Trevor Pitts and Rebekah Pitts, a married couple, appellants, and Haco Electric Company, Incorporated, a Nebraska corporation, appellee, v. Genie Industries, Inc., a Washington corporation, appellee.

921 N.W.2d 597

Filed January 18, 2019. No. S-18-219.

1. **Summary Judgment: Appeal and Error.** An appellate court reviews the district court's grant of summary judgment de novo, viewing the record in the light most favorable to the nonmoving party and drawing all reasonable inferences in that party's favor.
2. **Trial: Expert Witnesses: Appeal and Error.** An appellate court reviews de novo whether the trial court applied the correct legal standards for admitting an expert's testimony. But a trial court's ruling in receiving or excluding an expert's testimony which is otherwise relevant will be reversed only when there has been an abuse of discretion.
3. **Judges: Words and Phrases.** A judicial abuse of discretion exists when a judge, within the effective limits of authorized judicial power, elects to act or refrain from acting, but the selected option results in a decision which is untenable and unfairly deprives a litigant of a substantial right or a just result in matters submitted for disposition through a judicial system.
4. **Summary Judgment: Appeal and Error.** An appellate court will affirm a lower court's grant of summary judgment if the pleadings and admitted evidence show that there is no genuine issue as to any material facts or as to the ultimate inferences that may be drawn from those facts and that the moving party is entitled to judgment as a matter of law. In the summary judgment context, a fact is material only if it would affect the outcome of the case.
5. **Products Liability: Actions: Negligence.** In a products liability cause of action based on strict liability in tort, the central question involves

the quality of the manufactured product, that is, whether the product was unreasonably dangerous.

6. **Products Liability: Words and Phrases.** "Unreasonably dangerous" means that the product has a propensity for causing physical harm beyond that which could be contemplated by the ordinary user or consumer.
7. **Products Liability: Proof.** In a products liability action based on defect, a plaintiff must prove by a preponderance of the evidence that (1) the defendant placed the product on the market for use and knew, or in the exercise of reasonable care should have known, that the product would be used without inspection for defects; (2) the product was in a defective condition when it was placed on the market and left the defendant's possession; (3) the defect is the proximate or a proximately contributing cause of the plaintiff's injury sustained while the product was being used in a way and for the general purpose for which it was designed and intended; (4) the defect, if existent, rendered the product unreasonably dangerous and unsafe for its intended use; and (5) the plaintiff's damages were a direct and proximate result of the alleged defect.
8. **Products Liability: Negligence: Proximate Cause: Proof.** To establish proximate cause in a products liability action, the plaintiff must meet three basic requirements: (1) Without the defect, the injury would not have occurred, commonly known as the "but for" rule or "cause in fact"; (2) the injury was a natural and probable result of the defect; and (3) there was no efficient intervening cause.
9. **Expert Witnesses: Testimony.** Findings of fact as to technical matters beyond the scope of ordinary experience are not warranted in the absence of expert testimony supporting such findings.
10. **Trial: Expert Witnesses.** With respect to the requirement of expert testimony, the test is whether the particular issue can be determined from the evidence presented and the common knowledge and usual experience of the fact finders.
11. **Summary Judgment.** Conclusions based on guess, speculation, conjecture, or a choice of possibilities do not create material issues of fact for purposes of summary judgment.
12. **Rules of Evidence: Expert Witnesses.** When a court is faced with a decision regarding the admissibility of expert opinion evidence, the trial judge must determine at the outset, pursuant to the evidence rule governing expert witness testimony, whether the expert is proposing to testify to (1) scientific, technical, or other specialized knowledge that (2) will assist the trier of fact to understand or determine a fact in issue.
13. **Courts: Expert Witnesses.** In evaluating expert opinion testimony under *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579,

113 S. Ct. 2786, 125 L. Ed. 2d 469 (1993), and *Schafersman v. Agland Coop*, 262 Neb. 215, 631 N.W.2d 862 (2001), where such testimony's factual basis, data, principles, methods, or their application are called sufficiently into question, the trial judge must determine whether the testimony has a reliable basis in the knowledge and experience of the relevant discipline.

14. **Expert Witnesses: Words and Phrases.** Expert testimony based upon possibility or speculation is insufficient to establish causation; it must be stated as being at least probable, in other words, more likely than not.
15. **Negligence: Products Liability.** The malfunction theory is based on the same principle underlying res ipsa loquitur, which permits a fact finder to infer negligence from the circumstances of the incident, without resort to direct evidence of the wrongful act.
16. **Products Liability: Proof.** Under the malfunction theory, also sometimes called the indeterminate defect theory or general defect theory, a plaintiff may prove a product defect circumstantially, without proof of a specific defect, when (1) the incident causing the harm was of a kind that would ordinarily occur only as a result of a product defect and (2) the incident was not, in the particular case, solely the result of causes other than a product defect existing at the time of sale or distribution.
17. ____: ____. The malfunction theory simply provides that it is not necessary for the plaintiff to establish a specific defect so long as there is evidence of some unspecified dangerous condition or malfunction from which a defect can be inferred—the malfunction itself is circumstantial evidence of a defective condition.
18. **Products Liability: Proximate Cause: Damages: Proof.** The malfunction theory does not alter the basic elements of the plaintiff's burden of proof and is not a means to prove proximate cause or damages.
19. **Products Liability: Strict Liability: Proof.** The malfunction theory is applicable in a strict liability manufacturing defect claim.
20. **Products Liability: Proof.** The malfunction theory is not available when specific defects are alleged.

Appeal from the District Court for Lancaster County: Darla J. Ideus, Judge. Affirmed.

Peter C. Wegman, Mark R. Richardson, and Alyssa P. Martin, of Rembolt Ludtke, L.L.P., and John W. Ballew, Jr., of Ballew Hazen, P.C., L.L.O., for appellants.

Michael L. Moran, of Engles, Ketcham, Olson & Keith, P.C., for appellee Haco Electric Company, Incorporated.

Michael F. Coyle and Timothy J. Thalken, of Fraser Stryker, P.C., L.L.O., for appellee Genie Industries, Inc.

Heavican, C.J., Miller-Lerman, Cassel, Stacy, Funke, Papik, and Freudenberg, JJ.

Freudenberg, J.

NATURE OF CASE

An electrician was injured when an aerial lift malfunctioned and tipped over while the electrician was working approximately 30 feet in the air on the lift's raised platform. After sustaining serious injuries, the electrician brought strict liability claims, negligence claims, and an implied warranty claim against Genie Industries, Inc. (Genie), the manufacturer and designer of the lift. Genie moved for summary judgment as to all of the electrician's claims and sought to exclude the electrician's expert opinions on the issues of unreasonably dangerous conditions, defect, causation, and alternative design. Following a hearing, the district court partially granted Genie's motion to exclude expert testimony and granted Genie's motion for summary judgment on all claims. The electrician appeals.

FACTS

Aerial Lift

Genie manufactured an aerial lift named Genie model "TZ-34/20." In order to operate the lift, an operator stands on a platform, or "bucket" or "basket," and the platform is raised and lowered. The platform is raised and lowered by an extension of the lift referred to as a "boom." The lift sits atop of four outriggers that can be retracted when the lift is being transported. The outriggers are intended to extend, make contact with the ground, and raise the lift off the ground in a level manner.

The user operates the lift by pressing buttons on one of two control panels: (1) a ground control panel that operates the outriggers, boom, and platform and (2) a platform control

panel located directly on the platform that operates only the boom and the platform. There is also a key switch located at the platform controls that selects which of these two controls will operate. For example, when the key switch is turned to the platform setting, the ground controls will not operate. In theory, an operator standing on the platform should not be able to move or control the outriggers by pressing buttons on the platform control panel. This mechanism was designed to avoid destabilization while an operator is on the platform.

The lift in question was sold by Genie to Nebraska Machinery Company (Nebraska Machinery) in May 2011. Over the next few years, a number of repairs were performed on the lift. According to Nebraska Machinery's work orders, the lift was first repaired in August 2011, 4 months after the sale, when the "limit switch" failed, which caused the lift to become incapable of lowering. In the 2 years prior to the electrician's accident, there were approximately 30 total work orders for repairs on this particular lift, several of which related to issues with the "auto-leveling" system and the outriggers.

Genie started manufacturing this type of lift in 2003 and has made more than 4,600 of them. Genie is not aware of any other lift falling over in the same manner on any other occasion. During the end of the manufacturing process, Genie tested the lift's functions and determined that the tested movement functions worked properly. Genie's senior product safety manager testified that the lift's design was consistent with all relevant national standards and that in his opinion, the lift's design used the best technology reasonably available at the time it was made.

Accident

In June 2013, Nebraska Machinery leased the lift to a general contractor for use at a jobsite in Seward, Nebraska. Trevor Pitts is an electrician and was working for an electrical subcontractor. On August 21, the lift tipped over while Pitts was working on the platform approximately 30 feet in the air. Pitts had used the lift without any problems for 10 days before the

accident. On the day of the accident, other subcontractors had used the lift less than an hour before the incident.

There appeared to be electrical tape over a button on the platform control panel, but Pitts did not know why the tape was on the button or who put it there. According to Genie, the button that was taped over was the button that levels the platform when it is in the air. Genie argues that this indicates that the leveling system was altered after the machine left Genie's possession.

After the accident, bystanders who came to the scene saw that the left rear outrigger was "retracted." As a result of that outrigger's being shorter than the others, the lift was not level and tipped over, causing Pitts' injuries.

Pitts and his wife brought several claims against Genie (and two other parties, now dismissed) in the Lancaster County District Court. These claims included three strict liability claims for manufacturing and design defects and a failure to warn, three negligence claims, one breach of implied warranty claim, and a loss of consortium claim.

Dr. John Boye's Testimony

The Pittses' sole expert was an electrical engineer, Dr. John Boye. Boye is a professor emeritus in the University of Nebraska-Lincoln electrical and computer engineering department who holds a Ph.D. in electrical engineering. Along with another electrical engineer, Boye also formed a small electrical engineering consulting firm as a licensed electrical and computer engineer with the state. Boye had never before examined, used, repaired, or designed an aerial lift. He also had never reviewed any other lift in the industry.

In preparing his expert report, Boye reviewed video footage from a November 2014 inspection that he did not attend. In the video, at least 20 different malfunctions of the left outrigger occurred. He also reviewed several photographs taken at the time of the accident and from the 2014 inspection, some technical documents, the work order history, depositions, and a fuel log from Nebraska Machinery. The extensive work order

history and fuel log indicated that the auto-leveling system was not working correctly prior to the date of the accident.

Boye reported that the photographs from the 2014 inspection showed the wiring inside the ground control panel was "not well done." He explained that the leads of the diodes were not insulated and were very close together. Boye describes a diode as an electrical device that allows current to flow in one direction.

Boye later participated in a physical inspection of the lift in November 2015. In the year since the November 2014 inspection, the lift remained in the sole possession of Nebraska Machinery. However, when Boye completed his 2015 inspection, the lift behaved differently than it did in 2014. In his report, Boye explained that the lift clearly malfunctioned in the 2014 videos but that during the 2015 inspection, the lift either did not malfunction at all or malfunctioned differently when posed with the same tests. Based on the machine's failing to malfunction as it did in 2014 and at the time of the accident, Boye assumed that the lift had been altered between 2014 and 2015. Because of the lift's alleged alteration, Boye opined that the "[parties] may never be able to find [out] what was wrong originally."

Boye reported generally that the accident occurred from an electrical malfunction. However, based on his overall observations, Boye was unable to precisely pinpoint what component caused the lift to malfunction on the day of Pitts' accident. Although his report proposed an "overview of a few possibilities" that could have been the cause of the malfunction, he conceded several times that he had no opinion as to what specifically failed on August 21, 2013.

The possible causes of the electrical malfunction were (1) incorrect or shorted wiring; (2) bad components, such as bad or touching diodes; (3) other bad or faulty components; (4) failed or stuck limit switches; (5) the sticking of failed or "worn out" switches, buttons, and relays; and (6) potential movement earlier in the day of the accident which loosened diodes or wires

and could have caused a short circuit. He also thought the taped button on the platform control panel may have been a factor, but he was unsure how.

Boye reported that Genie's technical schematics and diagrams had at least 19 "errors and inconsistencies." In other words, in reviewing seven pages of the "*Genie Service Manual*" and six sheets of the "*ED, TZ34 DC Control*" drawings, Boye identified multiple inconsistencies between these documents as to the lift's design. However, he did not opine that the documents identified design defects. Boye stated that he was never provided a number of documents that would have helped in the evaluation, including certain design documents and other specifications and technical information regarding circuit elements. He admitted in his deposition that these missing documents are critical to understanding the design.

Boye opined that the lift "could have been designed better." In particular, he suggested that Genie could have used a "4-position keyed switch" instead of a "3-position keyed switch." As designed, the lift has a three-position switch in which the user turns a key to activate either the platform control panel or the ground control panel or turns off the machine. It is designed so that only one control panel can be activated at a given time, and none of the buttons on the platform controls should operate the outriggers. Still, Boye explained that this technology could fail if diodes fail. In other words, power could be sent to the outriggers even if the switch was in "platform" position, if diodes failed.

Considering the current design, Boye proposed a four-position switch as an alternative design which would have "totally isolate[ed] the outrigger power from the platform control panel." He testified as to his design in a deposition and stated that the three-position switch increased the risk of a particular kind of electrical diode failure. But Boye admitted that this four-position switch design could also fail. He also admitted that this proposed four-position switch design would require a completely revamped circuitry "from scratch." Boye's

opinion was not peer reviewed, nor did Boye test or analyze the feasibility of a four-position switch design.

In 2017, Boye wrote and signed an additional affidavit for the purposes of clarifying his testimony. This affidavit stated that the lift tipped over because of an "electrical malfunction in the lift's circuit[r]y." In the same affidavit, he again opined that he could not determine the exact cause of the accident, but that the lift was in an unreasonably dangerous condition when it left Genie's possession, because the platform and ground control circuitry were interconnected, the diodes and wires were too close together, the diodes and wires did not have protective sheathing, and a three-position switch design was used as opposed to a proposed four-position switch. Boye did not elaborate as to the foundation of his conclusion that these defects were present at the time it left Genie's possession and did not retract his prior testimony that six or more possible causes could have resulted in the lift's electrical malfunction.

Motions to Exclude Expert Testimony and Summary Judgment

Genie moved to exclude Boye's testimony and for summary judgment. The district court granted Genie's motion to exclude testimony in part and denied it in part. The court held that Boye's opinions regarding alternative design were not admissible as they were not relevant and lacked reliability under a *Daubert*/*Schafersman*[1] analysis. However, the district court overruled Genie's motion to exclude testimony regarding Boye's opinions that the lift was unreasonably dangerous because the platform control and ground control circuitry were "'interconnected,'" the diodes and wires were too close together, and the diodes and wires lacked adequate sheathing.

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[1] See *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579, 113 S. Ct. 2786, 125 L. Ed. 2d 469 (1993), and *Schafersman v. Agland Coop*, 262 Neb. 215, 631 N.W.2d 862 (2001).

The court then granted Genie's motion for summary judgment. The court held that the Pittses lacked the necessary expert testimony for the proximate cause element of their negligence and product liability claims. Boye's expert testimony, the court explained, only speculated a "'choice of possibilities'" as to causation, and such testimony did not create a fact question on summary judgment. The court held that the malfunction theory could not be used to create a material issue for proximate cause in this case because Boye pointed to several specific defects. With no expert evidence to show that the lift was defective at the time it left Genie's possession or that the defects proximately caused the platform controls to operate the outriggers, the district court granted summary judgment in favor of Genie on all claims.

ASSIGNMENTS OF ERROR

The Pittses assign, reordered and rephrased, that the district court erred in (1) finding that Genie was entitled to summary judgment on the Pittses' strict liability design defect claim, (2) excluding portions of Boye's expert testimony, (3) misconstruing the scope of Boye's opinion regarding causation, (4) failing to consider and/or excluding evidence related to issues of causation regarding the strict liability design defect claim, (5) finding that Genie was entitled to summary judgment with respect to the Pittses' strict liability manufacturing defect claim, and (6) failing to allow the Pittses to proceed on and further apply the "malfunction theory" with regard to their strict liability manufacturing defect claim.

STANDARD OF REVIEW

[1] An appellate court reviews the district court's grant of summary judgment de novo, viewing the record in the light most favorable to the nonmoving party and drawing all reasonable inferences in that party's favor.[2]

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[2] *Waldron v. Roark*, 298 Neb. 26, 902 N.W.2d 204 (2017).

[2,3] We review de novo whether the trial court applied the correct legal standards for admitting an expert's testimony.[3] But a trial court's ruling in receiving or excluding an expert's testimony which is otherwise relevant will be reversed only when there has been an abuse of discretion.[4] A judicial abuse of discretion exists when a judge, within the effective limits of authorized judicial power, elects to act or refrain from acting, but the selected option results in a decision which is untenable and unfairly deprives a litigant of a substantial right or a just result in matters submitted for disposition through a judicial system.[5]

ANALYSIS

The Pittses contend that the district court erred in granting Genie's motion for summary judgment against their strict products liability design and manufacturing defects claims. The Pittses argue that they presented sufficient evidence that the lift was defectively designed, unreasonably dangerous, and defectively manufactured at the time the lift left Genie's possession to create a genuine dispute rendering summary judgment improper. They add that they presented sufficient evidence of causation as it relates to Pitts' injuries.

[4] In reviewing a summary judgment, an appellate court views the evidence in the light most favorable to the party against whom the judgment was granted, and gives that party the benefit of all reasonable inferences deducible from the evidence.[6] An appellate court will affirm a lower court's grant of summary judgment if the pleadings and admitted evidence show that there is no genuine issue as to any material facts or as to the ultimate inferences that may be drawn from those

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[3] *King v. Burlington Northern Santa Fe Ry. Co.*, 277 Neb. 203, 762 N.W.2d 24 (2009).

[4] *Schafersman v. Agland Coop, supra* note 1.

[5] *Id.*

[6] *Green v. Box Butte General Hosp.*, 284 Neb. 243, 818 N.W.2d 589 (2012).

facts and that the moving party is entitled to judgment as a matter of law.[7] In the summary judgment context, a fact is material only if it would affect the outcome of the case.[8]

[5,6] In a products liability cause of action based on strict liability in tort, the central question involves the quality of the manufactured product, that is, whether the product was unreasonably dangerous.[9] "Unreasonably dangerous" means that the product has a propensity for causing physical harm beyond that which could be contemplated by the ordinary user or consumer.[10] Whether the product is in a defective condition and is unreasonably dangerous to its user are generally questions of fact.[11]

[7] In a products liability action based on defect, a plaintiff must prove by a preponderance of the evidence that (1) the defendant placed the product on the market for use and knew, or in the exercise of reasonable care should have known, that the product would be used without inspection for defects; (2) the product was in a defective condition when it was placed on the market and left the defendant's possession; (3) the defect is the proximate or a proximately contributing cause of the plaintiff's injury sustained while the product was being used in a way and for the general purpose for which it was designed and intended; (4) the defect, if existent, rendered the product unreasonably dangerous and unsafe for its intended use; and (5) the plaintiff's damages were a direct and proximate result of the alleged defect.[12]

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[7] *Freeman v. Hoffman-La Roche, Inc.*, 300 Neb. 47, 911 N.W.2d 591 (2018).

[8] See *id*.

[9] See, *Stahlecker v. Ford Motor Co.*, 266 Neb. 601, 667 N.W.2d 244 (2003); *Freeman v. Hoffman-La Roche, Inc.*, 260 Neb. 552, 618 N.W.2d 827 (2000); *Rahmig v. Mosley Machinery Co.*, 226 Neb. 423, 412 N.W.2d 56 (1987).

[10] *Hancock v. Paccar, Inc.*, 204 Neb. 468, 283 N.W.2d 25 (1979).

[11] *Rahmig v. Mosley Machinery Co., supra* note 9.

[12] See *Jay v. Moog Automotive*, 264 Neb. 875, 652 N.W.2d 872 (2002).

[8] Proximate cause is the cause that in a natural and continuous sequence unbroken by an efficient intervening cause, produces the injury, and without which the injury would not have occurred.[13] To establish proximate cause in a products liability action, the plaintiff must meet three basic requirements: (1) Without the defect, the injury would not have occurred, commonly known as the "but for" rule or "cause in fact"; (2) the injury was a natural and probable result of the defect; and (3) there was no efficient intervening cause.[14]

[9,10] Findings of fact as to technical matters beyond the scope of ordinary experience are not warranted in the absence of expert testimony supporting such findings.[15] With respect to the requirement of expert testimony, the test is whether the particular issue can be determined from the evidence presented and the common knowledge and usual experience of the fact finders.[16] This case involves the mechanical functioning of an aerial lift, its component parts, and its electrical circuitry, which are technical matters well outside the scope of ordinary experience. Therefore, to create a material issue of fact, the Pittses were required to present expert testimony that a defective product caused the malfunction that led to Pitts' injuries. Their only expert was Boye. Thus, the question is whether Boye's testimony created issues of fact as to each element of their products liability claims.[17]

The notion of a defective product embraces two separate concepts—a manufacturing defect and a design defect.[18] A manufacturing defect is one in which the product differs from

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[13] *Hughes v. School Dist. of Aurora*, 290 Neb. 47, 858 N.W.2d 590 (2015).

[14] See, generally, *Roskop Dairy v. GEA Farm Tech.*, 292 Neb. 148, 871 N.W.2d 776 (2015).

[15] *Id.*

[16] *McVaney v. Baird, Holm, McEachen*, 237 Neb. 451, 466 N.W.2d 499 (1991).

[17] See, *Freeman v. Hoffman-La Roche, Inc., supra* note 7; *Roskop Dairy v. GEA Farm Tech., supra* note 14.

[18] See *Freeman v. Hoffman-La Roche, Inc., supra* note 9.

the specifications and plan of the manufacturer, while a design defect is one in which the product meets the specifications of the manufacturer, but nonetheless poses an unreasonable risk of danger.[19] We first address the Pittses' assignments of error related to a design defect.

Design Defect

The Pittses argue that they presented sufficient evidence to show that defectively designed circuitry was the proximate cause of the electrical malfunction that ultimately caused Pitts' injuries. They argue that the district court, in concluding that Boye's testimony was speculative and inadequate to create a material issue of fact as to causation, misunderstood and mischaracterized Boye's expert testimony. According to the Pittses, Boye testified with sufficient certainty that the electrical malfunction was caused by one of several possible reasons, all of which could be attributed to design defects that created an unreasonable danger of an electrical malfunction. We disagree.

[11] An expert must have "good grounds" for his or her belief in every step of the analysis.[20] The term "good grounds" means an inference or assertion derived by scientific method and supported by appropriate validation.[21] Good grounds do not include conclusions based on guess, speculation, conjecture, or a choice of possibilities.[22] Conclusions based on guess, speculation, conjecture, or a choice of possibilities do not create material issues of fact for purposes of summary judgment.[23]

Boye initially presented an "overview of a few possibilities" that could have been the cause of the malfunction, none

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[19] See *id.*

[20] *Roskop Dairy v. GEA Farm Tech., supra* note 14.

[21] *Id.*

[22] See *id.*

[23] *Marksmeier v. McGregor Corp.*, 272 Neb. 401, 722 N.W.2d 65 (2006).

of which he directly identified as specifically relating to the product's design. Indeed, several possible causes appear to be things that would have occurred after the lift left Genie's possession. The possible causes of the electrical malfunction were: (1) incorrect or shorted wiring; (2) bad components, such as bad or touching diodes; (3) other bad or faulty components; (4) failed or stuck limit switches; (5) the sticking of failed or "worn out" switches, buttons, and relays; and (6) potential movement earlier on the day of the accident which loosened diodes or wires and could have caused a short circuit. He also thought the taped button on the platform control panel may have been a factor, but he was unsure how. He asserted that Genie's three-position switch design could have been the cause of the malfunction and provided, albeit untested and not reviewed by peers, a four-position switch design as an alternative.

Boye later attempted to clarify his opinion in a supplemental affidavit that was admitted into evidence by the district court. In the affidavit, he opined that the lift was unreasonably dangerous when it left Genie's possession because (1) the platform and ground control circuitry were interconnected, (2) the diodes and wires were too close together, (3) the diodes and wires did not have proper protective sheathing, and (4) Genie utilized a three-position switch design as opposed to a proposed four-position switch. In the affidavit, Boye did not retract his prior testimony that he had no opinion as to what specifically failed and caused the accident on August 21, 2013. In making its decision, the district court considered only the first three elements of Boye's opinion from the affidavit; it excluded the alternate design of a four-position switch.

[12,13] First, we find that the district court did not abuse its discretion in determining that Boye was not qualified to opine that the specific underlying design defect was the failure to design the lift with a four-position switch. When a court is faced with a decision regarding the admissibility of expert opinion evidence, the trial judge must determine at the outset, pursuant to the evidence rule governing expert witness

testimony, whether the expert is proposing to testify to (1) scientific, technical, or other specialized knowledge that (2) will assist the trier of fact to understand or determine a fact in issue.[24] This entails a preliminary assessment whether the reasoning or methodology underlying the testimony is valid and whether that reasoning or methodology properly can be applied to the facts in issue.[25] In evaluating expert opinion testimony under *Daubert*/*Schafersman*, where such testimony's factual basis, data, principles, methods, or their application are called sufficiently into question, the trial judge must determine whether the testimony has a reliable basis in the knowledge and experience of the relevant discipline.[26]

It is undisputed that Boye had expertise in the field of electrical engineering, but Boye testified that he did not know how any other aerial lifts are designed and admitted he was unaware of the standards used in the industry for the design and manufacture of machines of this nature. He provided no evidence of any other lift manufacturer's utilizing a four-position switch design. He stated that his four-position switch design was conceptual. He did not actually create and test his theory, nor was his assertion peer reviewed by other electrical engineers. He further asserted that, even with a four-position switch instead of Genie's three-position switch, an electrical malfunction could still have occurred. Without testing, peer review, and knowledge of whether this theory or alternative design would be generally accepted in the industry, Boye's expert opinion that the lift should have been designed with a four-position switch was simply unreliable under a *Daubert*/*Schafersman* analysis. As such, the district court did not abuse its discretion in determining that Boye lacked knowledge in the relevant discipline to testify that the lift should have been

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[24] *Schafersman v. Agland Coop, supra* note 1. See, also, Neb. Evid. R. 702, Neb. Rev. Stat. § 27-702 (Reissue 2016).

[25] *Schafersman v. Agland Coop, supra* note 1.

[26] *Id.*

designed with a four-position switch and in excluding those portions of his testimony.

As to the remainder of Boye's testimony that was admitted into evidence, we find that the district court did not err in granting summary judgment in favor of the Pittses. Boye, as a qualified and trained electrical engineer, reviewed pictures, diagrams, and charts related to the wiring and schematics of the machine. Boye generally opined that the lift was unreasonably dangerous in its design because it had inadequate sheathing, interconnected circuitry, and diodes that were too close in proximity. Essentially, his affidavit testimony asserts that these unreasonably dangerous conditions are defects in Genie's design. However, Boye testified that any one of a number of problems or occurrences, including those not linked to design and outside of Genie's control after the point of sale, could have been the actual cause of the electrical malfunction that resulted in Pitts' injuries.

Specifically, Boye stated that one of six or more possibilities could have been the cause of the accident. While some of the initial report's "possibilities" could possibly be connected to the affidavit's "unreasonably dangerous" elements of the design, others cannot. For example, Boye stated that a failed limit switch, faulty components or diodes, or even recalled parts could have been the cause of the malfunction. He even stated that incorrect, damaged, or shorted wiring could have easily caused the malfunction, which he notes was altered or repaired just months prior to Pitts' accident. He also stated that the taped leveling button could have been a cause of the accident. Boye was unable to precisely pinpoint what component caused the lift to malfunction on the day of Pitts' accident. Although his report proposed an "overview of a few possibilities" that could have been the cause of the malfunction, he conceded several times that he had no opinion as to what specifically failed on August 21, 2013.

Some courts have held that a particular product may be sufficiently identified as having caused harm even though

the evidence does not exclude every other possible cause.[27] However, courts clarify that, though the plaintiff is not required to eliminate all possible causes, the plaintiff must still establish a logical sequence of cause and effect between the defect and the injury.[28] We need not decide in this case if the Pittses were required to eliminate all possible nondesign causes in order to create a material issue of fact, because even if they were not, the evidence's logical sequence of cause and effect was lacking. In other words, Boye did not opine with a requisite degree of certainty that any of the "possibilities" was the one that caused the malfunction.

[14] We have held that expert testimony "based upon possibility or speculation is insufficient [to establish causation]; it must be stated as being at least 'probable,' in other words, more likely than not."[29] Even assuming that Boye's reasons for the lift's being in an "unreasonably dangerous condition" were all affirmatively connected to the lift's design, he failed to sufficiently connect the possible causes of the malfunction stated in his report to these design defects. Throughout his opinion, Boye merely speculated that defects *could have been* related to the ultimate cause of the malfunction, while also proposing potential causes that overtly did not relate to Genie's design, such as the failure of a limit switch, the taped over leveling button, or faulty components. Because of the intermingling of possible causes that are related and unrelated to the design, with no testimony that any one of them was more probable than another, there is no way for a fact finder to determine without speculation whether a defective design

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[27] See 49 Am. Jur. Proof of Facts 2d 293 *Defect Not Cause* § 3 (1987 & Supp. 2018).

[28] See *id*. See, also, *Whitmire v. Terex Telelect, Inc.*, 390 F. Supp. 2d 540 (E.D. Tex. 2005); *Skinner v Square D Co*, 445 Mich. 153, 516 N.W.2d 475 (1994); *MASB-SEG v. Metalux*, 231 Mich. App. 393, 586 N.W.2d 549 (1998).

[29] *Fackler v. Genetzky*, 263 Neb. 68, 74, 638 N.W.2d 521, 528 (2002). Accord *Barrett v. Rhodia, Inc.*, 606 F.3d 975 (8th Cir. 2010).

was the proximate cause of the electrical malfunction and Pitts' injuries.

In sum, Boye's testimony as to causation was too speculative for a jury to conclude that the specific alleged design defect or defects were the "but for" cause of the electrical malfunction leading to Pitts' injuries. Because failure of proof concerning an essential element of the nonmoving party's case on a motion for summary judgment necessarily renders all other facts immaterial,[30] we hold that the district court did not err in finding that there remained no genuine issue of fact as to the element of causation and that Genie was entitled to judgment as a matter of law on the Pittses' strict liability design defect claim.

Manufacturing Defect and Malfunction Theory

In addition to the Pittses' design defect claim, they assert that the district court erred in granting summary judgment against their strict liability manufacturing defect claim. The Pittses rely on what is known as the malfunction theory to support the causation prong of this claim. They contend that although they presented evidence of specific design defects, they did not present any direct evidence that there was a specific manufacturing defect. They assert that in lieu of proving a specific manufacturing defect, the malfunction theory allows them to circumstantially prove an unspecified defect in the lift.

[15,16] The malfunction theory is based on the same principle underlying res ipsa loquitur, which permits a fact finder to infer negligence from the circumstances of the incident, without resort to direct evidence of the wrongful act.[31] Under the malfunction theory, also sometimes called the indeterminate defect theory or general defect theory,[32] a plaintiff may prove

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[30] See *Freeman v. Hoffman-La Roche, Inc., supra* note 7.

[31] *Roskop Dairy v. GEA Farm Tech., supra* note 14.

[32] *Id.*

a product defect circumstantially, without proof of a specific defect, when (1) the incident causing the harm was of a kind that would ordinarily occur only as a result of a product defect and (2) the incident was not, in the particular case, solely the result of causes other than a product defect existing at the time of sale or distribution.[33]

[17,18] The malfunction theory is narrow in scope. The theory simply provides that it is not necessary for the plaintiff to establish a specific defect so long as there is evidence of some unspecified dangerous condition or malfunction from which a defect can be inferred—the malfunction itself is circumstantial evidence of a defective condition.[34] The malfunction theory does not alter the basic elements of the plaintiff's burden of proof and is not a means to prove proximate cause or damages.[35] Although some circumstances may justify the use of the malfunction theory to bridge the gap caused by missing evidence, the absence of evidence does not make a fact more probable but merely lightens the plaintiff's evidentiary burden despite the fact that the missing evidence might well have gone either way, and this rationale is too often subject to misapplication by courts in situations in which evidence is actually available.[36]

As a matter of policy, the malfunction theory is meant to allow circumstantial proof of a product defect without evidence of the specific defect, because in many instances, the dealer or manufacturer has either purposefully or inadvertently tampered with the evidence.[37] When examination of the product unit is impossible because the unit is lost or destroyed after the harm-causing incident, responsibility for spoliation

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[33] *Id.* (citing Restatement (Third) of Torts: Products Liability § 3, comment *a.* (1998)).

[34] *Roskop Dairy v. GEA Farm Tech., supra* note 14.

[35] *Id.*

[36] *Id.*

[37] *Id.*

of evidence may be relevant to the application of the malfunction theory.[38]

[19] We have yet to expressly hold that the malfunction theory applies to strict liability claims,[39] but we have made the malfunction theory available to plaintiffs in an implied warranty context.[40] And we have approved of the general approach set forth in the Restatement (Third) of Torts § 2(b)[41] that identifies a product defect as the core similarity between strict liability and implied warranty claims, thereby merging theories of recovery for implied warranty with theories of recovery based on allegations of design or manufacturing defects.[42] There is no reason to prohibit the malfunction theory in a strict liability matter when we do not do so for its implied warranty counterpart. We hold that the malfunction theory is applicable in a strict liability manufacturing defect claim.

[20] To support a manufacturing defect through the malfunction theory, the Pittses rely on Boye's opinion that, given the nature of the malfunction that occurred, "the only reasonable inference to be drawn from this set of events is that a flaw in the lift's circuitry caused this electrical malfunction." However, they simultaneously point to several specific design defects in their design defect claim, as we discussed above. We recently held in *O'Brien v. Cessna Aircraft Co.*[43] that the malfunction theory is not available when specific defects are alleged.

In *O'Brien*, a commercial pilot specifically claimed that the deicing system on the plane was defectively designed and

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[38] See Restatement, *supra* note 33, comment *b*.

[39] See *O'Brien v. Cessna Aircraft Co.*, 298 Neb. 109, 903 N.W.2d 432 (2017).

[40] See, e.g., *Genetti v. Caterpillar, Inc.*, 261 Neb. 98, 621 N.W.2d 529 (2001) (holding that precise or specific defect does not need to be proved in order to find product defective).

[41] Restatement, *supra* note 33, § 2(b).

[42] *Freeman v. Hoffman-La Roche, Inc., supra* note 9. See, also, *Shuck v. CNH America, LLC*, 498 F.3d 868 (8th Cir. 2007).

[43] *O'Brien v. Cessna Aircraft Co., supra* note 39.

unreasonably dangerous. He argued that it was defectively designed, because the deicing boot provided insufficient coverage and the deicing system lacked a water separator to prevent contaminants from entering and affecting its operation. The pilot then attempted to rely on the malfunction theory to prove a nonspecific defect that the aircraft was susceptible to "'ice contaminated tail stall.'"[44] We held that because the pilot alleged that the plane crash was caused by several specific design defects, he could not simultaneously rely on the malfunction theory in an effort to prove the accident was caused by a nonspecific defect rendering the aircraft susceptible to "ice contaminated tail stall."[45]

This case mirrors *O'Brien* in that the Pittses have pointed to evidence of specific design defects in the lift that possibly caused an electrical malfunction; but, later, in an effort to forward his manufacturing defect theory, relied on the malfunction theory by generally asserting that a flaw in the lift's circuitry caused this electrical malfunction. For this reason, the malfunction theory is inapplicable in this case and the district court did not err in refusing to apply it. We need not address whether there are additional reasons why the Pittses failed to create a material issue of fact for recovery under the malfunction theory.

There being no other evidence of a manufacturing defect, the district court did not err in granting summary judgment in favor of Genie on the Pittses' strict liability manufacturing defect claim.

CONCLUSION

For the foregoing reasons, we affirm the district court's grant of summary judgment as to the Pittses' strict products liability defect claim.

Affirmed.

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[44] *Id.* at 114, 903 N.W.2d at 444.

[45] *O'Brien v. Cessna Aircraft Co.*, *supra* note 39.