

## AUTOMOBILE DESIGN LIABILITY: *LARSEN v. GENERAL MOTORS* AND ITS AFTERMATH

Ever since the highly publicized writings of Ralph Nader in 1965 and the subsequent Congressional hearings in 1966, the issue of automobile safety has been a national concern. In the midst of this attention, a great deal of consideration has focused upon "second accident" injuries which occur when a victim is thrown against the interior of the passenger compartment after his vehicle has first collided with an external object.<sup>1</sup> These injuries often result from faulty automobile design.<sup>2</sup> While automobile manufacturers have been held liable for negligent construction which causes "first" accidents,<sup>3</sup> they have, until quite recently, avoided liability when the alleged defect was the automobile design.<sup>4</sup>

Those courts which do find a cause of action for faulty automobile design rely on traditional negligence principles. While plaintiffs have often asserted the developing theories of strict liability and implied warranty as alternative grounds for recovery, negligence claims have been the focal point of decisions.<sup>5</sup> This reliance on negligence principles may be an example of a judicial propensity to depend on

<sup>1</sup> An auto manufacturer's publication aptly describes the second collision:

What happens to the passengers inside the car? "A body in motion will continue in a straight line until something stops it." The passengers continue to move at the braking speed of 30 mph at impact until they are stopped by the instrument panel, the header bar or the steering wheel, or possibly the pavement via an open door. *This is the so-called second accident which actually produces the injuries.*

FORD MOTOR COMPANY, WHAT HAPPENED TO THE APPLE, cited in Katz, *Liability of Automobile Manufacturers for Unsafe Design of Passenger Cars*, 69 HARV. L. REV. 863, 868 (1956).

<sup>2</sup> See R. NADER, UNSAFE AT ANY SPEED: THE DESIGNED-IN DANGERS OF THE AMERICAN AUTOMOBILE (1965); Auerbach, *Defective Automobile Design—Tort Action as a Means of Forcing Improvement*, in TRAUMA AND THE AUTOMOBILE 35 (W. Curran & N. Chayet eds. 1966); Katz, *Liability of Automobile Manufacturers for Unsafe Design of Passenger Cars*, 69 HARV. L. REV. 863 (1956); Nader & Page, *Automobile Design and the Judicial Process*, 55 CAL. L. REV. 645 (1967) [hereinafter cited as Nader & Page].

<sup>3</sup> *E.g.*, MacPherson v. Buick Motor Co., 217 N.Y. 382, 111 N.E. 1050 (1916).

<sup>4</sup> Design defects are, by definition, common to all vehicles of a particular model. Construction defects are generally limited to an extremely small portion of a given model.

The earliest reported assertion of automobile design liability is *Foster v. Ford Motor Co.*, 139 Wash. 341, 246 P. 945 (1926). For later decisions dismissing assertions of negligent automobile design, see, *e.g.*, *Schemel v. General Motors Corp.*, 384 F.2d 802 (7th Cir. 1967); *Shumard v. General Motors Corp.*, 270 F. Supp. 311 (S.D. Ohio 1967); *Willis v. Chrysler Corp.*, 264 F. Supp. 1010 (S.D. Tex. 1967); *Hatch v. Ford Motor Co.*, 163 Cal. App. 2d 393, 329 P.2d 605 (1958).

<sup>5</sup> See, *e.g.*, *Larsen v. General Motors Corp.*, 391 F.2d 495 (1965). Plaintiff alleged negligence in design, negligent failure to warn of a latent defect, strict liability for defective manufacture of an inherently dangerous instrument, and breach of express and implied warranties of merchantability. The Eighth Circuit ruled on the negligence allegation, found contradictory indications in Michigan precedents imposing strict liability, and never reached the warranty counts. For full discussion of *Larsen*, see text accompanying notes 21-48 *infra*.

familiar theories to achieve reform.<sup>6</sup> But it also avoids the privity requirements of warranty actions<sup>7</sup> and skirts the unsettled question whether an automobile is an inherently dangerous instrument, a prerequisite of strict liability in some states.<sup>8</sup>

Within the context of framing the negligence issue, courts have generally considered the exercise of due care as both a question of law in which the court must determine whether the manufacturer has a duty to provide accident victims with reasonable protection from injury,<sup>9</sup> and a question of fact in which the jury must determine whether the duty was breached.<sup>10</sup> In determining the existence of a legal duty, the court assesses the foreseeability of injury, the gravity of the possible injury, and the cost of minimizing the risk of such injury.<sup>11</sup> If these three factors exist in the proper relationship, with the foreseeability of injury great, the extent of possible injury severe,<sup>12</sup> and the cost of minimizing the risk relatively low,<sup>13</sup> the court should find, as a matter of law, that the manufacturer owes a duty to consumers to design "a reasonably safe container within which to make the journey."<sup>14</sup>

The courts, however, have occasionally lost sight of these basic negligence principles when dealing with the question whether to impose a duty of safe design on the automobile manufacturers; this has caused considerable concern among commentators.<sup>15</sup> The loss of perspective has been prompted primarily by shrewd legal manipulation on the part of the industry's counsel. These lawyers have managed to persuade the courts that a plaintiff seeking recovery based on faulty design is in effect contending that the manufacturer is under a duty to design and construct a crashproof or foolproof car.<sup>16</sup> One frequently cited example

<sup>6</sup> See Keeton, *Creative Continuity in the Law of Torts*, 75 HARV. L. REV. 463 (1962).

<sup>7</sup> See, e.g., *Blitzstein v. Ford Motor Co.*, 288 F.2d 738 (5th Cir. 1961). See generally 1 R. HURSCHE, *AMERICAN LAW OF PRODUCTS LIABILITY* §§ 6:58-6:63 (1960).

Privity is seldom an obstacle in actions for negligent design. See, e.g., *Caprini v. Pittsburg & Weirton Bus Co.*, 216 F.2d 404 (3d Cir. 1954) (bus manufacturer liable to injured passengers for negligent design of brake system); *RESTATEMENT (SECOND) OF TORTS* § 395, comment i, at 330 (1965).

<sup>8</sup> See, e.g., *Larsen v. General Motors Corp.*, 391 F.2d 495, 506 (8th Cir. 1968).

<sup>9</sup> *Id.* at 498; see W. PROSSER, *THE LAW OF TORTS* § 36, at 207 (3d ed. 1964) [hereinafter cited as PROSSER].

<sup>10</sup> *Dyson v. General Motors Corp.*, 298 F. Supp. 1064, 1074 (E.D. Pa. 1969). See PROSSER, *supra* note 9, at 208.

<sup>11</sup> See *Conway v. O'Brien*, 111 F.2d 611, 612 (2d Cir. 1940), discussed in 2 F. HARPER & F. JAMES, *LAW OF TORTS* § 16.9, at 929 (1956).

<sup>12</sup> In 1965, 49,000 persons died in automobile accidents, and 1.8 million were injured. NATIONAL SAFETY COUNCIL, *ACCIDENT FACTS* 40 (1966). See O'Connell, *Taming the Automobile*, 58 NW. U.L. REV. 299, 348 (1963).

<sup>13</sup> For example, the average estimated cost of head restraints, which are required on models manufactured after January 1, 1969, is \$11.95 at wholesale, and \$16.66 at retail. U.S. BUREAU OF LABOR STATISTICS, *DEPT OF LABOR, WHOLESALE PRICES & PRICE INDEXES*, Jan. 1969, at 2.

<sup>14</sup> *Dyson v. General Motors Corp.*, 298 F. Supp. 1064, 1073 (E.D. Pa. 1969). For a discussion of *Dyson*, see text accompanying notes 53-66 *infra*.

<sup>15</sup> See authorities at note 2 *supra*.

<sup>16</sup> See, e.g., *Schumard v. General Motors Corp.*, 270 F. Supp. 311, 314 (S.D. Ohio 1967).

for the acceptance of this doctrine is the Seventh Circuit's decision in *Evans v. General Motors Corp.*<sup>17</sup> In that case plaintiff alleged that General Motors was negligent in designing the frame of its 1961 Chevrolet station wagon. The car was manufactured without the perimeter frame rails which were being used in many other cars. The complaint averred that because the X-type frame would not adequately protect occupants during a side-impact collision, defendant had created an unreasonable risk of serious injury.<sup>18</sup> The *Evans* court responded by stating that "[a] manufacturer is not under a duty to make his automobile accident-proof or foolproof . . . ." <sup>19</sup> Thus, by exaggerating the complaint of the plaintiff, defendant's counsel convinced the court to immunize the manufacturer from liability for an arguably dangerous auto design. The court held as a matter of law that the manufacturer's duty did not extend to the particular design precaution which the plaintiff in that case deemed to be reasonable.<sup>20</sup>

The Eighth Circuit, however, was not deceived by the industry's exaggerated view of the plaintiff's claims. In *Larsen v. General Motors Corp.*,<sup>21</sup> the steering column of the plaintiff's Corvaire protruded beyond the forward surface of the front tires. The plaintiff complained that the rearward displacement of the steering shaft in a head-on collision was much greater on the Corvaire than on cars designed to protect against such displacement. General Motors relied on the *Evans* "crashproof" argument in order to rebut this contention. Whereas the *Larsen* court agreed that it was beyond the state of the art to produce a crashworthy car, they stated that such an argument was irrelevant.<sup>22</sup> The court was concerned instead with the manufacturer's ability to foresee that many of the cars which it produced would be involved in accidents, and with whether it was possible to design vehicles which would not increase the risk of serious injuries resulting from these accidents.<sup>23</sup> The court, after dismissing the "crashproof" concept and framing the issue as stated above, concluded:

We perceive of no sound reason, either in logic or experience, nor any command in precedent, why the manufacturer should not be held to a reasonable duty of care in the design of its vehicle consonant with the state of the art to minimize the effect of accidents.<sup>24</sup>

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<sup>17</sup> 359 F.2d 822 (7th Cir. 1966), *cert. denied*, 385 U.S. 836 (1966).

<sup>18</sup> *Id.* at 824.

<sup>19</sup> *Id.*

<sup>20</sup> *Id.* at 825. Evidence at trial demonstrated that defendant had previously used a perimeter or "ladder" frame with side rails and that other models were advertised as having safer frames. Berger, *Automobile Safety Design Problems*, in AMERICAN TRIAL LAWYERS ASSOCIATION TWENTIETH ANNUAL CONVENTION 1966, at 705, 706 (1967). See Nader, *Automobile Design Hazards*, in 16 AM. JUR. PROOF OF FACTS 74-90 (1965).

<sup>21</sup> 391 F.2d 495 (8th Cir. 1968), *rev'd* 274 F. Supp. 461 (D. Minn. 1967).

<sup>22</sup> *Id.* at 502.

<sup>23</sup> *Id.* at 502-03.

<sup>24</sup> *Id.* at 503.

A second tactic employed to prevent the imposition of a duty on automobile manufacturers is the utilization of the doctrine of abnormal use. This ploy relies on the well-established principle that a manufacturer's liability for negligence is restricted to situations where his product is used "for a purpose for which the manufacturer should expect it to be used."<sup>25</sup> The courts then are faced with the difficult decision whether the unintentional misuse of an automobile is in fact so unintentional and unforeseeable that the case should be taken from the jury. Again, the *Evans* court presents an excellent illustration of the judicial acceptance of this argument. The court there held that the plaintiff had failed to state a cause of action because the injury asserted was not caused by the intended use of the automobile:

The intended purpose of an automobile does not include its participation in collisions with other objects, despite the manufacturer's ability to foresee the possibility that such collisions may occur.<sup>26</sup>

It should be noted that the "intended use and purpose" limitation on manufacturer liability applies only to conscious utilization of the product by the injured operator.<sup>27</sup> However, few courts have recognized the distinction between intentional and unintentional misuse; most have insisted on following the *Evans* logic, thereby holding that the manufacturer has no duty to design his automobile in order to protect against second accidents.<sup>28</sup>

The *Larsen* opinion offers a well-reasoned response to this argument. *Larsen* stated that because these accidents are foreseeable, the manufacturer should protect against them.

While automobiles are not made for the purpose of colliding with each other, a frequent and inevitable contingency of normal automobile use will result in collisions and injury producing impacts. . . . Where the injuries or enhanced injuries are due to the manufacturer's failure to use reasonable care to avoid subjecting the user of its products to an unreasonable risk of injury, general negligence principles should be applicable. The sole function of an automobile is not just to provide a means of transportation, it is to provide a means of safe transportation or as safe as is reasonably possible under the present state of the art.<sup>29</sup>

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<sup>25</sup> RESTATEMENT (SECOND) OF TORTS § 395 (1965). *But see* RESTATEMENT (SECOND) OF TORTS § 395, comment *k* at 331 stating: "The manufacturer may, however, reasonably anticipate other uses than the one for which the chattel is primarily intended."

<sup>26</sup> 359 F.2d at 825.

<sup>27</sup> *Nader & Page* 662.

<sup>28</sup> *See, e.g., Schemel v. General Motors Corp.*, 384 F.2d 802 (7th Cir. 1967); *Shumard v. General Motors Corp.*, 270 F. Supp. 311 (S.D. Ohio 1967); *Willis v. Chrysler Corp.*, 264 F. Supp. 1010 (S.D. Tex. 1967).

<sup>29</sup> 391 F.2d at 502.

The court also pointed out the irony that while members of the industry during Congressional hearings publicly acknowledged their responsibility to build safer cars, in the less public forum of the courtroom they contended that they owed no legal duty to the public to design a reasonably safe car.<sup>30</sup>

Related to the question of the manufacturer's ability to foresee second accident injuries are the defenses of contributory negligence and assumption of risk. Contributory negligence often constitutes a bar to recovery for second accident injuries if the plaintiff was not in the exercise of ordinary care at the time of the accident. But, as a matter of sound policy, the plaintiff's contributory negligence should not absolve the manufacturer of a duty of safe design<sup>31</sup> nor immunize him from all liability. The plaintiff's negligence precludes his recovery for certain injuries, but should not absolve the manufacturer of liability for injuries which are the direct result of his failure, in light of foreseeable auto collisions, to exercise due care in compartmental design. Damages, then, should be apportioned so that the manufacturer whose negligent design actually produced the second accident injuries would be liable only for the harm he caused.

While there is necessarily some element of risk involved in the operation of any motor vehicle, it does not follow that the auto consumer assumes risks which are the direct result of the manufacturer's faulty design. Because the average driver does not understand the relationship between auto design and the potential for injury, he should not be held to have assumed risks of which he was unaware.<sup>32</sup>

Judicial hesitancy to hold automobile manufacturers liable for negligent design is attributable in part to misgivings about the jury's judgment on the issues of damage apportionment and the expert's standard of care. Where the negligent design did not cause the first accident, but did contribute to the second accident injuries, damages must be apportioned to limit the liability of the auto manufacturer to the harm he actually caused. The difficulty in precisely apportioning damages should not, however, absolve the manufacturer of all liability. The court in *Larsen* resolved this problem, stating:

Any design defect not causing the accident would not subject the manufacturer to liability for the entire damage, but the manufacturer should be liable for that portion of the

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<sup>30</sup> *Id.* at 504 n.7.

<sup>31</sup> RESTATEMENT (SECOND) OF TORTS § 395 (1965) suggests that an auto manufacturer owes a duty to avoid creating an unreasonable risk to the negligent driver.

An act of omission may be negligent if the actor realizes or should realize that it involves an unreasonable risk of harm to another through the negligent or reckless conduct of the other or a third person.

Comment b to § 395 warns, however, that while the original actor may have been negligent in failing to meet such a duty, the injured plaintiff may be precluded from recovery by his own negligent conduct.

<sup>32</sup> Katz, *Liability of Automobile Manufacturers for Unsafe Design of Passenger Cars*, *supra* note 2, at 872.

damage or injury caused by the defective design over and above the damage or injury that probably would have occurred as a result of the impact or collision absent the defective design. The manufacturer argues that this is difficult to assess. This is no persuasive answer and, even if difficult, there is no reason to abandon the injured party to his dismal fate as a traffic statistic, when the manufacturer owed, at least, a common law duty of reasonable care in the design and construction of its product. The obstacles of apportionment are not insurmountable. It is done with regularity in those jurisdictions applying comparative negligence statutes and in other factual situations such as condemnation cases, where in some jurisdictions the jury must assess the value of the land before and after a taking and then assess a special benefit accruing to the remaining property of the condemnee.<sup>33</sup>

This argument is convincing. The difficulty of apportionment, in this instance, is an unpersuasive reason for taking cases from the jury. To do so abandons the injured plaintiff without a critical evaluation of the manufacturer's conduct.

Complementing the apportionment problem is the concern on the part of the judiciary that juries are not appropriate arbiters of design decisions made by engineering experts. However, this argument also defies traditional legal theory. It is not a novel idea to require a jury to pass on the standard of care exercised by experts.<sup>34</sup> Two highway safety advocates have recently observed:

Perhaps the courts are willing to affix responsibility to individual experts, but have difficulty where the expert decision is hallowed by a brand name and a corporate shield. The mere technical nature of an issue does not justify its exemption from the public judgment expressed by the judicial process. In areas such as medical malpractice, juries often must resolve questions of a complicated nature. In fact, the issues arising in auto design design cases are often well within the grasp of laymen.<sup>35</sup>

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<sup>33</sup> Larsen v. General Motors Corp., 391 F.2d 495, 503 (1968).

<sup>34</sup> See, e.g., Bayshore Development Co. v. Bondfoey, 75 Fla. 455, 78 So. 507 (1918) (holding liability of architect for negligent design was an issue for the jury); Tremblay v. Kimball, 107 Me. 53, 77 A. 405 (1910) (affirming jury verdict of liability of pharmacist for negligent filling of a prescription); Ultramares Corp. v. Touche, 255 N.Y. 170, 174 N.E. 441 (1931) (holding liability of public accountants for negligent auditing procedures was an issue for the jury); Guaranty Abstract Co. v. Denman, 209 S.W.2d 213 (Tex. Civ. App. 1948) (affirming jury verdict of liability of professional abstractor for negligent drafting of chain of title); McLeod v. Grant County School Dist., 42 Wash. 2d 316, 255 P.2d 360 (1953) (holding liability of school district for alleged failure adequately to supervise students' recess was an issue for the jury).

<sup>35</sup> Nader & Page 663.

Another factor inhibiting a more aggressive attitude on the part of the courts is the realization that a judgment for a particular plaintiff may subject the defendant to other claims so numerous and costly as to produce serious economic consequences for both the individual manufacturer and the industry as a whole.<sup>36</sup> However, this argument falls by an extension of its own logic. It implies that the greater the risk created, the more desirable the immunity from liability.<sup>37</sup> The cost of calling back defective automobiles does not deter automobile manufacturers from assuming this responsibility for unsafe construction. Therefore, it should not deter the courts from imposing liability when actual harm has resulted from faulty design.

The final, and probably the most compelling, reason for refusing to hold manufacturers liable for unsafe design was articulated by the *Evans* court:

Perhaps it would be desirable to require manufacturers to construct automobiles in which it would be safe to collide, but that would be a legislative function, not an aspect of judicial interpretation of existing law.<sup>38</sup>

This argument is now even more persuasive due to the passage of the National Traffic and Motor Vehicle Safety Act of 1966.<sup>39</sup> The Act requires that the Secretary of Transportation promulgate safety standards for the design of new models in order to protect the automobile consumer against unreasonable risk of accident or injury. Standards have been developed since 1967 and have been incorporated in recent models.<sup>40</sup>

There are several obvious advantages to legislative, rather than judicial, establishment of minimum design standards. Independent research can give a regulatory body a better understanding of design complexities than judges and juries are able to achieve through expert testimony. Standards promulgated by an administrative body also provide a measure of uniformity and certainty with regard to future application. These qualities are difficult to achieve when individual courts establish standards in the sporadic nature that the case-by-case approach requires.

However, in practice, the standards developed by the Department of Transportation have not provided a comprehensive approach to highway safety. Many commentators have complained that the Department is still too much the captive of the industry and has not incorporated

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<sup>36</sup> In 1967 Ralph Nader noted: "There is simply no data available from the manufacturers from which to ascertain the financial impact which design suits have made on the industry." *Id.* at 673.

<sup>37</sup> *Id.* at 664.

<sup>38</sup> 359 F.2d 822, 824 (1966).

<sup>39</sup> 15 U.S.C. §§ 1381-1425 (Supp. III, 1968).

<sup>40</sup> For example, head restraints, seat belts, and side marker lamps.

changes that have long been considered necessary.<sup>41</sup> The new standards that are incorporated apply only to models produced after announcement, and, in many instances, there is a substantial lag between the date of promulgation and the date when they become mandatory.<sup>42</sup> In addition, all vehicles manufactured before the development of these regulations are unaffected by their promulgation.

Furthermore, it is clear that Congress did not intend the Department regulations to be all-inclusive. Section 108(c) of the Act specifies that "[c]ompliance with any Federal motor vehicle safety standard issued under this subchapter does not exempt any person from any liability under common law."<sup>43</sup> The report of the Senate Committee on Commerce unequivocally sets forth the legislative intent not to preempt judicial development:

The Federal minimum safety standards need not be interpreted as restricting State common law standard of care. Compliance with such standards would thus not necessarily shield any person from product liability at common law.<sup>44</sup>

Courts therefore should be free to determine what constitutes due care with respect to design modifications not covered by the federal regulation. The *Larsen* court adopted such an approach by handling the legislative preemption problem in the following manner:

It is apparent that the National Safety Act is intended to be supplementary of and in addition to the common law of negligence and product liability. The common law is not sterile or rigid and serves the best interests of society by adapting standards of conduct and responsibility that fairly meet the emerging and developing needs of our time. The common law standard of a duty to use reasonable care in light of all the circumstances can at least serve the needs of our society until the legislature imposes higher standards or the courts expand the doctrine of strict liability for tort. The Act is a salutary step in this direction and not an exemption from common law liability.<sup>45</sup>

It should also be noted that the automobile industry's engineers, physicians, and statisticians are in an excellent position to develop practicable design modifications in order to protect manufacturers from

<sup>41</sup> See, e.g., Anderson, *Transportation Dept. Is Serving as Agent of the Auto Industry*, *The Evening Bulletin* (Philadelphia), Aug. 20, 1969, at 96, col. 6; *CONSUMER REPORTS*, April, 1969, at 182-83.

<sup>42</sup> See, e.g., Campbell, *Twelve Years of Automotive Crash Injury Research*, in *TRAUMA AND THE AUTOMOBILE*, 1 (W. Curran & N. Chayet eds. 1966). For a general bibliography, see ARTHUR D. LITTLE, INC., *THE STATE OF THE ART OF TRAFFIC SAFETY* 297-624 (1966).

<sup>43</sup> 15 U.S.C. § 1397(c) (Supp. III, 1968).

<sup>44</sup> S. REP. NO. 1301, 89th Cong., 1st Sess. 12 (1966). For similar indications of legislative intent in the House, see H.R. REP. NO. 1776, 89th Cong., 2d Sess. 24 (1966).

<sup>45</sup> 391 F.2d at 506.

liability. Stimulated by *MacPherson v. Buick Motor Co.*,<sup>46</sup> automakers have devised methods of production and inspection which have made construction defects relatively rare.<sup>47</sup> However, given the courts' predisposition not to hold manufacturers liable for negligent design, the industry has had little incentive to make design modifications beyond those specifically required by the Department.<sup>48</sup> Considering the industry's research capabilities, it would be an inefficient allocation of testing resources to shift all design development to a single government agency.

*Larsen*, then, stands as a landmark in automotive design liability, refuting many of the shibboleths by which liability was previously avoided. Two recent cases relying heavily on *Larsen* establish a trend which may forecast a new judicial outlook towards the responsibility of automobile manufacturers to design for safety. *Mickle v. Blackmon*,<sup>49</sup> decided in 1969 by the Supreme Court of South Carolina, was the first of these cases. In that case, the plaintiff was a passenger in a 1949 Ford which collided with a second car. The impact of the collision threw the plaintiff toward the vehicle's gear shift which protruded two inches beyond the rim of the steering wheel. A small plastic knob protected the end of the tapered lever that pointed toward the passenger seat. The ultraviolet rays of sunlight had caused the plastic knob to deteriorate, thereby destroying the force distributing quality of the knob.<sup>50</sup> The protective ball shattered on contact with the plaintiff's body, impaling her on the spear-like lever and causing permanent paralysis of the lower torso. Plaintiff charged, *inter alia*, that the design of the gearshift lever presented an unreasonable risk of injury if not adequately guarded and that Ford had been negligent in its choice of plastic for the protective knob. At trial, the jury brought in a verdict against Ford for \$312,000 actual damages. The trial court granted Ford's motion for judgment notwithstanding the verdict and the plaintiff appealed. The South Carolina Supreme Court rejected Ford's con-

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<sup>46</sup> 217 N.Y. 382, 111 N.E. 1050 (1916).

<sup>47</sup> Katz, *Liability of Automobile Manufacturers for Unsafe Design of Passenger Cars*, *supra* note 2, at 864.

<sup>48</sup> There is evidence to suggest that while General Motors' counsel argued in *Evans* that manufacturers had no duty to design automobiles to protect passengers against side-impact, GM had by that time approved installation of side strengthening rails in 1969 and 1970 models. Telephone conversation with Elwood S. Levy, Sept. 19, 1969. (Mr. Levy was plaintiff's counsel in *Dyson*.)

<sup>49</sup> 252 S.C. 202, 166 S.E.2d 173 (1969).

<sup>50</sup> Tennite butyrate, the plastic material from which Ford made the hollow knob, was available in a wide range of colors, including black. Ford chose to use white tennite butyrate for the knobs in its 1949 model despite the fact that carbon, the coloring agent used to produce black plastic, was highly resistant to ultraviolet rays. Hairline cracks developed in the white balls, but black plastic Ford used in its 1950 and later models never developed these cracks. Ford admitted knowing in 1948 that white plastic would soon deteriorate in sunlight, but disclaimed use of the ball as a safety device. *Id.* at 234-36, 166 S.E.2d at 187-88.

The court found that the advanced age of the ball was coincidental to its failure rather than the cause of it, and that the knob would have shattered much earlier if subjected to a comparable impact.

tention, which was primarily based on the *Evans* case, that it owed no duty in the design and composition of its product to minimize the collision connected hazards caused by the design of the passenger compartment. The court said:

[A]n automobile manufacturer knows with certainty that many users of his product will be involved in collisions, and that the incidence and extent of the injury to them will frequently be determined by the placement, design and construction of such interior components as shafts, levers, knobs, handles and others. By ordinary negligence standards, a known risk of harm raises a duty of commensurate care. We perceive no reason in logic or law why an automobile manufacturer should be exempt from this duty.<sup>51</sup>

The *Mickle* court, relying heavily on *Larsen*, refused to be misled by defendant's counsel. A clear and reasonable formulation of the issue was presented. On remand, jury instructions, premised on the manufacturer's duty to take design precautions, will seek a determination "whether the collision risk to which the [plaintiff] was subjected by the design and composition of the gearshift lever assembly was unreasonable."<sup>52</sup>

The second case was decided by the District Court for the Eastern District of Pennsylvania. In *Dyson v. General Motors Corp.*,<sup>53</sup> the plaintiff was a passenger in a 1965 Buick two door hardtop when the vehicle left the road and rolled onto its roof. The roof collapsed under the weight of the overturned car. Plaintiff conceded that the allegedly defective roof design<sup>54</sup> did not cause the accident, but contended that the severity of her injuries was greatly increased by the inability of the roof to support, even partially, the weight of the vehicle. General Motors, again relying primarily on the theory of the *Evans* case, argued that it was under no duty to avoid the creation of unreasonable risk of second collision injuries. The district court denied the manufacturer's motion for judgment on the pleadings,<sup>55</sup> stating:

[I]t is the obligation of an automobile manufacturer to provide more than merely a movable platform capable of trans-

<sup>51</sup> *Id.* at 230, 166 S.E.2d at 185.

<sup>52</sup> *Id.* at 243, 166 S.E.2d at 192.

<sup>53</sup> 298 F. Supp. 1064 (E.D. Pa. 1969).

<sup>54</sup> To create the 1965 Electra two door hardtop, Buick removed from its sedan design the center door posts, reduced door frame specifications from full-frame to half-frame, and changed the angle of the roof supports. All earlier Electras had full frame doors and center posts. 298 F. Supp. at 1073.

<sup>55</sup> See FED. R. CIV. P. 12(c). Because defendant argued that since it had no duty there could be no actionable negligence, the court's ruling established as a matter of law defendant's duty of safe design and held for jury determination the question whether defendant met this obligation. "Questions of law which are settled by the decision of a motion for judgment on the pleadings cannot be raised again at a later stage of the action." 1A W. BARRON & A. HOLTZOFF, FEDERAL PRACTICE AND PROCEDURE § 358, at 393 (Wright ed. 1960).

porting passengers from one point to another. The passengers must be provided with a reasonably safe container within which to make the journey. The roof is part of such container, and . . . should provide more than merely protection against the rain.<sup>56</sup>

*Dyson*, too, is indebted to *Larsen* for its rationale.

Aside from reaffirming the *Larsen* approach, *Dyson* and *Mickle* also reinforce a view that courts have vital functions to perform in the field of automobile safety. In both cases the courts were dealing with automobiles produced before 1966, and whose safety standards were therefore not prescribed by the 1966 Act. While many injuries may be lessened by post-1965 legislation and administrative action, only courts can grant redress for injuries aggravated by pre-1966 design negligence. But beyond granting compensation for injuries, courts can also supplement legislative or administrative action in setting safety standards in another manner. *Dyson*, for example, involved a design feature which the Department of Transportation could not have covered at the time of production (because the year was pre-1966), and did not cover thereafter.<sup>57</sup> Without deciding whether or not the Department should have established such standards, nevertheless it is clear there was a need for them. Automotive safety experts have advocated stronger roof supports for many years.<sup>58</sup> The Safety Administration Committee of the Automobile Manufacturer's Association had even suggested that the Department promulgate "[r]equirements for passenger compartment integrity during typical impact conditions, including rollover."<sup>59</sup> The applicability of established tort doctrine and the demonstrated availability of feasible, safer alternatives provide all that is needed for courts to participate concurrently with legislative-administrative action in the fashioning of design standards.

However, a closer look at the language in *Dyson* uncovers an ambiguity that may undercut the role courts can play in supplementing the 1966 Act, as well as the whole approach sparked by the Eighth Circuit in *Larsen*. The car in *Dyson* was a two door hardtop. Counsel for General Motors argued that to hold defendants liable would amount to a declaration that "soft-top" convertibles are unreasonable per se since they are obviously not as safe as the sedan which has the added support of the center posts.<sup>60</sup> The court's attempt to answer this contention is ambiguous:

<sup>56</sup> 298 F. Supp. at 1073.

<sup>57</sup> The Department has yet to require integrated roof supports on hardtop models or to promulgate structural requirements for roof support columns, although standards for roof strength have been under consideration since 1967. See 32 Fed. Reg. 14281 (Oct. 14, 1967).

<sup>58</sup> For example, the "Survival Car I," a prototype safety vehicle built jointly by the Liberty Mutual Insurance Co. and Cornell Aeronautical Laboratory in 1957, contained integrated roll-over bars above the front and back seats.

<sup>59</sup> *Hearings on H.R. 13228 Before the House Comm. on Interstate and Foreign Commerce*, 89th Cong., 2d Sess. 345 (1966).

<sup>60</sup> 298 F. Supp. at 1073.

[T]he manufacturer can be expected to provide a convertible which is as safe as it reasonably can be made, and which is not appreciably less safe than other convertibles. So, too, in the present case, the manufacturer was not necessarily under an obligation to provide a hardtop model which would be as resistant to roll-over damage as a four door sedan; but the defendant was required, in my view, to provide a hardtop model which was a reasonably safe version of such model, and *which was not substantially less safe than other hardtop models*.<sup>61</sup>

One interpretation of this passage is that a determination on the part of the court that General Motors's hardtop model was not substantially less safe than Ford's or Chrysler's would exempt General Motors from liability.

Not only does this interpretation substantially increase the burden of proof upon the plaintiff, but it also contradicts language in *Larsen* and *Mickle*. These cases do not suggest a comparative standard of care based on prevailing practices within the automobile industry. Rather, they apply an objective standard of reasonableness based on design capabilities and economic practicalities. In order to build a reasonably safe car, the manufacturer must take reasonable measures not only to prevent accidents, but also to protect passengers when accidents actually occur. Measures necessary to achieve this objective must be adopted to the extent that they are reasonable, given the present state of the art and their economic feasibility.

The problem with the industry standard which may be implied in *Dyson* is that it presents the manufacturers with another semantic game by which they can avoid due care in the design of their product. Instead of encouraging manufacturers to develop new standards that are economically and technically feasible, this interpretation would only require that they keep pace with the standards of the other manufacturers. The possibility of a conspiratorial stand-still among the three primary manufacturers could nullify any motivation that either the 1966 Act<sup>62</sup> or any concurrent thrust of the common law might be able to inspire. In effect, if the comparative standard is adopted, the industry could do away with ploys of overstating or misstating the negligence issue, simply compare their design to that of other manufacturers, and be comforted with the knowledge that they too are doing very little to protect the automobile consumer.

Admittedly, the dilemma presented to the automobile industry is a troubling one. Although it is tempting to suggest that automakers be compelled to adopt only the highest safety standards, this might require consumers to forego other values, such as style and economy. There

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<sup>61</sup> *Id.* at 1073-74 (emphasis added).

<sup>62</sup> This possible dampening effect is based on the alleged influence of the auto industry on the Department of Transportation. Note 41 *supra* & accompanying text.

is, however, a plausible interpretation of the *Dyson* case that would resolve the dilemma. The court might well be saying that each model must be designed in order to make it as safe as the state of the art and financial limitations permit. Thus, any language within the opinion which indicates that a comparison with other models is necessary is, in effect, only referring to such a comparison as inconclusive evidence of a reasonable standard. Expert testimony could be used in order to examine whether the entire industry was dragging its feet in a particular design area.<sup>63</sup>

Implicit in this latter interpretation of *Dyson* is the belief that the consumer assumes the risks inherent in those models which are less safe than the most crashworthy model. However, as mentioned earlier, only the more sophisticated car buyer is able to relate design to some degree of protection in collisions.<sup>64</sup> Therefore a requirement consistent with such a reading should be that insofar as the model varies from the safest car that the manufacturer produces, the consumer must be forewarned.<sup>65</sup> For example, it should be pointed out to the potential buyer of a two door hardtop that, due to certain stylistic modifications, it is not as safe in a roll-over accident as the four door sedan. If the consumer acknowledges this warning, and, in fact, the particular model is as safe as could reasonably be expected, the consumer will be considered to have assumed the risks inherent in the model and the automobile manufacturer will be exempt from liability to that extent.<sup>66</sup>

The use of an objective rather than a comparative standard for each model and the issuance of a warning to the consumer that certain models necessarily sacrifice certain safety standards to style or economy would provide considerable protection for both the consumer and the industry.

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What usually is done may be evidence of what ought to be done, but what ought to be done is fixed by a standard of reasonable prudence, whether it is usually complied with or not.

*Texas & Pac. Ry. v. Behymen*, 189 U.S. 468, 470 (1903) (Holmes, J.). See also Learned Hand's statement in *T. J. Hooper*, 60 F.2d 737, 740 (2d Cir. 1932), that "a whole calling may have unduly lagged in the adoption of new and available devices."

There is evidence to suggest that at the remanded trial of *Larsen v. General Motors Corp.* the trial court charged the jury that the applicable standard of care was either an industry set standard or a "community standard." Bowman, *Defense of an Auto Design Negligence Case*, 10 FOR THE DEFENSE No. 5 (May, 1969). Compliance with the "state of the art" is not conclusive of due care. For this reason the trial court's instructions may well amount to reversible error.

<sup>64</sup> Text at note 32 *supra*.

<sup>65</sup> While the exact content and detail of this warning has not as yet been determined, it would not place an undue burden on the manufacturer to develop a reasonably concise summary of safety design variations of a given model. For a general discussion of the duty to warn of a product-connected danger, see 1 R. HURSCH, *supra* note 7, at §§ 2:28-2:57.

<sup>66</sup> Unless the industry were to undertake blanket warnings to the general public of safety design differences among their various models, their warnings to the initial purchaser should not absolve them of liability to injured passengers or secondary buyers. See RESTATEMENT (SECOND) OF TORTS § 388, comment *n* at 307-08 (1965).

## CONCLUSION

In the past, the automobile industry has avoided liability for negligent design of automobiles which led to second accident injuries. However, the Eighth Circuit's opinion in *Larsen*<sup>67</sup> marks the beginning of a new trend of decisions. The court there properly stated the negligence issue, holding the industry to a duty to design cars which do not create an unreasonable risk of injury in a collision. This duty should be measured by the estimate by design experts of the safety features the industry can produce, and by the practicability of these features.

Courts can, as *Mickle* and *Dyson* demonstrate, play an important role in the development of the standards by which this duty will be measured. Although imprecise language in *Dyson* could be read otherwise, manufacturers should be held to a duty to make every model as reasonably safe as possible, and a concurrent duty to forewarn consumers about the degree to which a specific model varies from the safest model. Such an interpretation will provide adequate safeguards for both the consumer and the industry as a whole.

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<sup>67</sup> At the remanded trial of *Larsen*, General Motors argued to the jury that (1) the Corvair's steering assembly conformed to the state of the art in 1963 and was used in other popular models; (2) the plaintiff failed to establish that his injuries were increased by the rearward displacement of the steering column; and (3) plaintiff's failure to wear seat belts contributed to his injury to such extent that it barred recovery in whole or in part. After three weeks of trial and several hours of jury deliberation (in the courtroom because the jury room was too small to hold all of the General Motors exhibits) the jury returned a unanimous verdict for the defendant. Bowman, *Defense of an Auto Design Negligence Case*, *supra* note 63.