court found that allowing the *Delhi-Taylor* rule to stand after *Parker* would lead to an incongruous situation: "We cannot believe the *Parker* decision was intended to create a set of rules whereby knowledge of a dangerous condition by supervisory personnel of the injured workman would bar recovery, but personal knowledge by the workman would not . . . ."

The incongruity of the results envisaged by the court of civil appeals is apparent, but *Delhi-Taylor*'s reasoning remains sound today: To warn each employee directly is impractical; therefore, if an occupier's duty of care can be satisfied by an adequate warning, it can be satisfied by warning a contractor's supervisor. Unquestionably, even if the duty of reasonable

---

17. *Id.* at 582.
18. *Id.* at 577.
19. *Id.*
20. *Id.* at 578.
21. *Id.* at 579.
22. *Id.* at 582.
23. *Id.*
care is unlimited, the only possible negligence in some situations will be that of failing to warn adequately about a danger. In other special situations, the duty of care may be limited to a warning. For example, if an independent contractor is employed to eliminate a dangerous condition and is adequately advised of the nature of the danger involved, the Delhi-Taylor analysis remains valid. In any case in which failure to warn is submitted as a ground of negligence, the reasoning of Delhi-Taylor continues to be applicable because it would impose an intolerable burden on the occupier to issue a direct warning to every employee.

Moreover, the question still remains whether Parker applies or should be applied to employees of independent contractors. A reasonable conclusion would be that the unlimited duty of ordinary care to the typical business guest-invitee does not apply to employees of independent contractors, and that the limited duty of ordinary care to warn about nonobvious danger remains applicable. The contractor's employee has the supervisory personnel, and oftentimes other means, to guard against accidents from obvious dangers on the premises. This safeguard may not be regarded, however, as a sufficient justification to relieve the occupier from liability for his negligence in failing to eliminate a danger when there is evidence to show that there was a feasible way to do so.

II. LOSS OF CONSORTIUM AND THE WORKERS' COMPENSATION ACT

In Copelin v. Reed Tool Co. the court held that a deprived wife whose husband was injured in the course of his employment and then collected benefits under the Texas Workers' Compensation Act could recover damages for loss of consortium. The fact that the husband's tort action was barred by the Workers' Compensation Act was not considered controlling because the court viewed the deprived wife's action for loss of consortium as a separate and independent cause of action from that of the impaired husband. Further, the wife's claim was not held barred because the wife's recovery for loss of consortium would be her separate property, rather than community property.

In Texas the right of either spouse to recover for negligent impairment of consortium was not recognized until Whittlesey v. Miller. In that case

26. 596 S.W.2d at 304.
27. Id.; see Gates v. Foley, 247 So. 2d 40, 44-45 (Fla. 1971); Thill v. Modern Erecting Co., 284 Minn. 508, 170 N.W.2d 865, 869 (1969); Whittlesey v. Miller, 572 S.W.2d 665, 667 (Tex. 1978); Peeples v. Sargent, 77 Wis. 2d 612, 253 N.W.2d 459, 471 (1977); W. Prosser, supra note 3, § 125, at 893.
28. 596 S.W.2d at 304; see Whittlesey v. Miller, 572 S.W.2d 665, 669 (Tex. 1978); Graham v. Franco, 488 S.W.2d 390, 396 (Tex. 1972). See also Tex. Fam. Code Ann. § 5.01(a)(3) (Vernon 1975) (recovery for personal injuries sustained by the spouse during marriage is separate property, except for recovery for loss of earnings); McKnight, Matrimonial Property, Annual Survey of Texas Law, 26 Sw. L.J. 31, 49 n.149 (1972) (recovery of loss of "comfort and society" of plaintiff-spouse is separate property).
29. 572 S.W.2d 665 (Tex. 1978).
the supreme court held not only that the deprived wife had a recovery, but also that her independent cause of action was not extinguished by a release by the impaired spouse of his cause of action against the tortfeasor.\textsuperscript{30} The court also said, however, that “the deprived spouse’s suit for loss of consortium is considered to be derivative of the impaired spouse’s negligence action to the extent that the tortfeasor’s liability to the impaired spouse must be established . . . .”\textsuperscript{31} In other words, in order to subject a defendant to liability to a deprived spouse, all the elements of a tort action by the impaired spouse must also exist. The same policy considerations that foreclose or diminish recovery on the part of the impaired spouse also foreclose or diminish recovery on the part of the deprived spouse.

The dependency of a right to recovery for a relational injury, such as loss of consortium, upon the existence and scope of the impaired spouse’s independent right to recovery is manifested in various areas of tort law. For example, contributory negligence on the part of the impaired spouse will bar or diminish recovery by the deprived spouse in the same manner and to the same extent as it would recovery by the impaired spouse.\textsuperscript{32} Likewise, if a husband injured in a traffic accident cannot recover against a host driver because of the guest statute, neither can the deprived wife.\textsuperscript{33}

In a logical extension of Whittlesey the supreme court disagreed with the reasoning and conclusions of the court of civil appeals in Copelin, but affirmed the court’s holding that reversed and remanded the trial court’s grant of summary judgment.\textsuperscript{34} The supreme court specifically held that a deprived spouse has a cause of action for loss of consortium against a tortfeasor only if at the time of the injury the impaired spouse has a cause of action against that tortfeasor.\textsuperscript{35} The common law rule regarding deriva-

\textsuperscript{30} Id. at 669.

\textsuperscript{31} Id. at 667. This statement was, of course, unnecessary to the decision and could therefore be regarded as a dictum. The derivative nature of the cause of action, however, has been generally recognized. See Restatement (Second) of Torts § 693, Comment e (1977): “In order to subject a defendant to liability to a deprived spouse for illness or bodily harm done to the impaired spouse, all of the elements of a tort action in the impaired spouse must exist, including the tortious conduct of the tortfeasor . . . .” In other words, if the impaired spouse has no cause of action, neither does the deprived spouse. This derivative notion has been criticized. See W. Prosser, supra note 3, § 125, at 892-93. This author does not share this criticism, however.

\textsuperscript{32} See Pioneer Constr. Co. v. Bergeron, 170 Colo. 474, 462 P.2d 589, 591-93 (1969); Ross v. Cuthbert, 239 Or. 429, 397 P.2d 529, 532 (1964). See also Keeton, supra note 11, at 18 (concluding on the basis of Whittlesey that the deprived spouse’s cause of action would be diminished by the impaired spouse’s contributory negligence under comparative negligence rules).

\textsuperscript{33} See note 32 supra.

\textsuperscript{34} See 24 Tex. Sup. Ct. J. 96, 97 (Dec. 6, 1980). The trial court had granted a motion for summary judgment against the plaintiff; notwithstanding the fact that the plaintiff’s petition had alleged a cause of action based on an intentional injury of the employee as well as a cause of action based on an accidental injury attributable to negligence. Because the impaired spouse’s cause of action in tort against his employer for an intentional injury inflicted by the employer was not barred by the Workers’ Compensation Act, the consortium action was not barred. There being no indication that a finding of intentional conduct would be precluded as a matter of law, the supreme court remanded the case to the trial court. Id. at 99.

\textsuperscript{35} Id. at 98.
tive rights of recovery\textsuperscript{36} is especially sound and applicable in the workers’ compensation situation, because any other result could lead to unmanageable and inordinately expensive tort litigation, requiring an employer to bear as a cost of doing business substantial tort liability insurance costs arising out of injuries to workers as well as the contemplated liability without fault costs under the Workers’ Compensation Act.\textsuperscript{37} The benefits awarded under the Workers’ Compensation Act are intended not only for the injured employee, but also for the employee’s family.\textsuperscript{38} If such benefits are inadequate, the legislature has the power to expand them.

The result reached by the supreme court seems sound. The great weight of authority throughout the country supports the conclusion that a deprived spouse has no recovery against an employer when the impaired spouse’s exclusive remedy is under a workers’ compensation act.\textsuperscript{39} A recent decision of the Massachusetts Supreme Judicial Court, however, reached a contrary result.\textsuperscript{40} The Massachusetts court held that both a deprived spouse and the children of the injured employee could recover for loss of consortium and companionship, even though they had accepted benefits under the Massachusetts Workers’ Compensation Act.\textsuperscript{41} The Massachusetts case is indeed unique in allowing a child to recover for the loss of companionship and care of an injured parent. When there is merely negligent injury of a parent, problems related to the size of damage awards, especially damages for noneconomic losses, have resulted in the universal rejection by courts throughout the United States of a cause of action on behalf of children for the loss of companionship and care of an impaired parent, even when there is no impediment to a recovery by the parent.\textsuperscript{42}

III. PRODUCTS LIABILITY AND THE STATE OF THE ART

A. Introductory Comments

It has often been asserted that if a machine, drug, or other product was

\textsuperscript{36} See text accompanying notes 32-33 supra.

\textsuperscript{37} The court of civil appeals recognized the benefits of the derivative action rule in the workers’ compensation area, but concluded that undesirable results were compelled because of the recognition by the courts of the independence of the deprived spouse’s cause of action and the fact that the deprived spouse’s recovery was separate property. 596 S.W.2d at 304. The court said: “We are not unmindful of the disruptive effect this opinion may have upon the administration of the Workers’ Compensation Act; however, the result reached herein is compelled by the authorities cited.” \textit{Id}.


\textsuperscript{39} See Ziegler v. United States Gypsum Co., 251 Iowa 714, 102 N.W.2d 152, 153-54 (1960); Ellis v. Fallert, 209 Or. 406, 307 P.2d 283, 286 (1957).

\textsuperscript{40} Ferrier v. Daniel O’Connell’s Sons, Inc., 413 N.E.2d 690 (Mass. 1980).

\textsuperscript{41} \textit{Id} at 702-03.

\textsuperscript{42} See \textit{Restatement (Second) of Torts} § 707A (1977): “One who by reason of his tortious conduct is liable to a parent for illness or other bodily harm is not liable to a minor child for resulting loss of parental support and care.” The comment to this section states: “The only apparent distinctions are that the harm to the interest of the minor child is of less significance in this situation and the likelihood of duplication or overlap of recovery would be substantially greater.” \textit{Id} Comment a.
designed or constructed by a producer or maker in conformity with the “state of the art” at the time possession was surrendered, then either (1) the product should not be regarded as defective in such a manner as to be unreasonably dangerous, or (2) if defective, then the maker or producer should be excused. The recent supreme court case of Bailey v. Boatland of Houston, Inc. is among the dozen most important supreme court opinions on products liability due to its detailed discussion of the term “state of the art.” In Boatland the plaintiffs were the widow and children of Bailey, who was killed in a boating accident. The boat, which was purchased in 1973, had struck a submerged tree stump, and Bailey was thrown into the water. With its motor still running, the boat turned sharply and circled back toward the stump. Bailey was killed by a propeller. One of the alleged defects of design was the failure to incorporate a safety device known as a “kill switch,” an automatic cut-off system that would cause the boat’s motor to shut off automatically when the driver is propelled away from his position at the steering wheel. Evidence regarding this device was introduced through the testimony of an inventor who began developing a kill switch in 1972. He made an application for a patent on this type of kill switch in January 1973. According to his testimony, the invention required no breakthrough in scientific knowledge and was relatively simple. The inventor also testified that such a device had been in use on racing boats for thirty years. Further evidence was introduced by the defendant over the objection of the plaintiffs to the effect that kill switches were not commercially available to Boatland, the assembler and retailer of the boat in question. At trial the jury found that the product was not defective as designed. Its finding was no doubt influenced by the evidence introduced by the defendant as to the unavailability of any kind of kill switches.

The court of civil appeals, relying in part on a consumer-contemplation


State legislatures have approached the state of the art defense in two ways, either as a complete defense or as a rebuttable presumption. The Indiana product liability law, for example, provides as a defense to an action for physical harm caused by the plan or design of a product, that the methods, standards, or techniques of designing and manufacturing the product were prepared and applied in conformity with the generally recognized state of the art at the time of the manufacture or design. IND. CODE § 34-4-20A-4(b)(4) (Supp. 1980).

The Kentucky statute, on the other hand, provides that, until rebutted by a preponderance of the evidence, the product is presumed not defective if the design, methods of manuacturing, and testing conformed to the generally recognized and prevailing standards of the state of the art at the time the design was prepared and the product was manufactured. KY. REV. STAT. § 411.310 (1980).

44. 23 Tex. Sup. Ct. J. 566 (July 31, 1980).

45. Bailey v. Boatland of Houston, Inc., 585 S.W.2d 805, 807 (Tex. Civ. App.—Houston [1st Dist.] 1979), rev’d, 23 Tex. Sup. Ct. J. 566 (July 31, 1980). This testimony would seem to indicate that the patent applied for would not be a valid one.

46. 585 S.W.2d at 807.

47. Id. at 808.

48. Id. at 807.
test as to when a product is defective, held that such state of the art evidence as to the availability of kill switches when Boatland assembled and sold the boat was irrelevant and reversed the trial court's judgment for the defendant. The supreme court reversed the court of civil appeals and affirmed the trial court's judgment, holding that state of the art evidence relating to technical and scientific knowledge at the time a product is designed is relevant to the issue of the feasibility of minimizing or eliminating a risk or hazard related to the foreseeable uses of a product. Boatland should prove helpful in the resolution of various issues and problems related to state of the art. For this reason, I am using the case as an occasion to comment on some of the problems and ambiguities related to the use of the term "state of the art."

The term "state of the art" is sometimes used when the problem or accident is related to a flaw in a product, such as trichinosis in pork or serum hepatitis in blood, rather than a design hazard. The argument runs that the undiscourability of the "flaw," in light of the state of the art at the time, should excuse liability. In reality, this is an argument against strict liability for defects in products and a return to something akin to liability based on negligence. The burden of proof is simply shifted from the plaintiff to prove negligence to the defendant to prove utmost care.

State of the art has more often been used as a reason for concluding that there should be no liability for a design hazard. Even when so limited, two basic ambiguities have been involved in the various arguments put forward: first, the term has been used for the purpose of resolving entirely different issues or problems; secondly, it has been used with quite different meanings. The result of these ambiguities is that in each instance that state of the art is used, the precise meaning and purpose of the term must be identified in order to evaluate the soundness of the argument or proposition.

In order to identify the various ways in which the expression is used, it is necessary to begin with a clear understanding of the test or standard for ascertaining when a product as designed is defective in such a way as to make it "unreasonably dangerous." In Turner v. General Motors Corp. the supreme court approved a jury charge that defined "defectively designed" as meaning: "a product that is unreasonably dangerous as designed, taking into consideration the utility of the product and the risk involved in its use." Prior to Turner, it was generally thought that the

49. See Turner v. General Motors Corp., 584 S.W.2d 844, 850 (Tex. 1979).
50. 585 S.W.2d at 811. Judgment for the defendant had been entered based in part on the jury's finding that the boat was not defective. Id. at 807.
53. See note 43 supra and accompanying text.
54. 584 S.W.2d 844 (Tex. 1979).
55. Id. at 847 n.1.
supreme court meant to give a claimant an opportunity to prove a design defect in one of two alternative ways: (1) by proving that the product as designed was more dangerous than would be contemplated by the ordinary purchaser; or (2) by proving that a reasonable seller with knowledge of the danger that existed would not have sold the product. The supreme court perceptively concluded that there were a variety of difficulties with this bifurcated approach and disapproved its use in the charge to the jury. The court also stated that, for practical reasons, it would be counterproductive to attempt to set forth for the jury the various factors related to danger on the one hand and utility on the other. This statement, however, does not alter the fact that appellate judges and trial and appellate advocates must understand which factors are significant regarding issues of admissibility and sufficiency of the evidence. Trial advocates are left with the responsibility of illuminating the otherwise vague and nebulous charge approved in Turner.

My position is that the supreme court in Turner actually held that a product is unreasonably dangerous, and therefore defective, if a reasonable person would conclude that the danger in fact, whether foreseeable or not, outweighs the utility of the product. There are three primary reasons for so concluding: (1) the harmful consequences in fact from intended and reasonably foreseeable uses outweigh the benefits; although the harmful consequences do not exceed the benefits, alternative products are available that serve the same needs or desires with less risk of harm; (3) although the harmful consequences do not outweigh the benefits, there was or is a feasible way to design the product with less harmful consequences.

56. See Henderson v. Ford Motor Co., 519 S.W.2d 87, 92 (Tex. 1974). I describe these two tests succinctly by referring to the first as the “consumer contemplation” test and the second as the “hindsight negligence” test. The latter simply hypothesizes knowledge on the part of the seller of the dangerousness of the product and requires a jury finding whether, under such a state of affairs, the seller would have been negligent. The principal weakness of the hindsight negligence test is that it fails to direct attention to the fact that, in evaluating conduct, or in evaluating the propriety of a particular design, it is necessary to weigh perceiveable danger (or danger in fact, as the case may be) with the utility of the design. See Donaher, Piehler, Twerski & Weinstein, The Technological Expert in Products Liability Litigation, 52 Tex. L. Rev. 1303, 1305-09 (1974); Keeton, Products Liability—Design Hazards and the Meaning of Defect, 10 Cum. L. Rev. 293, 306 (1979).

57. These included doubts as to whether jurors would know what the expectations of an ordinary consumer would be, or whether they would apply any standard except their own experience. 584 S.W.2d at 851.

58. Id.

59. Id. at 848-49.

60. “Benefits” refers to the wants, desires, and human needs that are served by the product. The benefits served by a prescription drug, for example, would be lives saved, disabling injuries prevented, illnesses cured, and pain alleviated. Often a prescription drug or vaccine is withdrawn from use, either voluntarily or under coercion from a federal agency, because the harmful side effects outweigh the benefits derived from the use of the drug or vaccine. The fact that the product was withdrawn is relevant, if not conclusive, that the harm was found to have outweighed the benefits. See Parke, Davis & Co. v. Stromsodt, 411 F.2d 1390, 1398-99 (8th Cir. 1969).

Assuming the validity of what has just been said about the meaning of a design defect, conformity to state of the art has been utilized in four different ways in an effort to relieve the manufacturer from liability for physical harm attributable to a design hazard.

B. *State of the Art as the Customary Way*

It has often been argued that if a product were designed in conformity with the state of the art, in the sense of the customary way or practice of designing such a product, then the product should not be regarded as defective and unreasonably dangerous. With rare exceptions, the courts have held that industry custom, at the time a product was designed and sold, is not conclusive either on a negligence theory or on a theory of strict liability in tort. This usage was noted in *Boatland*. The Texas Supreme Court clearly has adopted this position. In *Gonzales v. Caterpillar Tractor Co.*, a tractor was designed with a step to assist the user in getting into the rider's seat. The problem with the step was that it became muddy when the tractor was used in wet weather. The step was the only way the user had to get on and off the tractor. The plaintiff fell when getting off the tractor and injured his back. At trial, the defendant introduced evidence that the tractor design was consistent with prevailing industry custom. Expert testimony however, indicated that for about the same cost, and without impairment of the use of the tractor, a retractable step could have been designed to eliminate the danger. Jury findings of both product defect and negligence were upheld on the basis of the testimony adduced by the plaintiff's expert.

Courts have generally held that the prevailing industry custom in designing a product is relevant and admissible on both theories of negligence and strict liability to show that an industry-wide value judgment had been made weighing known or reasonably foreseeable dangers against the product's utility. Some language in *Boatland*, however, may imply that in-

---


64. 23 Tex. Sup. Ct. J. at 569. The court stated:

An offer of evidence of the defendant's compliance with custom to rebut evidence of its negligence has been described as the "state of the art defense." . . .

In this connection, it is argued that the state of the art is equivalent to industry custom and is relevant only to the issue of the defendant's negligence and irrelevant to a strict liability theory of recovery.

In our view, "custom" is distinguishable from "state of the art."

*Id.* (citation omitted).

65. 571 S.W.2d 867 (Tex. 1978).

66. *Id.* at 871.

67. *Id.*

Industry custom is inadmissible evidence under a theory of strict liability. Custom is relevant on the issue of negligence simply because it can be inferred that the industry has made some effort to weigh reasonably foreseeable dangers against utility, including the feasibility of safer alternatives. Industry custom is not conclusive, however, because price competition may lower standards of safety below acceptable levels. The same point can be made about product defect and custom. But a significant difference exists that gives rise to an argument that custom is inadmissible on a theory of strict liability. Danger in fact accompanying the use of a product, not reasonably foreseeable danger, is weighed against product utility to determine if a product is defectively designed. This objective test for danger distinguishes strict liability from negligence. Because custom is necessarily based on an industry's perception of the danger relative to the available technology rather than the danger in fact, the industry's value judgment cannot be regarded as equally reliable on the issue of product defect as on the issue of negligence. Because the foreseeability of the danger or its extent is often an issue at trial, however, the preferable approach is to admit the evidence for whatever value it has. Advocates can point out its unreliability on the issue of product defect, but the evidence is relevant to the extent that the danger may have been perceived by the industry.

C. State of the Art as Meaning the Feasibility of Minimizing Danger

The state of the art is frequently used in products liability litigation, and was so used in Boatland, to mean that which is feasible by way of minimizing danger. This concept is critically important in the products liability treatment of design hazards. Nebraska's "reform" act defined it as the best technology reasonably available at the time. When this usage is employed by the defendant, the contention is that, at the time the product was made and designed, the danger in fact of the product was not reducible by any feasible means, given the technical and scientific knowledge that was then reasonably available to the designer.

69. The Boatland court held that "custom" is distinguishable from 'state of the art.' The state of the art with respect to a particular product refers to the technological environment at the time of its manufacture. . . . Evidence of this nature is important in determining whether a safer design was feasible." 23 Tex. Sup. Ct. J. at 569. The inference is that evidence of industry custom is inadmissible.


71. Turner v. General Motors Corp., 584 S.W.2d 844, 847-51 (Tex. 1979).

72. 23 Tex. Sup. Ct. J. at 569.


74. NEB. REV. STAT. §§ 25-21, 182 (Supp. 1978); see Keeton, Torts, Annual Survey of Texas Law, 34 Sw. L. J. 1, 12 (1980); cf. U.S. DEP'T OF COMMERCE, DRAFT UNIFORM PRODUCT LIABILITY LAW § 106(A), 44 Fed. Reg. 2996, 2998 (1979) (defining "state of the art" as "the safety, technical, mechanical, and scientific knowledge in existence and reasonably feasible for use at the time of manufacture.").
The feasibility of minimizing danger is an issue in cases in which the danger in fact of a product does not outweigh the benefits, but the argument is made by the claimant that the danger does outweigh the utility because a feasible way existed to avoid much of the danger without seriously impairing the benefits. The contention may be either (1) that it was feasible to design a safer product when the product was designed and sold by utilizing technology then known and available or (2) that it became feasible to do so after the product was sold as a result of a scientific breakthrough or the acquisition of new knowledge or technical skill.

There is no known authority to support the position that a product is defectively designed solely because a subsequent scientific discovery has resulted in a safety improvement in later models. *Bell Helicopter Co. v. Bradshaw*, however, applies this rationale to the sale of used products. In *Bradshaw* a Bell helicopter crashed after its tail rotor blade broke during flight. The helicopter was equipped with the 102 rotor blade system, the ultimate in existing technology in 1961, when the helicopter was designed and sold. Several years after the sale of this helicopter, Bell developed a new and safer type of rotor blade system that had a much longer service life, was less susceptible to damage from misuse, and did not require the same frequency of inspections. Because the rotor blades were not interchangeable, use of the new and safer system on used helicopters required an alteration in design at a significant cost. After Bell had developed the new and safer rotor blade system, an authorized Bell service station purchased the used helicopter in 1969 and resold it without altering the system. The appellate court affirmed the trial court judgment against the defendant, citing as one reason the continued use of the old 102 system at the time it left the Bell service station. Because a safer rotor blade system was then available, the court found that the helicopter sold by Bell was defective as a matter of law. This holding requires a manufacturer of a product, such as an automobile, who discovers a way to improve the safety of his product either (1) to include in the price of the new product the cost of redesigning all used products that come into the possession of its dealers, or (2) to bear the costs of accidents that result from not redesigning such products.

Notwithstanding the holding in *Bradshaw*, the courts have universally held that the feasibility of designing a safer product must be determined on the basis of the level of pertinent scientific and technical knowledge existing at the time a product is designed. An alternative design that was

---

75. 594 S.W.2d 519 (Tex. Civ. App.—Corpus Christi 1979, writ ref'd n.r.e.).
76. *Id.* at 526-28.
77. *Id.*
78. *Id.* at 539.
79. *Id.* at 530-32. I am not commenting on the merits of *Bradshaw* and its various holdings primarily because I was counsel for Bell in its application for a writ of error.
not utilized is to be considered as feasible when a reasonable person would conclude that the magnitude of the danger that could have been avoided by such alternative design, by utilizing the scientific knowledge or technology reasonably available to the defendant, outweighed the financial costs of guarding against such dangers plus any impairment of the benefits and any new risk or danger created by the alternative design. The courts have repeatedly said that a manufacturer is not required to make a product as safe as would be technologically possible; however, technological impossibility of a safer design at the time a product is designed is conclusive that the product is not defective.\(^8\)

The courts have not always consistently allocated the burden of proof. In Barker v. Lull Engineering Co.\(^8\) the California Supreme Court held that a product is to be regarded as defectively designed in a particular aspect "if the plaintiff proves that the product's design proximately caused his injury and the defendant fails to prove . . . that on balance the benefits of the challenged design outweigh the risk of danger inherent in such design."\(^8\)

The great majority of courts, however, have placed the burden of proof on the claimant. To shift this burden to the defendant comes perilously close to holding the defendant liable for all harm proximately caused by design hazards, and arguably burdens those who make and sell products with an excessive allocation of the costs of accidents, especially at a time when there is so much effort to bring about legislative intervention.\(^8\)

In Boatland the trial court held that the failure to design the boat with a kill switch involved the issue of the feasibility of minimizing the risks.\(^8\)

The evidence on the part of the claimant that kill switches had been in use on racing boats was quite obviously relevant to the issue of the feasibility of using kill switches in all motor boats. It appears close to being convincing. The Texas Supreme Court, however, held that evidence regarding the unavailability of kill switches to the defendant was at least some evidence of lack of feasibility.\(^8\) In essence, it seems to be nothing more than evidence that motor boats are universally, and therefore customarily, designed without kill switches. As stated heretofore, however, custom is generally admissible as some evidence that the product's risk and utility have been properly weighed by the industry,\(^8\) and therefore perhaps some

---

81. Boatland of Houston, Inc. v. Bailey, 23 Tex. Sup. Ct. J. 566, 570 n.3 (July 31, 1980);
2 L. FURMER & M. FRIEDMAN, supra note 63, § 16A[4][i].
82. 20 Cal. 3d 413, 573 P.2d 443, 143 Cal. Rptr. 225 (1978).
83. 573 P.2d at 457-58, 143 Cal. Rptr. at 239-40.
85. 23 Tex. Sup. Ct. J. at 568.
86. Id. at 570. This opinion, insofar as it holds that certain evidence of the state of the art is admissible on the issue of defectiveness in product design cases, is not intended to suggest that such evidence constitutes an affirmative defense, as do misuse and assumption of the risk. Id. at 570 n.3; see Murray, The State of the Art Defense in Strict Products Liability, 57 MARQ. L. REV. 649, 651-52, 672-74 (1974).
87. See note 70 supra and accompanying text. On rehearing in Turner, two justices
evidence of lack of feasibility to use the kill switch on boats generally.\textsuperscript{88}

If, as I think was true, under the charge to the jury in \textit{Boatland} a product could be regarded as defective only if it was more dangerous than would have been contemplated by an ordinary consumer,\textsuperscript{89} then a jury finding that the product was not defective is understandable. The ordinary purchaser of a fishing boat does not expect anything safer than that which is customarily made and sold.\textsuperscript{90}

\textbf{D. State of the Art as That Which is Feasible at a Given Time}

State of the art is often used to describe the level of technology existing at a specific time and place.\textsuperscript{91} In a scientific, nonlegal context, state of the art refers to "the level of pertinent scientific, technical knowledge existing at the time," encompassing "all available data pertinent to the problem, regardless of its source," including information from other disciplines and other industries, or in research laboratories "so long as it is in published form and accessible to research workers through technical libraries or similar sources."\textsuperscript{92}

A product should be regarded as defectively designed for failure to use a safer design if it is economically feasible to do so on the basis of available scientific methods, whether or not such knowledge is discoverable in the exercise of utmost care. Under this approach, in determining the issue of product defect no consideration should be given to the impracticability of discovering what may have been a known scientific fact. Therefore, in \textit{Boatland}, the question is whether the feasibility of making boats with kill switches should be judged on the basis of all known scientific data or only on data knowable to manufacturers in the exercise of ordinary care. Feasibility of alternative designs appears to have been based upon the reasonable discoverability of the technological data.

took issue with the majority, their position being that the evidence that was admitted was only evidence of an industry practice. 584 S.W.2d at 853-55 (Campbell, J., concurring in part, dissenting in part). I agree that this is so, but I have previously taken the position that custom is admissible as some indication of the lack of feasibility to do better. I doubt if \textit{Boat/and} was tried to the jury on the proper theory in that it was probably submitted on the basis of a consumer contemplation test. This evidence would be quite convincing on the basis of such a test, because purchasers could not expect any more safety than they were generally receiving and because the danger was obvious.

\textsuperscript{88} See 23 Tex. Sup. Ct. J. at 568.


\textsuperscript{90} See Bruce v. Martin-Marietta Corp., 544 F.2d 442 (10th Cir. 1976), wherein the court said:

\begin{quote}
State-of-art evidence helps to determine the expectation of the ordinary consumer. A consumer would not expect a Model T to have the safety features which are incorporated in automobiles made today. The same expectation applies to airplanes. Plaintiffs have not shown that the ordinary consumer would expect a plane made in 1952 to have the safety features of one made in 1970.
\end{quote}

\textit{Id.} at 447.

\textsuperscript{91} See 1 L. FRUMER & M. FRIEDMAN, supra note 63, § 6.05[15] (1975).

\textsuperscript{92} Id.
E. State of the Art as Meaning the Technological and Economic Feasibility of Discovering a Risk or Hazard That Exists in a Product

There is a fourth and final way that the term state of the art is used to limit the liability of a producer. The fact that a hazard or risk related to the way a product is designed is not discoverable under existing technology in the exercise of utmost or reasonable care is often urged as an excuse. This reasoning is usually asserted by way of an affirmative defense rather than by way of asserting that the product is not defective. In fact, this defensive theory has not been limited to design hazards but has also been utilized for flaws or impurities in products, such as trichinosis in pork.93

The 1960s witnessed a confusing series of cases over the risk of contracting lung cancer from smoking cigarettes.94 Several issues were involved, one of which was the scientific undiscoverability of the risk or danger of contracting lung cancer from smoking.95 Scientific undiscoverability of a risk or hazard would seem to be completely irrelevant on the issue of whether a product is defective in the sense that its danger outweighs its benefits. If inability to discover a risk or hazard related to product design were a defense, then, as a substantive matter, negligence becomes the basis for recovery. The only practical difference between recovery on a negligence theory and recovery under strict liability is a change in the burden of proof. The defendant under so-called strict liability is required to prove both that reasonable or utmost care was exercised and that the risk was not discoverable.

The issue of the undiscoverability of the risk has occasionally arisen with respect to cases involving prescription drugs and vaccines, most recently in the controversy surrounding the synthetic hormone DES. In Crocker v. Winthrop Laboratories,96 a case involving an addictive pain killing drug, the Texas Supreme Court stated in a dictum that “some products, though manufactured as designed and intended, are so dangerous in fact that the manufacturer should be liable for resulting harm though he did not and could not have known of the danger at the time of marketing.”97 Likewise, Tinnerholm v. Parke, Davis & Co.98 held “that a drug

93. See note 52 supra and accompanying text.
94. See Green v. American Tobacco Co., 409 F.2d 1166 (5th Cir. 1969) (testimony on scientific knowledge was admissible); Ross v. Phillip Morris & Co., 328 F.2d 3 (8th Cir. 1964) (scientific unknowability is a defense); Lartigue v. R.J. Reynolds Tobacco Co., 317 F.2d 19 (5th Cir. 1963) (scientific unknowability regarded as a defense under Louisiana law); Pritchard v. Liggett & Myers Tobacco Co., 295 F.2d 292 (3d Cir. 1961) (scientific unknowability is not a defense if the risk or hazard in the product constituted a breach of warranty); Green v. American Tobacco Co., 154 So. 2d 169 (Fla. 1963) (scientific unknowability of the risk of lung cancer is irrelevant). See generally Wegman, Cigarettes and Health—A Legal Analysis, 51 CORNELL L.Q. 678 (1966).
95. See note 94 supra.
96. 514 S.W.2d 429 (Tex. 1974).
97. Id. at 432.
98. 411 F.2d 48 (2d Cir. 1969). Tinnerholm involved a four-in-one vaccine for whoop-
manufacturer warrants . . . that its products will not prove to be unreasonably dangerous."
Regardless of how this issue is ultimately resolved in Texas and elsewhere, there is nothing inconsistent about refusing to recognize undiscoversability of danger as a bar to liability while at the same time holding that "feasibility of alternative designs" must be based on the current state of technology at the time the product was made and designed.

IV. PRODUCTS LIABILITY AND THEORIES OF RECOVERY

In former survey articles on torts, I have observed that products liability law has become unnecessarily complex, primarily because recovery for a particular kind of loss by a particular type of person may often be obtained under three separate theories: negligence, strict liability in tort, and strict liability for breach of warranty. The first of these theories in point of time was the warranty theory, the second was negligence, and the third was strict liability in tort. My position has been that it is unnecessary and counterproductive to provide three theories of recovery for a particular kind of loss, such as personal injury, damage to tangible property other than the defective product itself, damage to the defective product itself, or intangible economic losses. Much of the complexity of products liability law could be eliminated by adopting, through court decisions and legislation, a single theory of recovery for each particular kind of loss as opposed to permitting a claimant to rely on two or three theories for the same loss. Of course, the courts cannot rescind constitutionally enacted legislation.

The legal obligations of an actor to one who is not a party to a contract, or an intended beneficiary of one of the parties to a contract, have historically been regarded as tortious in nature rather than as contractual. Preserving this distinction is important. To regard something as a contractual obligation that does not result from a promise or a representation made to a party to a bargaining transaction or such party's intended beneficiary confuses the bases on which the respective obligations rest. Contractual liability exists to prevent the frustration of expectations created by promises and representations made by one party in a bargaining transac-

99. Id. at 53.
100. Keeton, supra note 74, at 3-4; Keeton, supra note 11, at 1 n.2; Keeton, Torts, Annual Survey of Texas Law, 32 Sw. L.J. 1, 1 (1978).
104. Keeton, supra note 11, at 1.
105. Id. at 9-15.
tion to another. Warranty liability, including the implied warranty of merchantability, has historically been based on the notion that the seller made an implied representation that the product being sold was reasonably fit for its intended and perhaps reasonably foreseeable use. Tort liability on the other hand is based on the notion that an actor has certain duties to avoid harm that may result from the dangerousness of his conduct. These duties are completely independent of any promises and representations made to those with whom the actor might have negotiated a contract.

The mere fact that the framers of the Uniform Commercial Code provided that a purchaser, and one who can justifiably be regarded as an intended beneficiary, can recover for physical injuries as consequential damages when a purchaser has been frustrated in his expectations about the product does not mean that the Code must be interpreted to allow recovery on a warranty theory to everyone who is foreseeably injured by a defective product. In actuality, the remaining provisions of the Code indicate that the contrary was intended.

The Code explicitly provides that a buyer can recover as an element of his damages any losses resulting from personal injuries attributable to a defect that constitutes a breach of warranty. Such damages are regarded as consequential. Breach of warranty to the claimant, however, does not arise from the personal injury; rather, it results from the selling of a defective product, the direct damage measured by the difference between the value of what the claimant received and the value of what he bargained for.

The Uniform Commercial Code was drafted at a time when strict liability in tort had not fully developed. There was, therefore, a pressure to recognize some "users" as third-party beneficiaries, although they would not have been regarded as third-party beneficiaries or intended beneficiaries under sound principles of contract law. The framers responded by drafting several versions from which legislators could make a selection, but the framers did not intend to extend liability to all bystanders and all

106. A. CORBIN, CORBIN ON CONTRACTS 1-2 (1963). The main purpose of contract law is the realization of reasonable expectations induced by promises.
107. R. NORDSTROM, LAW OF SALES 235-36 (1970); see Krause v. Sud-Aviation, Soc. Nat. de Const. Aero., 301 F. Supp. 513, 524 (S.D.N.Y. 1968), aff'd, 413 F.2d 428 (2d Cir. 1969), in which the court stated: "A warranty is in essence a promise. We think it is reasonable for a passenger in an aircraft to proceed on the assumption that the manufacturer has made the plane, if not perfectly, at least in such a way that its ordinary use will not prove harmful."
108. W. PROSSER, supra note 3, § 1, at 4-7.
109. Id.
110. TEX. BUS. & COM. CODE ANN. § 2.318 (Tex. UCC) (Vernon 1968). This section was designed to prescribe who can sue if a product fails to conform to the warranty or warranties made. The purpose of this section is to give certain beneficiaries the benefit of the same warranty that the buyer received in the contract of sale.
111. TEX. BUS. & COM. CODE ANN. § 2.715 (Tex. UCC) (Vernon 1968).
112. Id. § 2.714.
113. See U.C.C. § 2-318.
users. The Texas Legislature chose to leave to the courts the issue of who other than the purchaser could recover on a warranty theory. The Texas Supreme Court was thus free to say that warranty liability extends to precisely the same persons as does strict liability in tort, to all those to whom harm is likely to occur from a defect. The supreme court so held in Garcia v. Texas Instruments, Inc., with which I respectfully disagree. The court could have held otherwise, and limited more narrowly contract liability and warranty liability to a purchaser and members of the purchaser’s household.

While moving cartons of acid the claimant in Garcia tripped and fell, breaking a glass container, and as a result, received severe acid burns. Approximately three years and eight months after the accident, Garcia instituted suit against the producer of the acid, alleging a breach of the implied warranty of merchantability and further alleging that as an employee of the purchaser, he was a third-party beneficiary. The trial court’s grant of summary judgment in favor of the defendant producer was affirmed by the court of civil appeals. The supreme court reversed and remanded, holding that “privity of contract is not a requirement for a Uniform Commercial Code implied warranty action for personal injuries.” The court ruled that Garcia’s recovery was governed entirely by the Uniform Commercial Code, including its four-year statute of limitations.

In Garcia the claimant was a user of the product, but the language of the court seems to indicate that a bystander could also recover on a warranty theory. Thus, the classes of persons who can sue for personal injuries under strict tort liability and warranty liability now seem to be coextensive in Texas. The claimant can select as a basis for recovery either warranty rules, and principles primarily developed to protect purchasers from intangible economic losses resulting from a frustration of expectations about the product, or strict liability rules, and principles primarily developed to guard against the dangerousness of the product. Does any injured person’s need to receive compensation justify the creation of this complexity by giving a claimant optional theories in order to overcome legislative roadblocks to recovery on one of the theories?

In support of the Texas Supreme Court’s decision in Garcia, it is arguable that if a purchaser and an intended beneficiary, such as a member of the purchaser’s household, can recover for personal injuries on a warranty theory, then there is no sound reason for not allowing a bystander, and also any user, to recover on a warranty theory. But the warranty theory is,
as stated earlier, a representational theory, based on the notion that the purchaser's expectations about the product were frustrated by a misrepresentation.

Although two theories of recovery are arguably available, it would be preferable if the Uniform Commercial Code were amended so as to eliminate personal injury recovery from the warranty action. By extending warranty liability to protect bystanders and all users, the Texas Supreme Court has in my judgment increased rather than lessened the complexity of litigation. Even if this result were justified in order to avoid the shorter statute of limitations applicable to tort actions, I doubt that the benefits gained outweigh the social costs that stem from the increasing complexity that necessarily results.