

IN THE SUPREME COURT OF TEXAS

=====
No. 94-1057
=====

MARITIME OVERSEAS CORPORATION, PETITIONER

v.

RICHARD ELLIS, RESPONDENT

=====
ON APPLICATION FOR WRIT OF ERROR TO THE
COURT OF APPEALS FOR THE FOURTEENTH DISTRICT OF TEXAS
=====

Argued on November 5, 1997

JUSTICE BAKER delivered the opinion of the Court, in which JUSTICE ENOCH, JUSTICE SPECTOR, JUSTICE ABBOTT and JUSTICE HANKINSON join.

JUSTICE GONZALEZ filed a concurring opinion, joined by JUSTICE ABBOTT with respect to Part III only.

JUSTICE HECHT, joined by CHIEF JUSTICE PHILLIPS, filed a dissenting opinion.

JUSTICE OWEN not sitting.

This case involves Richard Ellis's Jones Act claims for injuries he sustained aboard a vessel owned by Maritime Overseas Corporation. The trial court rendered judgment on the jury's verdict for Ellis for actual and exemplary damages and awarded prejudgment interest. The court of appeals affirmed the actual damages award, but reversed the awards of exemplary damages and prejudgment interest.

Maritime asserts that the court of appeals used an improper standard to review the factual sufficiency of Ellis's damages evidence. Maritime also contends that the court of appeals should have applied a *Daubert-Robinson-Havner* review to determine whether any well-founded scientific methodology supported some of the actual damages award.¹ We conclude, under the facts of this case, that the court of appeals properly disposed of Maritime's claims. Accordingly, we affirm the court of appeals' judgment.

¹ See *Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. 579 (1993); *E.I. duPont de Nemours v. Robinson*, 923 S.W.2d 549 (Tex. 1995); *Merrell Dow Pharm., Inc. v. Havner*, 953 S.W.2d 706 (Tex. 1997).

I. BACKGROUND

A. FACTS

Ellis served as a steward's assistant in the housekeeping and galley department aboard the *S/T Overseas Alaska*, a 700-foot oil tanker owned by Maritime. In late August 1982, while the ship was at sea, the chief steward attempted to control a roach problem by spraying Diazinon, an industrial strength pesticide, in small, enclosed, unventilated areas, including the pantry, a storeroom and other nearby areas. The chief steward did not dilute the Diazinon properly. On the morning after the spraying, crew members noticed a strong insecticide odor. The captain ordered several crew members, including Ellis, to clean up the excess Diazinon. Ellis participated in the cleanup for about five hours without wearing inhalation protective gear or special equipment to protect his skin from contact with the insecticide. He was exposed to Diazinon levels up to 200 times over what is considered safe for human exposure.

After the cleanup, Ellis complained of a headache, eye irritation, and a runny nose. The ship reached New Orleans two days later, and Ellis was sent to the New Orleans General Hospital Emergency Room. At the hospital, emergency room personnel found Ellis had myosis with pupil constriction, muscle twitching, and muscle weakness along with other symptoms. Ellis's blood tests revealed that he had depressed levels of acetylcholinesterase, an essential enzyme. The insecticide Diazinon is an organophosphate, which is toxic to humans in varying degrees. The emergency room doctor testified at trial that on a scale of one to ten, with one representing normal health and ten representing death, Ellis suffered organophosphate exposure of a level of six to seven. The examining physician concluded that Ellis suffered from Diazinon exposure and gave Ellis medication for eye problems. The examining physician did not hospitalize Ellis, but she recommended follow-up care. About a month later, Ellis saw another doctor for continuing problems with his eyes.

Months after his exposure to Diazinon, Ellis began to complain of memory defects, irritability, gastrointestinal problems, anxiousness, fatigue, indigestion, nausea, muscle pain and stiffness, leg cramps, dizziness, insomnia, high blood pressure, and black-out spells. At trial, Ellis's

experts testified that his Diazinon exposure had caused him to suffer from “delayed neurotoxicity” or “neuropathy.” Ellis’s experts also testified that his condition is irreversible.

B. PROCEDURAL HISTORY

About ten months after his exposure to Diazinon, Ellis sued Maritime for gross negligence under the Jones Act and unseaworthiness under general maritime law. Based on the jury’s verdict, the trial court rendered judgment for Ellis for \$8,576,000 in actual damages, \$1,000,000 in punitive damages, \$1,000,000 in exemplary damages for failure to pay maintenance and cure, and \$1,871,728 in prejudgment interest. The damages totaled about \$12.6 million. Maritime filed post-verdict motions for judgment notwithstanding the verdict and new trial or, in the alternative, for remittitur. Maritime alleged that the actual and exemplary damages were excessive because the evidence was factually insufficient to support the damage awards. The trial court overruled all of Maritime’s motions.

In the court of appeals, Maritime only complained about the trial court’s denial of its motion for new trial and motion for remittitur; it did not challenge the trial court’s denial of its motion for judgment notwithstanding the verdict. The case was first argued before a three-judge panel of the court of appeals. The panel majority held that the evidence was factually insufficient to support the damages award. There was a dissent without an opinion. Later, the court of appeals granted Ellis’s motion for en banc rehearing. Following argument, the en banc court affirmed the actual damages award, but reversed the trial court’s judgment for exemplary damages and prejudgment interest. 886 S.W.2d 780.

This Court granted Maritime’s application for writ of error on two issues. First, Maritime contends that the court of appeals erred by not using the proper standard to review the factual sufficiency of Ellis’s actual damages evidence. Maritime argues that the court of appeals should have applied a traditional factual sufficiency review to the damage award instead of a featherweight causation standard because the trial court submitted the damages question to the jury based upon a preponderance of the evidence burden of proof. Second, Maritime contends, within the framework of its factual sufficiency review argument, that the court of appeals should have examined whether

any well-founded scientific methodology supported the jury's actual damages award.

At oral argument in this Court, Maritime stated that it was not making a no evidence complaint. Rather, Maritime asserted that its only complaint is that the court of appeals did not properly conduct a factual sufficiency review. However, under its factual sufficiency argument, Maritime argues that there is *no evidence* of long term injury from delayed neurotoxicity. In essence, Maritime would have this Court conduct a no evidence review of the evidence about delayed neurotoxicity within the Court's review of whether the court of appeals properly reviewed the factual sufficiency of the evidence. We decline to do so.

II. COURT OF APPEALS' FACTUAL SUFFICIENCY REVIEW

A. THE JONES ACT 48 U.S.C. § 688

The Jones Act provides a cause of action for maritime workers injured by an employer's negligence. Federal law provides that a party asserting an admiralty action may bring the action in state court. *See* 28 U.S.C. § 1333(1). When a state court hears an admiralty case, that court occupies essentially the same position occupied by a federal court sitting in diversity: the state court must apply substantive federal maritime law but follow state procedure. *See Texaco Ref. & Mkt. Inc. v. Estate of Dau Van Tran*, 808 S.W.2d 61, 64 (Tex. 1991); *see also General Chem. Corp. v. De La Lastra*, 852 S.W.2d 916, 920 (Tex. 1993).

Under the Federal Employers' Liability Act (FELA), a related statute, the causation burden is not the common law proximate cause standard. Rather, the causation burden is "whether the proof justifies with reason the conclusion that employer negligence played any part, even the slightest, in producing the injury for which the claimant seeks damages." *Rogers v. Missouri Pac. R.R.*, 352 U.S. 500, 506-07 (1957); *Landry v. Oceanic Contractors Inc.*, 731 F.2d 299, 302 (5th Cir. 1984). This burden has been termed "featherweight." *See Johnson v. Off Shore Exp., Inc.*, 845 F.2d 1347, 1352 (5th Cir. 1988); *Smith v. Trans-World Drilling Co.*, 772 F.2d 157, 162 (5th Cir. 1985); *see also Sentilles v. Inter-Caribbean Shipping Corp.*, 361 U.S. 107 (1959). The Jones Act expressly incorporates FELA and the case law developing that statute. *See Ferguson v. Moore-McCormack Lines, Inc.*, 352 U.S. 521 (1957). Thus, the causation standard under the Jones Act is the same as

that under FELA. *See American Dredging Co. v. Miller*, 510 U.S. 443, 456 (1994); *see also Brown & Root, Inc. v. Wade*, 510 S.W.2d 408, 410 (Tex. Civ. App.--Houston [14th Dist.] 1974, writ ref'd n.r.e.).

B. STANDARDS OF REVIEW

1. Jones Act Liability

Texas courts have long recognized that in addition to the burden of proof being less stringent, the standard of appellate review in a Jones Act case is also less stringent than under the common law. *See Texas & Pac. Ry. v. Roberts*, 481 S.W.2d 798, 800 (Tex. 1972); *Brown & Root, Inc.*, 510 S.W.2d at 410. As with the law on causation, FELA's standard of appellate review applies in Jones Act cases. *See Ferguson*, 352 U.S. at 523. Thus, the purpose of the Jones Act standard of review is to vest the jury with complete discretion on factual issues about liability. *See Rogers*, 352 U.S. at 506-07. Once the appellate court determines that some evidence about which reasonable minds could differ supports the verdict, the appellate court's review is complete. *See Roberts*, 481 S.W.2d at 800 (citing *Lavender v. Kurn*, 327 U.S. 645 (1946)). Essentially, a Texas court of appeals may not conduct a traditional factual sufficiency review of a jury's liability finding under the Texas "weight and preponderance" standard. *See Roberts*, 481 S.W.2d at 801; *see also Brown & Root, Inc.*, 510 S.W.2d at 410. Rather, courts of appeals must apply the less stringent federal standard of review.

2. Excessive Damages and Remittiturs

Texas courts of appeal have the power to review excessiveness of damages and to order remittitur in FELA actions and, by implication, in Jones Act cases as well. *See Sweet v. Port Terminal R.R.*, 653 S.W.2d 291, 294-95 (Tex. 1983); *c.f. Nobles v. Southern Pac. Transp. Co.*, 731 S.W.2d 697, 699 (Tex. App.--Houston [14th Dist.] 1987, writ ref'd n.r.e.); *see also Nairn v. National R.R. Passenger Corp.*, 837 F.2d 565, 566 (2d Cir. 1988). The appellate court must make its own "detailed appraisal of the evidence bearing on damages." *Nairn*, 837 F.2d at 567, (quoting *Grunenthal v. Long Island R.R.*, 393 U.S. 156, 159 (1968)).

The standard of review for an excessive damages complaint is factual sufficiency of the

evidence. *See Rose v. Doctor's Hosp.*, 801 S.W.2d 841, 847-48 (Tex. 1990); *Pope v. Moore*, 711 S.W.2d 622, 624 (Tex. 1986). The court of appeals should employ the same test for determining excessive damages as for any factual sufficiency question. *See Pope*, 711 S.W.2d at 624. When considering a factual sufficiency challenge to a jury's verdict, courts of appeals must consider and weigh all of the evidence, not just that evidence which supports the verdict. *See Ortiz v. Jones*, 917 S.W.2d 770, 772 (Tex. 1996); *Lofton v. Texas Brine Corp.*, 720 S.W.2d 804, 805 (Tex. 1986). A court of appeals can set aside the verdict only if it is so contrary to the overwhelming weight of the evidence that the verdict is clearly wrong and unjust. *See Ortiz*, 917 S.W.2d at 772; *Cain v. Bain*, 709 S.W.2d 175, 176 (Tex. 1986). The court of appeals is not a fact finder. Accordingly, the court of appeals may not pass upon the witnesses' credibility or substitute its judgment for that of the jury, even if the evidence would clearly support a different result. *See Pool v. Ford Motor Co.*, 715 S.W.2d 629, 634 (Tex. 1986).

If the court of appeals determines that the evidence supports the jury's verdict, it is not required to detail all the evidence supporting the judgment when it affirms the trial court's judgment for actual damages. *See Ellis County State Bank v. Kever*, 888 S.W.2d 790, 794 (Tex. 1994). On the other hand, when reversing a trial court's judgment for factual insufficiency, the court of appeals must detail all the evidence relevant to the issue and clearly state why the jury's finding is factually insufficient or so against the great weight and preponderance of the evidence that it is manifestly unjust. *See Kever*, 888 S.W.2d at 794; *Pool*, 715 S.W.2d at 635. The court of appeals must explain how the contrary evidence greatly outweighs the evidence supporting the verdict. *See Kever*, 888 S.W.2d at 794; *Pool*, 715 S.W.2d at 635.

Because the question of whether damages are excessive and that a remittitur is appropriate is a factual determination made final in the court of appeals, this Court lacks jurisdiction to review such findings. TEX. CONST. art. V, § 6; TEX. GOV'T CODE, § 22.225(a); *Akin v. Dahl*, 661 S.W.2d 917, 921 (Tex. 1983); *Sweet*, 653 S.W.2d at 295.

C. ANALYSIS

Maritime concedes that the Jones Act imposes a reduced burden in proving a defendant's *liability*, but asserts the Act does not relieve a plaintiff of the burden of proving *damages* by a preponderance of the evidence. Initially, Maritime contends that by submitting the damages question based upon a preponderance of the evidence, Ellis waived any argument that a featherweight standard applies to the court of appeals' review of damages. *See De La Lastra*, 852 S.W.2d at 916. Maritime further argues that both federal and Texas appellate courts have reviewed damage awards for factual sufficiency and excessiveness using traditional standards of review in Jones Act cases. *See Nairn*, 837 F.2d at 566; *Sweet*, 653 S.W.2d at 294-95. Maritime asserts that the court of appeals used the wrong standard when it reviewed the actual damage award in this case. We disagree. As explained below, the court of appeals properly analyzed this case in the context of Maritime's point of error and argument in that court.

The record shows that during trial, Ellis offered the testimony of five expert medical doctors, four of whom had examined and treated Ellis. Maritime did not challenge the testimony of any of the five experts at trial. All five expert witnesses testified that Ellis's severe and lengthy exposure to Diazinon caused his prolonged neural damages. They expressed their opinions on bases ranging from reasonable medical probability to without a doubt. In essence, all five experts testified that Ellis's prolonged exposure to excessive levels of Diazinon due to Maritime's negligence caused the long-term effects of delayed neurotoxicity. Maritime presented three medical doctor experts, only one of whom had treated Ellis. These three experts testified that Ellis's injuries were not a delayed effect of his Diazinon exposure.

The jury answered "yes" to the question of whether Maritime's negligence played any part, even the slightest, in producing injury or illness to Ellis. The jury then found, based on a preponderance of the evidence, that \$8,576,000 in actual damages would fairly and reasonably compensate Ellis for the injuries or illnesses resulting from the occurrence in question. The trial

court rendered judgment for Ellis on the jury's verdict for the actual damages together with exemplary and punitive damages and prejudgment interest.

In the court of appeals, Maritime contended the trial court erred in denying its motion for new trial because factually insufficient evidence supported the jury's finding that Ellis suffered \$8,576,000 in actual damages, and because the amount was excessive. However, as the court of appeals recognized, Maritime's argument to that court was not about the amount of actual damages the jury awarded, but about causation. The court of appeals observed:

Appellant concedes that appellee suffered short-term effects from the exposure to Diazinon and in effect, that overexposure to Diazinon is toxic to humans and can cause damage to the nervous system on some temporary basis. Thus, appellant does not contest damages for the medical treatment appellee received in New Orleans in 1982 or for the loss of two days of work. Appellant does contest damages awarded for appellee's claim of delayed and permanent neurotoxic damage on the ground that appellee's expert testimony was speculative and not based on reasonable medical probability. Essentially, appellant's attack is directed at the issue of *causation* as to the delayed and permanent damage found by the jury based on the circumstantial and expert evidence before them.

886 S.W.2d at 783. Because Maritime contended there was factually insufficient evidence to support the damages award, the court of appeals considered all the evidence both in favor of and contrary to the judgment.

The court of appeals detailed the material testimony of all eight experts--five for Ellis and three for Maritime. After doing so, the court of appeals first concluded that the evidence more than satisfied the Jones Act standard for causation. 886 S.W.2d at 791. The court of appeals stated that sufficient evidence justified the jury's finding that Maritime's admitted negligence in exposing Ellis to extreme levels of a dangerous pesticide did play a part in producing the injury for which the damages were sought and awarded. 886 S.W.2d at 791. In addition to concluding that the evidence satisfied the "featherweight" burden of negligence and causation in Jones Act cases, the court of appeals also concluded that the evidence was sufficient under the higher standard of proof for causation under Texas common law. The court of appeals followed applicable law when it analyzed

Maritime's challenge to causation instead of damages and when it reviewed the amount of the damages award under traditional factual sufficiency review. *See Rogers*, 352 U.S. at 506-07; *Landry*, 731 F.2d at 302; *Nairn*, 837 F.2d at 566; *Sweet*, 653 S.W.2d at 294-95. Accordingly, we conclude that the court of appeals followed the appropriate standard of review in analyzing Maritime's claims. Again, this Court has no jurisdiction to decide whether the court of appeals reached the correct result--that is whether the actual damage award was excessive. *See Akin*, 661 S.W. 2d at 921. We reject Maritime's first argument.

III. COURT OF APPEALS' REVIEW OF SCIENTIFIC EVIDENCE

Maritime's second contention is that the court of appeals erred because it did not examine whether any well-founded scientific evidence supports the actual damages award. Maritime argues that the federal standard articulated in *Daubert* and the state standard articulated in *Robinson* and *Havner* are the proper standards for reviewing the sufficiency of Ellis's damages evidence. Significantly, Maritime does not complain about the trial court's admission of any of the scientific evidence from any of Ellis's five experts. Rather, Maritime's position is that if the court of appeals applied a proper scientific methodology test to Ellis's experts' testimony, the testimony would be legally insufficient to show that the long term conditions Ellis claims he suffers were caused by delayed neurotoxicity. Thus, Maritime concludes, by way of its complaints about the court of appeals' factual sufficiency review, that there is *no evidence* of *some* of Ellis's actual damages. Maritime's argument is flawed.

A. DAUBERT-ROBINSON-HAVNER

In *Daubert*, the Supreme Court considered "the standard for admitting expert scientific testimony in a federal *trial*." *Daubert*, 509 U.S. at 579 (emphasis added). *Daubert*'s focus is on the trial court's discretion, when faced with an objection to scientific evidence, to admit or exclude such evidence before or during the trial. The Supreme Court added that when the trial court concludes that the disputed scientific evidence is insufficient to go to the jury, the trial court may grant a

summary judgment or a directed verdict. *Daubert*, 509 U.S. at 595. However, *Daubert* does not support the proposition that a reviewing court can in effect exclude expert testimony that was not objected to based on its scientific reliability before trial or when it was offered at trial and then render judgment against the offering party.

Similarly, in *Robinson*, we granted DuPont's application for writ of error to decide "the appropriate standard for the admission of scientific expert testimony." *See Robinson*, 923 S.W.2d at 554 (emphasis added). Like the Supreme Court in *Daubert*, we recognized the special nature of scientific expert testimony. *See Robinson*, 923 S.W.2d at 554-58. We then explained the trial court's role as a "gatekeeper," and recognized that "[t]he trial court is responsible for making the preliminary determination of whether the proffered testimony meets the standards [for scientific reliability]." *Robinson*, 923 S.W.2d at 556. Like *Daubert*, *Robinson*'s focus is on a trial court's discretion in admitting or excluding scientific evidence after a party lodges an objection to the reliability of its opponent's scientific expert testimony before trial or when the evidence is offered. *See Robinson*, 923 S.W.2d at 557.

Under *Havner*, a party may complain on appeal that scientific evidence is unreliable and thus, no evidence to support a judgment. *See Havner*, 953 S.W.2d 706. *Havner* recognizes that a no evidence complaint may be sustained when the record shows one of the following: (a) a complete absence of a vital fact; (b) the reviewing court is barred by rules of law or evidence from giving weight to the only evidence offered to prove a vital fact; (c) the evidence offered to prove a vital fact is no more than a mere scintilla; or (d) the evidence establishes conclusively the opposite of the vital fact. *See Havner*, 953 S.W.2d 711 (citing Robert W. Calvert, "No Evidence" and "Insufficient Evidence" *Points of Error*, 38 TEX. L. REV. 361, 362-63 (1960)). Here, like in *Havner*, Maritime contends that because Ellis's scientific evidence "is not reliable, it is not evidence," and the court of appeals and this Court are "barred by rules of law or of evidence from giving weight" to Ellis's experts' testimony. *See Havner*, 953 S.W.2d at 711, 713.

B. ERROR PRESERVATION

To preserve a complaint that scientific evidence is unreliable and thus, no evidence, a party must object to the evidence before trial or when the evidence is offered. *See Robinson*, 923 S.W.2d at 557; *see also Havner*, 953 S.W.2d at 713 (“If the expert’s scientific testimony is not reliable, it is not evidence.”). Without requiring a timely objection to the reliability of the scientific evidence, the offering party is not given an opportunity to cure any defect that may exist, and will be subject to trial and appeal by ambush. *See Marbled Murrelet v. Babbitt*, 83 F.3d 1060, 1066-67 (9th Cir. 1996), *cert. denied*, 117 S. Ct. 942 (1997); *Sumitomo Bank v. Product Promotions, Inc.*, 717 F.2d 215, 218 (5th Cir. 1983).

Reviewing courts may not exclude expert scientific evidence after trial to render a judgment against the offering party because that party relied on the fact that the evidence was admitted. *Babbitt*, 83 F.3d at 1067. To hold otherwise is simply “unfair.” *Babbitt*, 83 F.3d at 1067. As the *Babbitt* court explained:

[P]ermitting [a party] to challenge on appeal the reliability of [the opposing party’s] scientific evidence under *Daubert*, in the guise of an insufficiency-of-the-evidence argument, would give [appellant] an unfair advantage. [Appellant] would be ‘free to gamble on a favorable judgment before the trial court, knowing that [it could] seek reversal on appeal [despite its] failure to [object at trial].’

Babbitt, 83 F.3d at 1067 (citations omitted). Thus, to prevent trial or appeal by ambush, we hold that the complaining party must object to the reliability of scientific evidence before trial or when the evidence is offered.

C. ANALYSIS

In this case, Maritime did not object to the reliability of Ellis’s scientific evidence until after the jury verdict. Maritime nevertheless argues that the court of appeals should have applied

the *Daubert-Robinson-Havner*² rationale as part of its factual sufficiency review. These cases do not support Maritime's argument because: (1) each involve admissibility or no evidence considerations, and (2) in each case the defendants timely objected to the scientific evidence.

Daubert and *Havner* involve the anti-nausea drug, Bendectin. In these two cases, plaintiffs asserted that Bendectin caused birth defects. *See Daubert*, 509 U.S. at 591; *Havner*, 953 S.W.2d at 708. *Robinson* involved a fungicide known as Benlate that DuPont manufactured. The Robinsons contended that the Benlate they used was contaminated and damaged their pecan crop. *See Robinson*, 923 S.W.2d at 551. In all three cases, causation was hotly contested, as it is in this case, on delayed effects. In all three cases, the manufacturer objected before trial or when the evidence was offered that the plaintiffs' scientific expert testimony on causation was inadmissible because it was neither relevant nor based upon a reliable foundation. *Daubert*, 509 U.S. at 591; *Robinson*, 923 S.W.2d at 552; *Havner*, 953 S.W.2d at 708-09. Thus, the manufacturers in all three cases properly preserved their claims that the expert testimony was inadmissible and was no evidence of causation because it was not relevant and not based on well-founded scientific methodology.

In *Daubert*, Merrell Dow moved for summary judgment. The trial court granted summary judgment on the grounds that the Dauberts did not establish that the principle on which their experts based their opinions was generally accepted by the relevant scientific community. *See Daubert v. Merrell Dow Pharm., Inc.*, 727 F. Supp. 570, 572 (S.D. Cal. 1989). On appeal, the United States Supreme Court held that the criteria is whether the scientific evidence is relevant and reliable and thus admissible. The Court remanded *Daubert* to the circuit court to determine whether the expert testimony rested on a reliable foundation and was relevant. *See Daubert*, 509

² Maritime also cites *Brock v. Merrell Dow Pharm., Inc.*, 874 F.2d 307 (5th Cir.), *modified*, 884 F.2d 166 (1989), to support its argument that Ellis's experts' testimony was not proper scientific evidence. However, like *Daubert*, *Robinson* and *Havner*, in *Brock*, Merrell Dow challenged the scientific evidence before the jury verdict. Here, Maritime did not challenge Ellis's scientific evidence until after the jury verdict.

U.S. at 597. On remand, the Ninth Circuit held that the testimony about Bendectin's effect was inadmissible under Federal Rule of Evidence 702.

In *Robinson*, the trial court granted DuPont's pretrial motion and excluded the Robinsons' expert testimony on the ground that it was neither relevant nor based upon a reliable foundation. *See Robinson*, 923 S.W.2d at 552. At trial, the Robinsons again attempted to introduce their expert's testimony but the trial court abided by its earlier ruling and excluded that testimony. The Robinsons then offered a bill of exception on their expert's testimony. At the close of evidence, the trial court granted DuPont's motion for directed verdict. The Robinsons appealed on the grounds that the trial court abused its discretion by excluding their expert's testimony. This Court followed *Daubert* and held that a party must show, in addition to showing an expert witness is qualified, that the expert's testimony is relevant and reliable. *See Robinson*, 923 S.W.2d at 556. Accordingly, although *Robinson* involves the exclusion of expert testimony, DuPont timely objected to the expert testimony before trial and when the evidence was offered. Unlike *Maritime*, DuPont did not wait until Merrell Dow objected to the Havners' scientific evidence "at several junctures" during the litigation. *See Havner*, 953 S.W.2d at 708. Merrell Dow moved for summary judgment contending there was no scientifically reliable evidence that Bendectin caused limb reduction birth defects or that Bendectin caused the plaintiff's birth defect. *Cf. General Elec. Co. v. Joiner*, 118 S. Ct. 512 (1997) (affirming summary judgment when plaintiff's expert evidence did not show link between polychlorinated biphenyls (PCBs) and cancer). The trial court held a hearing at which the scientific reliability of the Havner's summary judgment evidence was extensively aired. The trial court then denied Merrell Dow's motion for summary judgment. Before trial, Merrell Dow filed a motion in limine again questioning the scientific reliability of the Havner's expert testimony. The trial court denied Merrell Dow's motion in limine. During trial, Merrell Dow objected to the admission of the Havners' scientific evidence. Merrell Dow also unsuccessfully moved for directed verdict when the Havners closed their case, complaining about

the Havners' scientific evidence. The trial court overruled Merrell Dow's objections and denied its motion for directed verdict. In *Havner*, while the issue was whether the scientific evidence was legally sufficient to be some evidence of causation, Merrell Dow timely challenged the experts' testimony at every opportunity in the trial court, and it properly preserved a no evidence claim. Indeed, this Court emphasized that the offering party should be allowed the opportunity to "pass[] muster" under a trial court *Robinson* objection--"to present the best evidence available"--before an appellate court considers whether legally sufficient evidence supports a judgment. *Havner*, 953 S.W.2d at 720.

Here, Maritime did not object to the scientific reliability of a single one of Ellis's five expert witnesses until after the jury verdict. Before trial, Maritime did not ask for a *Daubert/Robinson*-type hearing. *Cf. Havner*, 953 S.W.2d at 708-09. During trial, the record reflects that Maritime made nine objections while Ellis's five experts testified. Five objections complained about nonresponsiveness, three complained about leading questions, and one complained that the witness was testifying from a document not in evidence. Simply put, Maritime did not make *any* objection to the reliability of Ellis's experts before trial or when Ellis offered the evidence. Maritime cannot complain for the first time after the verdict that the testimony from Ellis's five experts does not support the judgment. To allow otherwise would deny Ellis's scientific experts the opportunity to "pass[] muster" in the first instance and usurp the trial court's discretion as "gatekeeper." *See Havner*, 953 S.W.2d at 720; *Robinson*, 923 S.W.2d at 554.

Rules and procedures about error preservation promote certainty and fairness. Such rules also frame and develop the legal issues for appeal, giving notice to both the litigants and to appellate courts about what issues remain. Appellate courts must base their decisions on the record as made and brought forward, not on a record that should have been made or could have been made. *See Babbitt*, 83 F.3d at 1067. For this Court to decide now that Ellis's scientific evidence is unreliable under *Daubert* or *Robinson* would base appellate review on a record that

was not made.

IV. RESPONSE TO THE DISSENT

We do not disagree with the dissent that “Maritime Overseas’ position has always been . . . that no reliable scientific evidence shows that diazinon can cause long-term neurotoxicity.” ___ S.W.2d ___. However, at trial, rather than make objections to the trial court, Maritime chose to present this argument to the jury by challenging the reliability of Ellis’s scientific evidence via vigorous cross-examination, presenting contrary evidence, and through opening statement and closing argument. Thus, unlike *Havner*, the “question of scientific reliability was [not] raised repeatedly” before the trial court. *Havner*, 953 S.W.2d at 709.

Nevertheless, the dissent would hold that Maritime’s decision to argue the weight of both parties’ experts’ testimony to the jury was sufficient to preserve a complaint about reliability for appeal. When the reliability of scientific evidence is contested, attempts at persuasion before the jury and reiterated on appeal cannot amount to preservation of error for appeal. To allow otherwise would impermissibly permit a party to strip away the trial court’s role as gatekeeper in the first instance when a party wishes to contest the reliability of scientific evidence. *See Robinson*, 923 S.W.2d at 553, 556, 558 (placing a “heightened responsibility” on trial judges “to ensure that expert testimony show some indicia of reliability” by holding them “responsible for making the preliminary determination of whether the proffered testimony meets the standards [for scientific reliability]”); *see also Daubert*, 509 U.S. at 589 (explaining that “the trial judge must ensure that any and all scientific testimony or evidence admitted is . . . reliable”). As Justice Gonzalez rightly points out in his concurring opinion, “[i]t is impossible for a [trial] court to exercise its gatekeeper function after the evidence has been admitted and the jury discharged.” ___ S.W.2d ___.

Under the dissent’s approach, the trial court would be converted at a party’s whim from a gatekeeper to “an idle spectator rendered powerless to ensure the integrity of courtroom evidence.” *Robinson*, 923 S.W.2d at 554 (quoting DuPont’s argument). We decline to take away the trial

court's gatekeeping function. To do otherwise would usurp the orderly and efficient disposition of appeals, deprive the proffering party of an opportunity to cure any defects in its evidence that the objecting party might pose, and in some cases, place appellate courts in the undesirable position of making decisions about evidentiary reliability absent a fully developed record.

The dissent also goes to great lengths to set forth cases that it claims stand for the proposition that "a party may complain after verdict and on appeal that evidence admitted without objection is neither legally nor factually sufficient to support the verdict." ___ S.W.2d ___. But the dissent's reliance on these cases is misplaced for those cases involve no evidence challenges where, on the face of the record, the evidence lacked probative value. *See Calvert, supra*, at 362-63. In contrast, by its own admission, Maritime is not making a no evidence complaint.

Maritime could have and should have objected to Ellis's evidence at trial in a timely fashion for appellate consideration. We have properly decided the case on the issues preserved at trial and raised on appeal, as our rules and precedent require.

V. CONCLUSION

We conclude that the court of appeals used the proper standard to review the factual sufficiency of Ellis's actual damages evidence. We also conclude that because Maritime did not preserve error about Ellis's scientific expert testimony in the trial court, the court of appeals did not err in conducting its factual sufficiency review. We overrule Maritime's other points of error. Accordingly, we affirm the court of appeals' judgment.

James A. Baker,
Justice

OPINION DELIVERED: April 16, 1998