In the

United States Court of Appeals

For the Seventh Circuit

No. 16-1106

JOHN BAUGH, by and through his Wife and Next Friend, Sharon Baugh,

Plaintiff-Appellee,

v.

CUPRUM S.A. DE C.V.,

Defendant-Appellant.

Appeal from the United States District Court for the Northern District of Illinois, Eastern Division.
No. 08 CV 4204 — **John Z. Lee**, *Judge.*

ARGUED NOVEMBER 2, 2016 — DECIDED JANUARY 11, 2017

Before WOOD, *Chief Judge*, and POSNER and WILLIAMS, *Circuit Judges*.

WILLIAMS, *Circuit Judge.* John Baugh fell off a ladder while replacing gutter screws and suffered a traumatic brain injury. He sued the ladder's manufacturer, Cuprum, alleging that the ladder had unexpectedly collapsed and caused him to fall because it had been defectively designed. At the conclusion of

trial, a jury, finding in Baugh's favor, awarded him over $11 million in damages. Following the verdict, Cuprum filed a motion for a new trial and for judgment as a matter of law, but the district judge denied it.

On appeal, Cuprum contends that this denial was improper. Cuprum maintains that it was entitled to a new trial primarily because the district judge erroneously permitted two of Baugh's experts to testify about critical issues. But both experts' methodologies were adequate, and Cuprum's various complaints affected the weight of the experts' testimony rather than its admissibility. In addition, Cuprum contends that it was entitled to judgment as a matter of law because Baugh had failed to prove that the ladder contained an unreasonably dangerous condition and that this condition was the most probable cause of the accident. When viewing the evidence in the light most favorable to Baugh, however, we conclude that a reasonable jury could have found in Baugh's favor. Baugh supplied sufficient evidence demonstrating that a feasible alternative existed, and that the accident was more likely attributable to the ladder's original defective design than to an improper use of the ladder. So we affirm the district court's judgment in Baugh's favor.

I. BACKGROUND

John Baugh fell off a five-foot, A-frame aluminum ladder while replacing several rusty screws in a gutter on his garage. Baugh sustained significant bruising and bleeding in the frontal area of his brain, which caused him to suffer seizures, dementia, and quadriplegia and inhibited his ability to perform myriad routine functions such as taking medicine orally, urinating without a catheter, recognizing shapes and angles, and reading a one-paragraph excerpt and answering simple

questions like who, what, and where. On his behalf, Baugh's wife Sharon sued Cuprum, a Mexico-based company that designed and manufactured the ladder, alleging a design defect under strict liability and negligence theories. Baugh argued that the ladder was not designed to be strong enough to accommodate the weight of individuals at or near 200 pounds,[1] and that a feasible alternate design would have prevented the accident. But Cuprum argued that the ladder was designed to adequately support the weight of individuals weighing up to 200 pounds, and that the accident occurred because Baugh climbed too high on the ladder and stood on its fourth step and pail shelf, neither of which were intended to be stood on. (Pail shelves are often square in shape, attached near the top of ladders, and used to hold paint cans and other painting equipment.)

The parties proceeded to trial and a jury found in Cuprum's favor. However, we remanded the case for a new trial because the exemplar ladder, which had the same core specifications as Baugh's, was improperly given to jurors during jury deliberations. *See generally Baugh ex rel. Baugh v. Cuprum S.A. de C.V.*, 730 F.3d 701 (7th Cir. 2013).

During the second trial, Baugh elicited testimony from two of his neighbors and a paramedic, all of whom arrived to the scene post-accident. However, Baugh—the only eyewitness to the accident—did not testify at either trial, we assume, because of the severity of his injuries. Baugh also elicited testimony from a number of experts relating to the cause of the

[1] Baugh was five feet five inches tall and weighed 224 pounds approximately six weeks before the accident. However, neither party contends that Baugh's weight is relevant, so we will not address the issue further.

accident and the severity of his resulting physical injuries. Notably, Dr. Jack Vinson, a mechanical engineer, testified about the ladder's design. Relying on handwritten calculations based on centuries-old mathematics principles, Dr. Vinson opined that the ladder could withstand up to 35,000 pounds per square inch (PSI), and that a 200-pound person could exert as many as 97,700 PSI while using the ladder. Dr. Vinson opined further that the ladder could have accommodated a 200-pound person if it had thicker legs and thicker and longer gussets. (Gussets are metal bars that provide bracing support by connecting the leg of a ladder to the first step.)

Kevin Smith, a mechanical engineer, supplied causation testimony on Baugh's behalf. He opined that: (i) Baugh was facing the house and the gutter as he climbed the ladder (which was the intended use); (ii) all four of the ladder's feet were in Baugh's concrete driveway; (iii) Baugh was standing on the third step of the ladder (the highest intended step); (iv) the ladder tipped to the right; (v) the shorter-than-necessary gusset on the ladder's right front side could not support Baugh's weight, thereby causing the ladder's right front leg to fail and Baugh to fall onto his concrete driveway; and (vi) a longer gusset would have prevented the accident.

Cuprum elicited contrary testimony regarding design and causation. Dr. Michael Stevenson, a metallurgical engineer, opined that a 250-pound person could never exert more than 24,000 PSI—well within the ladder's range of tolerance. Dr. Stevenson reached this conclusion using the computer-based "finite element analysis" method. In addition, Michael Van Bree, a mechanical engineer, opined that: (i) Baugh was facing away from the house and gutter as he climbed the ladder (an

improper use); (ii) two of the ladder's feet were in the driveway, while the other two were in an adjacent flower bed; (iii) the ladder tipped to the left while Baugh was straddling it, with one foot on the pail shelf and the other on the ladder's fourth step (both improper uses); and (iv) Baugh lost balance, causing the ladder to tip over and Baugh to fall into the flower bed.

The jury ultimately found in Baugh's favor and awarded him $11 million. The district judge denied Cuprum's motion for judgment as a matter of law and, alternatively, for a new trial. This appeal followed.

II. ANALYSIS

A. Cuprum Not Entitled to a New Trial

On appeal, Cuprum maintains that the district judge erred in denying its motion for a new trial. We review such denials for abuse of discretion and where, as here, the moving party alleges an erroneous admission of evidence during trial, "we will grant a new trial only if the error had a substantial influence over the jury and the result reached was inconsistent with substantial justice." *Saathoff v. Davis*, 826 F.3d 925, 930 (7th Cir. 2016).

Cuprum's principal justification for a new trial concerns the district judge's denial of several of its motions *in limine* (MILs) concerning Dr. Vinson, Baugh's design expert, and Smith, Baugh's causation expert. Although none of the MILs explicitly cited Federal Rule of Evidence 702 or *Daubert v. Merrell Dow Pharmaceuticals*, 509 U.S. 579 (1993), their substantive arguments were unequivocally rooted in both—specifically, that Dr. Vinson's alternative-design opinions were un-

reliable, and that Smith was unqualified and proffered causation opinions based on unreliable methodology. Indeed, the MILs repeatedly used these Rule 702/*Daubert* buzzwords and cited multiple cases applying the related framework. So the district judge should have treated the MILs as invoking Rule 702 and *Daubert*. And it appears that he did—at least with regard to reliability—since he denied the MILs on the ground that "there is nothing about the witnesses' opinions that falls outside the realm of acceptable science."

However, the problem with that conclusion was that it was not accompanied by any further analysis regarding the considerations that animated the judge's ruling. *See, e.g.*, *Metavante Corp. v. Emigrant Sav. Bank*, 619 F.3d 748, 760 (7th Cir. 2010) (observing that a proper *Daubert* inquiry cannot be comprised solely of conclusory statements regarding admissibility). Nor was this deficiency remedied by either of the district judges who were subsequently assigned to the case, as both simply adopted the original judge's conclusion without elaboration. So rather than reviewing the denial of the MILs for abuse of discretion, as we typically do when a judge has adequately applied the Rule 702/*Daubert* framework, we review the denial here de novo. *See Hall v. Flannery*, 840 F.3d 922, 926 (7th Cir. 2016) (citations omitted).

1. Dr. Vinson's Testimony Was Admissible

On appeal, Cuprum challenges the methodology that led Dr. Vinson to opine that a design featuring thicker legs and a thicker and longer gusset would have prevented Baugh's accident. When determining the reliability of a qualified expert's testimony under *Daubert*, courts are to consider, among other things: (1) whether the proffered theory can be and has been tested; (2) whether the theory has been subjected to peer

review; (3) whether the theory has been evaluated in light of potential rates of error; and (4) whether the theory has been accepted in the relevant scientific community. *Smith v. Ford Motor Co.*, 215 F.3d 713, 719 (7th Cir. 2000). We have emphasized that "no single factor is either required in the analysis or dispositive as to its outcome." *Id.*; *accord Kumho Tires Co. v. Carmichael*, 526 U.S. 137, 151–52 (1999).

Cuprum attacks Dr. Vinson's alternate-design opinion on several grounds. Its primary criticism is that Dr. Vinson failed to test this alternative design, either with a specially made exemplar ladder or using finite element analysis (the latter being the preferred method of Dr. Stevenson, Cuprum's design expert). But Dr. Vinson did test his alternative design, using centuries-old mathematics principles that Dr. Stevenson himself conceded can be used to analyze stress in a ladder. The fact that these calculations were not accompanied with *live* testing of an exemplar ladder is irrelevant to Rule 702 and *Daubert*. *See Lapsley v. Xtek, Inc.*, 689 F.3d 802, 815–16 (7th Cir. 2012) ("[P]hysical re-creations of industrial accidents are not always feasible or prudent…. A mathematical or computer model is a perfectly acceptable form of test" for a proposed alternative design.); *Schmude v. Tricam Indus.*, 556 F.3d 624, 626 (7th Cir. 2009) (rejecting claim that plaintiff's expert should have been barred from testifying due to failure to conduct live recreation of accident, and discussing defendant's dubious re-creation attempt); *Cummins v. Lyle Indus.*, 93 F.3d 362, 369 (7th Cir. 1996) ("We do not mean to suggest … that hands-on testing is an absolute prerequisite to the admission of expert testimony.").

Cuprum also claims that Dr. Vinson's alternative design is deficient because it was not subjected to peer review. But Cuprum only claims that one of Dr. Vinson's three papers featuring his design went unreviewed, whereas Dr. Vinson testified (without contradiction) that the other two papers were in fact peer reviewed. And even assuming none of the three papers were reviewed, Dr. Vinson "was merely applying well-established engineering techniques to the particular materials at issue in this case, … [so] his failure to submit those techniques to peer review establishes nothing about their reliability." *Smith*, 215 F.3d at 720. This reasoning applies equally to Cuprum's complaint that Dr. Vinson's alternative design has not been adopted by the ladder industry. And the significance of these two complaints is further diminished by the fact that Dr. Stevenson reviewed the calculations that Dr. Vinson shared with the jury and found only one error—one that neither Dr. Stevenson nor Cuprum claims was significant enough to cast doubt on any of Dr. Vinson's conclusions.

Cuprum's reliance on *Dhillon v. Crown Controls*, 269 F.3d 865 (7th Cir. 2001), is misplaced. In *Dhillon*, we concluded that the district judge did not abuse his discretion in finding the challenged expert's testimony to be inadmissible. But unlike Dr. Vinson, most of the experts in *Dhillon* had failed to create or test their proposed alternative design, and the one expert who did conduct testing did so *after* forming his opinion and was unable to bridge the tests and the opinions. *Id.* at 869–70. To be sure, this latter expert bears some similarity to Dr. Vinson in that the American National Standards Institute (ANSI) had not expressly embraced either experts' bottom-line design. Nevertheless, the *Dhillon* expert is distinguishable since ANSI rejected his design on two separate occasions, whereas ANSI's review of Dr. Vinson's design had never

reached completion. Nor do we find that ANSI's stamp of approval, standing alone, is a dispositive consideration.

Finally, Cuprum suggests that Dr. Vinson lacked the requisite qualifications to opine on ladder design, due to his advanced age (he received his bachelor's degree in 1952 and his Ph.D. in 1961) and his concessions at trial that he had never designed a ladder for commercial use or worked in the ladder industry. But it appears that Cuprum forfeited this argument by failing to raise it in a motion *in limine*, an objection at trial, or in its post-trial motions. *See, e.g.*, *Pole v. Randolph*, 570 F.3d 922, 937–38 (7th Cir. 2009).

Forfeiture aside, the claim lacks merit. For one, Cuprum fails to explain *how* Dr. Vinson's age and lack of experience within the ladder industry render him unqualified to opine about PSI thresholds using well-established mathematical principles. *Cf. Doe v. Cutter Biological, Inc.*, 971 F.2d 375, 385 (9th Cir. 1992) ("Ordinarily, courts impose no requirement that an expert be a specialist in a given field, although there may be a requirement that he or she be of a certain profession, such as a doctor."). Nor are Dr. Vinson's purported experiential shortcomings evidenced in the record. Notably, Dr. Vinson studied mechanical engineering at Cornell University, Cambridge University, and the University of Pennsylvania. He is a professor emeritus of mechanical and aerospace engineering at the University of Delaware, is a member of the American Society of Testing Materials, and has served on the editorial boards of *Advanced Composites and Materials Journal* and *Advanced Materials and Structures*. He has also co-authored several articles relevant to aluminum step ladders entitled, "Experimental Evaluation of the Structural Character-

istics of Extruded Aluminum Step Ladders," "Failure Analysis of Step Ladders Manufactured from Extruded Aluminum," and "Fiberglass and Aluminum Step Ladder Performance Under Dynamic Loading Conditions." In addition, Dr. Vinson testified that his calculations are rooted in well-established principles that have been used for centuries to help assemble more complicated structures such as the Eiffel Tower. So Dr. Vinson's qualifications were adequate, and the district judge did not err in permitting him to testify about his proposed alternative design.

2. Smith's Testimony Was Admissible

Cuprum also used MILs in an attempt to restrict the scope of Smith's trial testimony. For example, Cuprum asked the district judge to bar Smith from testifying about the results of the "drop" test he performed on two six-foot, A-frame ladders designed and manufactured by Cuprum. (According to Cuprum, "the 'drop' test assesses the strength and durability of the ladder when it is dropped from different heights for purposes of determining how much the ladder could be damaged during handling and transport.") Cuprum argues these tests were not reliable because they were not performed in the manner mandated by ANSI. Smith dropped (i.e., tested) each ladder multiple times, whereas ANSI stipulates that a ladder need only be dropped once. But Cuprum does not explain *why* this deviation demonstrates unreliability, nor is it obvious to us. The record indicates that while the ANSI-based standard requires a single drop, multiple drops are not *prohibited*. Moreover, it seems entirely plausible that, in real life, ladders may be dropped or otherwise subjected to wear and tear on multiple occasions before an incident occurs. So Smith's deviation from ANSI in this way was not problematic.

Cuprum similarly complains that Smith used heavier loads for the "cantilever bend" test than ANSI requires—as high as 190 pounds, rather than the mandated 150 pounds. (Cuprum explains that "[t]he 'cantilever bend' test is conducted by placing loads of various amounts on the ladder to see if the section of the leg that is cantilevered out from the first step to the foot will bend.") Again, the missing link in Cuprum's argument is an explanation of why this deviation speaks to reliability. If a ladder is expressly meant to support individuals weighing as much as 200 pounds, it strikes us as entirely reasonable that loads exceeding 150 pounds would be used to test the ladder's strength. Cuprum has proven nothing to the contrary.

Finally, Cuprum sought to bar Smith from testifying about the accident and the ladder's design on the ground that he lacked the requisite factual basis to support his opinions. According to Cuprum, Smith knew so little about what actually occurred immediately before the accident—for example, Smith could not say with certainty where on the ladder Baugh had been positioned when the accident occurred, and whether he was climbing, standing, or descending—that the opinions he supplied were inadmissible bottom-line, off-the-cuff statements. This lack of knowledge is critical, Cuprum claims, because it means that Baugh cannot prove that the most probable cause of the accident was a design defect that manifested while Baugh was using the ladder as directed.

We disagree. In order to reach his opinions, Smith reviewed, among other things, photographs of the scene of the accident with overlaid measurements, transcripts of deposition testimony supplied by witnesses to the aftermath of the

accident, the actual ladder that Baugh had used, and an exemplar ladder. That supplied Smith with enough facts to render his opinion. Moreover, the mere fact that Smith could not testify about certain facts relating to the accident with absolute certainty does not render his opinions unreliable or irrelevant. *See Manpower, Inc. v. Ins. Co. of Pa.*, 732 F.3d 796, 806 (7th Cir. 2013) ("Reliability … is primarily a question of the validity of the methodology employed by an expert, not the quality of the data used in applying the methodology or the conclusions produced."); *Stollings v. Ryobi Techs., Inc.*, 725 F.3d 753, 768 (7th Cir. 2013) ("[E]xpert testimony does not need to be conclusive to be relevant."). Indeed, it is often the case that experts reach conflicting conclusions based on applying different but nevertheless reliable methodologies to a set of partially known facts. The determination of which opinion (if any) identifies the most probable cause of an injury is typically a question of weight, not reliability. *Cf. Smith v. Ford Motor Co.*, 215 F.3d 713, 718 (7th Cir. 2000) ("The soundness of the factual underpinnings of the expert's analysis and the correctness of the expert's conclusions based on that analysis are factual matters to be determined by the trier of fact ….").

3. Other Arguments Lack Merit

Cuprum identifies several non-*Daubert*-related grounds that supposedly warrant a new trial. It claims, for example, that the district judge erred in prohibiting Cuprum from asking its director of product safety and engineering, Thomas Schmitt, to explain whether Cuprum had ever changed the gusset length in the type of ladder at issue based on a fear of collapse. However, Cuprum has failed to demonstrate precisely how this testimony is relevant to the case, stating in conclusory fashion that the testimony is somehow "relevant

to plaintiff's theory of alternative design, which focused solely on the gusset." And as Baugh notes, Schmitt was precluded from testifying because he lacked personal knowledge about the subject. Cuprum does not dispute the validity of that factual predicate.

Cuprum also contends that the district judge erred in overruling two objections made by Cuprum during closing statements. The first objection concerned Baugh's statement that the evidence indicated the ladder's right front leg was capable of bending inward while the ladder's four feet were on the driveway. Cuprum contends that this statement was not anchored to any evidence presented at trial, but that would be true only if one ignores the testimony supplied by Dr. Vinson and (especially) Smith. And since the testimony from these experts was admissible, there was adequate evidence to support Baugh's statement, and the district judge did not abuse his discretion in overruling the objection. And even if an abuse somehow occurred, it was rendered harmless by the judge's curative instruction to the jury that closing statements are not facts, notwithstanding Cuprum's conclusory claim to the contrary. *See United States v. Berkowitz*, 927 F.2d 1376, 1384 (7th Cir. 1991) ("[P]erfunctory and undeveloped arguments, and arguments that are unsupported by pertinent authority, are waived ….").

The second statement that Cuprum objected to at closing concerned Baugh's use of already-accrued medical bills to calculate future medical costs. According to Cuprum, the past bills were an inappropriate comparator because "most of [Baugh]'s past damages were related to the acute care he received during the first two years after the accident and so will not be incurred again." But Cuprum fails to cite anything in

the record to support this assertion, and, in any case, Baugh elicited testimony to the contrary. For example, Dr. Gary Yarkony, a specialist in physical medicine and rehabilitation, testified that Baugh is partially paralyzed in all four extremities, has diminished cognitive function, and will need for the remainder of his life round-the-clock nursing care and access to durable medical equipment such as a motorized wheel chair and a lift to transfer him into and out of bed. Dr. Yarkony also opined that Baugh would need "additional medical care [beyond] just your routine internal medicine care" such as "rehab doctors, neurologists, [and] foot care." In short, there was ample evidence indicating that Baugh's injuries were permanent and would require significant medical treatment indefinitely.

Cuprum also claims that by calculating the average annual cost of Baugh's past medical expenses and by multiplying it by Baugh's remaining life expectancy, Baugh improperly sought so-called "per diem" damages. Cuprum directs our attention to *Caley v. Manicke*, in which the Illinois Supreme Court held that it had been improper for counsel to suggest during closing statements that certain damages should be calculated using a rigid cost-per-day mathematical formula. 182 N.E.2d 206, 207–09 (Ill. 1962). However, *Caley* was only concerned with damages relating to *pain and suffering*, whereas Baugh's statement at closing referenced damages relating to medical costs—which often are amenable to per diem calculations due to the repetitive nature of expenses such as medical check-ups, tests, and supplies.

Finally, Cuprum claims that the verdict is "against the manifest weight of the evidence, excessive, or otherwise unreasonable." This claim is easily dispatched, however, since it

merely incorporates, without explanation, the section of Cuprum's opening appellate brief concerning the Rule 702/*Daubert* issues that we rejected above. *Cf. United States v. Dunkel*, 927 F.2d 955, 956 (7th Cir. 1991) ("A skeletal 'argument,' really nothing more than an assertion, does not preserve a claim."). Nor has Cuprum demonstrated cumulative error, since it has failed to identify any error that individually or in combination with others deprived him of a fair trial. *See, e.g.*, *United States v. Powell*, 652 F.3d 702, 706 (7th Cir. 2011) (Cumulative error requires proof "(1) that multiple errors occurred at trial; and (2) those errors, in the context of the entire trial, were so severe as to have rendered his trial fundamentally unfair."). So the district judge did not abuse his discretion in declining to grant Cuprum a new trial.

B. Cuprum Not Entitled to Judgment as a Matter of Law

We review the district judge's denial of Cuprum's motion for judgment as a matter of law de novo, and view the evidence in the light most favorable to Baugh as the non-moving party. *Venson v. Altamirano*, 749 F.3d 641, 646 (7th Cir. 2014). We will reverse the district judge's decision only if no rational jury could have found in Baugh's favor. *Id.* Cuprum claims that it is entitled to judgment as a matter of law because Baugh failed to prove two of the requisite elements of a defective design claim—an unreasonably dangerous condition and causation. We address each issue in turn.

1. Unreasonably Dangerous Condition

As noted above, Baugh asserted design defect under both strict liability and negligence theories. The jury was instructed on both claims but returned a general verdict in Baugh's favor, so it is unclear whether the verdict was based

on one or both of the theories. But this uncertainty is unimportant, since, as discussed below, Cuprum's arguments implicate both theories.

Under Illinois law—which the parties agree applies here—a plaintiff alleging defective design under a strict product liability theory must prove that (i) the product has an unreasonably dangerous condition, (ii) the condition existed when the product left the defendant's control, and (iii) the condition caused the plaintiff to suffer an injury. *E.g.*, *Mikolajczyk v. Ford Motor Co.*, 901 N.E.2d 329, 345 (Ill. 2008) (citations omitted). A product may be unreasonably dangerous if it failed to perform as safely as an ordinary consumer would expect (the "consumer-expectation test"), or if the product's risks outweigh its benefits (the "risk-utility test"). *Id.* at 336 (citing *Lamkin v. Towner*, 536 N.E.2d 449, 457 (Ill. 1990)).

The consumer-expectation test is a simpler inquiry than the risk-utility test, as the latter asks courts to consider the following non-exhaustive list of factors:

> the availability and feasibility of alternate designs at the time of the product's manufacture; … [whether] the design used … conform[ed] to the design standards in the industry, design guidelines provided by an authoritative voluntary organization, or design criteria set by legislation or governmental regulation[;] … the utility of the product to the user and to the public as a whole[;] the safety aspects of the product including the likelihood that it will cause injury and the probable seriousness of the injury[;] and the manufacturer's ability to eliminate the unsafe character of the product without impairing

> its usefulness or making it too expensive to maintain its utility.

Jablonski v. Ford Motor Co., 955 N.E.2d 1138, 1154 (Ill. 2011) (citations omitted).

Like strict liability, negligence focuses on the allegedly unreasonably dangerous condition of a product. *Calles v. Scripto-Tokai Corp.*, 864 N.E.2d 249, 263–64 (Ill. 2007). For some time, Illinois courts have differentiated between the two theories on the ground that negligence alone inquires into the defendant's alleged fault—i.e., whether the defendant breached its "nondelegable duty to design reasonably safe products" by failing to exercise reasonable care. *Id.* In practice, however, this distinction may sometimes be illusory, as the Illinois Supreme Court has recently observed that "risk-utility balancing remains operative in determining whether a defendant's conduct is reasonable in a negligent-design case." *Jablonski*, 955 N.E.2d at 1154–55 (referencing approvingly the conclusion of numerous commentators that "the balancing test developed for strict liability claims … is essentially identical to the test applied in determining whether a defendant's conduct in designing a product is reasonable").

Here, Cuprum implicates both theories by arguing that Baugh failed to prove the existence of an alternate design at trial, a frequent prerequisite for liability under the risk-utility test and one that Baugh pursued in this case. In doing so, however, Cuprum relies primarily on the same arguments rejected above regarding the admissibility of Dr. Vinson's methodology—specifically, that Dr. Vinson failed to test his alternative design, that this design was not subjected to peer review or review by ANSI, that the design had not been em-

braced by the ladder industry, and that Dr. Vinson was unqualified to opine about alternative designs. Without those arguments, Cuprum is left with its contention that its own expert, Dr. Stevenson, relied on superior methodology in opining that the ladder possessed the requisite structural strength to support an individual like Baugh (i.e., that it did not contain an unreasonably dangerous condition). But this argument cannot carry the day for Cuprum. Cuprum had ample opportunity to enhance Dr. Stevenson's credibility by using Dr. Stevenson to highlight the strengths of finite element analysis and the shortcomings of Dr. Vinson's calculations, and by cross examining Dr. Vinson directly. All of this occurred in front of the jury, and based on the evidence presented, the jury found Dr. Vinson's approach more convincing and entered a verdict in Baugh's favor.

We reject the notion that no reasonable jury could have concluded the same: Dr. Vinson adequately explained why a ladder like Baugh's could fail when used as instructed, how the legs and gussets could be modified to prevent such a failure, and why the finite element analysis on which Dr. Stevenson relied was an inferior method of calculating the varying levels of force users apply on ladders. So Cuprum was not entitled to judgment as a matter of law on the unreasonably dangerous condition element. *See, e.g.*, *Gicla v. United States*, 572 F.3d 407, 414 (7th Cir. 2009) (observing that the case "presented a classic battle of the experts … [that] called upon the factfinder to determine what weight and credibility to give to each expert"); *Wipf v. Kowalski*, 519 F.3d 380, 385 (7th Cir. 2008) ("[I]n a case of dueling experts … it is left to the trier of fact, not the reviewing court, to decide how to weigh the competing expert testimony."); *Spesco, Inc. v. Gen. Elec. Co.*, 719 F.2d

233, 237–38 (7th Cir. 1983) ("[T]his case presents a typical example of opposing experts offering conflicting views to the jury …. It is within the province of the jury to determine which of two contradictory expert statements is deserving of credit.").

2. Causation

Cuprum also claims that it is entitled to judgment as a matter of law because Baugh failed to prove causation. When relying on circumstantial evidence to establish causation under Illinois law, as Baugh does here, "the conclusion sought must be more than speculative; rather the conclusion must be the only probable conclusion." *Williams v. Chi. Bd. of Educ.*, 642 N.E.2d 764, 768 (Ill. App. Ct. 1994) (citations omitted). Unsurprisingly, this means that a fact "cannot be inferred from the evidence when the existence of another fact inconsistent with the first can be inferred with equal certainty from the same evidence." *Pyne v. Witmer*, 543 N.E.2d 1304, 1313 (Ill. 1989) (citation omitted). However, circumstantial evidence need not go so far as to "exclude all other possible inferences" to show that a causal link exists. *Id.*

Here, we conclude that a rational fact finder could conclude that, based on a preponderance of the evidence, the alleged defect in the ladder (and not ladder misuse) was the most probable cause of the accident. The testing that Smith conducted provided the jury with sufficient information to conclude that the damage to the ladder likely occurred while Baugh was using the ladder properly. Moreover, the fact that both Baugh and the ladder were found in the driveway suggests that the ladder fell into the driveway (Baugh's theory) rather than into the adjacent flower bed (Cuprum's theory). Indeed, as Cuprum concedes, no dirt, vegetation, or anything

else was found on Baugh's body or clothes that suggested he fell into the flower bed, and Baugh's profound post-accident disorientation—non-communicative and non-responsive to his rescuers—makes it unlikely that he moved both himself and the ladder to the driveway after the fall. And after reviewing Cuprum's videotaped "reenactment" of the accident, the jury could have reasonably concluded that Baugh—65 years old and 224 pounds at the time—likely did not attempt to straddle the ladder in the physically awkward fashion that Cuprum suggests.

Cuprum raises a number of arguments in support of its position that ladder failure is not the most probable cause, but none are persuasive—especially when viewing the evidence in the light most favorable to Baugh, as we must. For example, Cuprum claims that Vinson and Smith disagreed about how the ladder's design caused the accident and how the ladder's left leg and pail shelf became damaged. But this misrepresents the two men's testimony; because Vinson's opinions on these topics ranged from equivocal to entirely absent, there was no meaningful disagreement between him and Smith.

Cuprum also criticizes Baugh's experts for not knowing the specific PSI that Baugh was exerting on the ladder immediately before the accident. But we fail to see why this absence is dispositive. Vinson testified that a 200-pound individual could exert more than twice the PSI that the ladder was designed to withstand, and Smith opined that the damage to and post-accident location of the ladder were consistent with failure and tip-over. That seems sufficient. And it is unsurprising that the specific PSI is unknown, since no expert on *either side* could testify with certainty as to Baugh's specific location on the ladder when the accident occurred.

Another complaint of Cuprum's is that Baugh could not have easily reached the gutter screws he was replacing by standing on the ladder's first, second, or third steps—the only proper steps for standing. In support, Cuprum notes that Van Bree, who is six feet tall, could barely touch one of the screws with his hand, and that Baugh is even shorter than Van Bree, at five feet ten inches. However, a reasonable jury could discount this testimony on several grounds—for example, that Van Bree's superior height does not establish that his standing reach was longer than Baugh's, or more importantly, that the use of a screwdriver could have given Baugh the few inches necessary to make the screws more comfortably reachable.

And while Cuprum claims that Van Bree's theory is the only one that accounts for all of the damage to Baugh's ladder, that overlooks several criticisms that the jury could have found compelling. For example, Van Bree opined that the ladder's right front leg bent not because of a design failure but because Baugh had fallen on it after the ladder tipped over. In support of this theory, Van Bree noted that he dropped a sandbag onto an exemplar ladder, but the jury could have reasonably found that the bag could not replicate the effects of a human body. Similarly, when asked to explain how the right front leg could have been bent down by Baugh falling on it but still ended up on the ground with the bend pointing up, Van Bree opined that the entire ladder had flipped over 180° after Baugh fell onto it. The jury was entitled to view this opinion with skepticism. And although Van Bree opined that the pail shelf was damaged by Baugh standing on it, there was no evidence ruling out the possibility that the shelf had been damaged before the accident. So Cuprum was not entitled to judgment as a matter of law on causation.

III. CONCLUSION

The judgment of the district court is AFFIRMED.