UPDATE ON CHALLENGES TO EXPERT WITNESSES

MARIA WYCKOFF BOYCE, *Houston*
Hogan Lovells LLP

ERICA W. HARRIS, *Houston*
Susman Godfrey LLP

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CHAPTER 19

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I. INTRODUCTION

Three main bases exist for challenging expert testimony: (1) the expert's professional and experiential qualifications, (2) the helpfulness or relevance of the testimony being offered, and (3) the reliability of the expert's conclusions and methodology. These legal issues play out differently depending on the type of expert testimony at issue. For example, financial experts are particularly vulnerable to foundational reliability challenges but are less likely to be excluded based on their professional qualifications. By contrast, experts in products liability cases may be vulnerable to qualification challenges if their professional experience is not sufficiently related to the type of design defect asserted in the case.

The procedural posture of the case can dictate which arguments are available to counsel challenging an expert and the standard of review the court will apply. Challenges to the reliability of expert testimony are widely available on appeal—even if counsel failed to object before or during trial.

Practitioners should also consider the practical impact of challenging the other side's expert witness. Although a ruling on a *Daubert* motion can accelerate settlement negotiations or a ruling on summary judgment, recent data show that resolution of a case is less likely to occur while the *Daubert* motion remains pending, especially in cases in which expert testimony is crucial to the plaintiff's success. Practitioners must account for these realities as they strategize whether to lodge a challenge. For example, timing matters; a *Daubert* motion is less likely to be ruled on while there is also a motion for summary judgment pending, as courts frequently wait to resolve both simultaneously. This delay can chill settlement negotiations in the meantime.

As a result, many issues should be considered when attempting to disqualify the other side's expert, including the legal grounds for doing so and the practical impact on the case.

II. BASIC ADMISSIBILITY FRAMEWORK FOR EXPERT TESTIMONY

Traditional non-expert witnesses cannot testify about their opinions or offer any analysis of the facts of a case. Instead, their testimony is limited to matters about which they have personal knowledge. Experts are not so limited. They are called upon to provide the factfinder with scientific, technical, or other specialized knowledge, and they may offer their analysis of and opinions on the facts of the case in order to do so. Because of the unique role experts play at trial, a number of requirements must be met before the expert testimony is deemed admissible. Specifically, before an expert may testify, the trial court must determine that the expert is qualified to offer an opinion and that the expert's analysis is relevant and reliable.

Admissibility is a preliminary question determined by the trial court.[1] Applying the standards of admissibility for expert testimony, the trial court assumes a mandatory "gatekeeping" role described in the landmark United States Supreme Court opinion, *Daubert v. Merrell Dow Pharmaceuticals, Inc.*,[2] and adopted by the Texas Supreme Court in *E.I. du Pont de Nemours & Co. v. Robinson.*[3] Prior to introducing expert testimony to a jury, a trial court must first determine (1) whether a witness is qualified to offer expert testimony; (2) whether the testimony offered is relevant; and (3) whether the testimony is sufficiently reliable.[4] *Daubert*, Federal Rule of Evidence 104(a), and the Texas Rule of Evidence 104(a) all direct trial courts to make preliminary assessments of the expert's qualifications and the admissibility of the testimony.[5] This analysis does not require courts to determine the truth or falsity of an expert's opinion. Instead, the trial court must determine if the expert is qualified and if his or her opinion is relevant. And, if so, the court must next examine the principles and methodology that underlie the opinion to determine if they are sufficiently reliable.[6]

Expert testimony from a qualified witness that is relevant and reliable may still be excluded if the probative value of the testimony is outweighed by potential prejudice or confusion it could cause the trier of fact. A determination of unfair prejudice, confusion

[1] TEX. R. EVID. 104(a).

[2] 509 U.S. 579 (1993). The federal jurisprudence setting forth the standards of admissibility for expert testimony is more accurately described as a trilogy, which, in addition to *Daubert*, includes *General Electric Co. v. Joiner*, 522 U.S. 136 (1997) (further articulating the *Daubert* standard and deciding the standard of appellate review for trial court rulings on expert testimony), and *Kumho Tire Co. v. Carmichael*, 526 U.S. 137 (1999) (holding that the *Daubert* standard applies to all expert testimony, not just scientific expert testimony).

[3] 923 S.W.2d 549 (Tex. 1995). Like the federal jurisprudence, the seminal Texas jurisprudence consists of a series of cases extending the holding of the first. For example, *Gammill v. Jack Williams Chevrolet, Inc.*, 972 S.W.2d 713 (Tex. 1998), extended *Robinson* to other forms of expert testimony.

[4] *Daubert*, 509 U.S. at 591–94; *see also Robinson*, 923 S.W.2d at 556–57.

[5] *Daubert*, 509 U.S. at 593-94; Fed. R. Evid. 104(a); TEX. R. EVID. 104(a).

[6] *E.I. du Pont de Nemours & Co. v. Robinson*, 923 S.W.2d 549, 558 (Tex. 1995).

of the issues, undue delay, or misleading of the jury can result in exclusion.[7]

The party offering expert testimony has the burden to prove the admissibility of the testimony unless the opposing party does not object to its introduction.[8] This burden of proof must be met before offering any kind of expert testimony, including scientific testimony, damages testimony, or testimony relying on other technical or specialized knowledge.[9]

III. THREE MAIN BASES FOR DISQUALIFYING EXPERTS

A. Qualification Challenges: General Standard for a Challenge

One basis for challenging an expert's testimony is that the expert lacks the qualifications necessary to opine on the issues in the case. Rule 702 requires that an expert be qualified to give her opinion "by knowledge, skill, experience, training, or education."[10] Courts construing this rule have emphasized that there are no "definitive guidelines" as to what will qualify someone as an expert.[11] There is no "per se requirement" that an expert hold a license, certification, or degree in a particular discipline.[12] Instead, the necessary specialized knowledge may "be derived from specialized education, practical experience, a study of technical works, or a varying combination of these things."[13]

Although "[e]xperience alone" may sufficiently qualify an expert to testify,[14] it is not enough for the expert to simply have more knowledge than the general population in a certain field. Rather, "[t]he offering party must demonstrate that the witness possesses special knowledge as to the very matter on which he proposes to give an opinion."[15] Put differently, the subject matter of the opinion must "fit" the expert's background and knowledge.[16] Finally, "[c]redentials are important, but credentials alone do not qualify an expert to testify."[17]

The Texas Supreme Court recently reaffirmed this test in *In re Commitment of Bohannan*.[18] The Court held that the expert must have "knowledge, skill, experience, training, or education regarding the specific issue before the court" in order to give an opinion on such issue.[19] Some commentators have read *Bohannan* to expand the qualifications inquiry to include the reliability of the techniques the expert used.[20] In other words, lesser qualifications may suffice if the methodology used is highly reliable and vice versa.

In many cases, expertise on the issue at hand requires additional education or experience beyond the expert's advanced degree. For example, in *Broders v. Heise*,[21] the Texas Supreme Court held that the expert's medical degree was insufficient to qualify the expert to answer "every conceivable medical question."[22] "[G]iven the increasingly specialized and technical nature" of the discipline, the expert's generalized credential in a larger field of study could not alone satisfy the requirements of Rule 702.[23] Similarly, in *Cooper Tire & Rubber Co. v. Mendez*,[24] the Texas

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[7] *Robinson*, 923 S.W.2d at 557.

[8] *See Bourjaily v. United States*, 483 U.S. 171, 175-76 (1987) (interpreting Fed. R. Evid. 104(a)); *Robinson*, 923 S.W.2d at 557; *Mack Trucks, Inc. v. Tamez*, 206 S.W.3d 572, 578 (Tex. 2006); *Clark v. State*, 01-13-00373-CR, 2015 WL 162257, at *12 (Tex. App.—Houston [1st Dist.] Jan. 13, 2015, pet. ref'd) (the proponent of expert testimony must show by "clear and convincing proof" that expert testimony is sufficiently relevant and reliable).

[9] *Kumho Tire Co.*, 526 U.S. at 149; *Gammill*, 972 S.W.2d at 726.

[10] TEX. R. EVID. 702.

[11] *See Mem'l Hermann Healthcare Sys. v. Burrell*, 230 S.W.3d 755, 762 (Tex. App.—Houston [14th Dist.] 2007, no pet.) ("There are no definitive guidelines for determining whether a witness's education, experience, skill, or training qualify him as an expert.").

[12] *Perez v. Goodyear Tire & Rubber Co.*, 04-14-00620-CV, 2016 WL 1464768, at *5 (Tex. App.—San Antonio Apr. 13, 2016, pet. filed) (holding that lack of an engineering degree did not make expert unqualified to testify about tire design defect); *Harnett v. State*, 38 S.W.3d 650, 659 (Tex. App.—Austin 2000, pet. ref'd); *Trenado v. Cooper Tire & Rubber Co.*, 2009 WL 5061775, at *2 (S.D. Tex. Dec. 15, 2009) ("A witness qualified as an expert is not strictly confined to his area of practice but may testify concerning related applications; a lack of specialization does not affect the admissibility of the opinion, but only its weight.").

[13] *Perez*, 2016 WL 1464768, at *3 (quoting *Perry v. State*, 903 S.W.2d 715, 762 (Tex. Crim. App. 1995)).

[14] *Gammill*, 972 S.W.2d at 726.

[15] *Id.* at 718 (quoting *Broders v. Heise*, 924 S.W.2d 148, 152-53 (Tex. 1996)) (internal quotation marks omitted).

[16] *Broders*, 924 S.W.2d at 153 (quoting *Nunley v. Kloehn*, 888 F. Supp. 1483, 1488 (E.D. Wis. 1995)).

[17] *In re Commitment of Bohannan*, 388 S.W.3d 296, 304 (Tex. 2012).

[18] 388 S.W.3d 296 (Tex. 2012).

[19] *Id.* at 305.

[20] Justice Harvey Brown & Melissa Davis, *Eight Gates for Expert Witnesses: Fifteen Years Later*, HOUS. L. REV. 1, 13 (2014).

[21] 924 S.W.2d 148 (Tex. 1996).

[22] *Id.* at 153–54 (quoting *Christophersen v. Allied–Signal Corp.*, 939 F.2d 1106, 1112–13 (5th Cir. 1991)).

[23] *Id.* at 152.

[24] 204 S.W.3d 797 (Tex. 2006).

Supreme Court held that an expert with a master's degree in polymer science and engineering was not qualified to testify regarding an alleged defect in manufacturing a tire because "tire chemistry and design . . . is a highly specialized field."[25]

The party presenting the expert may attempt to frame the issue on which testimony is elicited in such a way that generalized knowledge in the discipline is adequate to qualify the expert to give an opinion. When aiming to disqualify an expert, counsel should attack any disconnect between the expert's discipline and the issue of the case. However, if the issue is governed by standards and principles that are common across a broad discipline, then the expert testimony need not come from any particular subspecialty.[26]

In sum, an expert's qualifications can be established in numerous ways, but the expertise must actually pertain to the subject of the opinion. Even if an effort to exclude an expert's testimony before trial is unsuccessful, challenging the expert's qualifications during cross-examination at trial can serve to undermine the weight given to the expert's opinion by the jury.

B. Qualification Challenges: Application to Specific Types of Experts

1. Financial Experts

Generally, financial experts are required to have sufficient knowledge of accounting principles in order to qualify to testify.[27] Challenges to the qualifications of financial experts are rarely successful due to the relative ease of obtaining the requisite economic and financial expertise for valuation. Such expert testimony is more commonly attacked on reliability or relevance grounds rather than due to a lack of qualifications.[28]

Nonetheless, a qualifications challenge against a financial expert can succeed in some circumstances. For example, if calculating the amount of damages requires sophisticated or specialized valuation methods, such as a reasonable royalty in a patent infringement case, a general background in accounting or business valuation may be insufficient. Accordingly, the chances of successfully challenging a financial expert who has general expertise in economic or financial analysis may be increased by framing the subject matter of the issue for the court as requiring additional, specialized expertise.

In addition, it is important to take note of whether the financial expert appears to have formed an opinion on causation as well as damages. If so, a challenge to the expert's qualifications to provide testimony about causation may be well taken.

Successful challenges to the qualifications of financial experts are rare,[29] but such challenges can be appropriate if the damages calculation requires sophisticated or specialized valuation methods.

2. Products Liability Experts

Expert qualification of an expert is a common issue in products liability cases. Experts in this area must be able to speak to the issues and evidence before the trier of fact, which involves a specific product and type of defect.[30] For example, in *Macy v. Whirlpool Corp*, the Fifth Circuit affirmed the trial court's striking of an expert who testified regarding an alleged defect in a gas range that allegedly leaked toxic amounts of carbon

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[25] *Id.* at 806.

[26] *Nexion Health at Beechnut, Inc. v. Moreno*, No. 01-15-00793-CV, 2016 WL 1377899, at *5 (Tex. App.—Houston [1st Dist.] Mar. 29, 2016, no. pet.) (a physician with experience managing in-patient services in a hospital setting was qualified to testify about standards of patient care in a nursing home setting); *Hayes v. Carroll*, 314 S.W.3d 494, 505 (Tex. App.—Austin 2010, no pet.) (finding no abuse of discretion to qualify a vascular surgeon to testify to the standard of care required of defendants despite practicing in a different specialty because the relevant standard of care would "appl[y] to any physician or nurse treating an unconscious or semicomatose patient regardless of the physician's or nurse's area of expertise.")

[27] *See Seatrax, Inc. v. Sonbeck Int'l, Inc*., 200 F.3d 358, 372 (5th Cir. 2000) (considering a witness unqualified to testify to damages when he had no formal or educational training in accounting); *McDonough v. Williamson*, 742 S.W.2d 737, 739 (Tex. App.—Houston [14th Dist.] 1987, no writ) (finding a plaintiff, who was a certified public accountant, qualified to be an expert under TEX. R. EVID. 703); *Rogers v. Alexander*, 244 S.W.3d 370, 384 (Tex. App.—Dallas 2007, pet. denied) (finding a certified public accountant familiar with the home health industry and accounting and valuation principles associated with the industry qualified as an expert for the purposes of a damage calculation in a case involving the home health industry); *West v. Carter*, 712 S.W.2d 569, 572 (Tex. App.—Houston [14th Dist.] 1986, writ ref'd n.r.e.) (explaining that an accountant who consulted with a business owner and reviewed sales information indicating a downturn validly valued the business as an expert).

[28] PWC, DAUBERT CHALLENGES TO FINANCIAL EXPERTS: A YEARLY STUDY OF TRENDS AND OUTCOMES 26 (2016), *available at* https://www.pwc.com/us/en/forensic-services/publications/assets/pwc-daubert-study-whitepaper.pdf. ("Reliability, either on its own or in combination with other factors, has consistently been the main reason for financial expert witness exclusions over the course of our study.").

[29] PwC, *supra* note 29, at 26 (out of a sample of 896 expert exclusions from 2000-2015, only 62 exclusions were based on qualification alone; 160 exclusions involved qualification in conjunction with other issues).

[30] *Macy v. Whirlpool Corp.*, 613 F. App'x 340, 344–45 (5th Cir. 2015).

monoxide.[31] Although the expert was an accomplished engineer with experience in vehicular accident reconstruction and fire explosion analysis and had conducted a presentation on "gas systems and the investigation of gas appliance fires," the specific defect at issue in the case related to the unsafe release of carbon monoxide gas, rather than a fire that resulted from it.[32]

An expert testifying about a defect may also be faulted for not performing tests on the actual product itself, if that is a possibility. The plaintiffs in *Schronk v. Laerdal Med. Corp*. alleged that a design defect in an AED defibrillator caused the battery to be so low that it could not be used effectively, resulting in a woman's death.[33] The Court of Appeals affirmed the trial court's exclusion of the expert because he did not test the actual device or battery involved in the case and did not have expertise regarding AEDs and batteries specifically, even though he had worked in the medical devices field generally.[34]

3. Intellectual Property Experts

Experts are often employed to testify regarding the similarity of products in intellectual property cases. For example, in *Orthoflex, Inc. v. ThermoTek, Inc*, an expert's testimony concerning alleged similarities between a competitor's and manufacturer's medical devices was held to be admissible.[35] The plaintiff challenged the defendant's expert on the grounds that he was not a medical doctor.[36] However, the court held that such a background was not necessary because the party was offering the testimony to address the mechanical aspects of the products, not their medical or therapeutic effects.[37]

Parties in trademark cases may utilize "likelihood of confusion" surveys to demonstrate the presence or lack of consumer confusion between similarly branded products. Experts are qualified to offer testimony about such studies even if they did not personally participate in the consumer contacts so long as they were sufficiently responsible for the research and design of the study.[38]

In patent infringement cases, expert testimony is often used to establish the perspective or knowledge of a "person of ordinary skill in the art." To be qualified to offer such testimony, the expert need not have the same qualifications or background as the inventor but should be sufficiently qualified to "construe the patent and understand the design and components of the claimed invention as one with ordinary skill in the art of designing, testing, and building" the type of products involved.[39] Importantly, an expert offering conclusions regarding the knowledge of a person of ordinary skill in the art could potentially be *overqualified*. An expert should be careful not to testify from his or her own personal knowledge if such knowledge is actually "extraordinary" rather than "ordinary."[40]

C. Helpfulness and Relevance: General Standard for a Challenge

Two additional bases for an expert challenge are a lack of helpfulness and lack of relevance. These two requirements are distinct but often overlap, and courts commonly evaluate them together.[41] The helpfulness—or "assistance to the jury"—requirement focuses on whether the subject matter of the opinion is beyond the knowledge of the average juror. The relevance requirement mandates that the testimony actually relate to a disputed issue in the case.[42]

1. Helpfulness

The helpfulness requirement arises from Rule 702's instruction that expert testimony must "assist the trier of fact to understand the evidence or to determine a fact in issue."[43] An expert's opinion is of no assistance "when the jury is equally competent to form an opinion on an ultimate fact issue."[44] If the testimony relates to

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[31] *Id*.

[32] *Id*.

[33] 440 S.W.3d 250, 254 (Tex. App.—Waco 2013, pet. denied).

[34] *Id.* at 261–62.

[35] *Orthoflex, Inc. v. ThermoTek, Inc*., 986 F. Supp. 2d 776, 787 (N.D. Tex. 2013).

[36] *Id.*

[37] *Id.*

[38] *Shell Trademark Mgmt. B.V. v. Warren Unilube, Inc*., 765 F. Supp. 2d 884, 890 (S.D. Tex. 2011) (rejecting expert challenge, stating "Dr. Golden, who has forty years of experience and extensive credentials in the field of survey and market research, designed the methodology for the surveys, including the universe and the questions.").

[39] *Neutrino Dev. Corp. v. Sonosite, Inc*., 410 F. Supp. 2d 529, 535–36 (S.D. Tex. 2006).

[40] *Id.* at 550 (citing *Environmental Designs, Ltd. v. Union Oil Co. of California*, 713 F.2d 693 (Fed. Cir. 1983) ("one of ordinary skill in the art" is not a judge, layman, those skilled in remote arts, or "the geniuses in the art").

[41] *TXI Transp. Co. v. Hughes*, 306 S.W.3d 230, 234 (Tex. 2010) ("An expert's testimony is relevant when it assists the jury in determining an issue or in understanding other evidence.").

[42] *See* Brown & Davis, *supra* note 21, at 28.

[43] TEX. R. EVID. 702.

[44] *GTE Sw., Inc. v. Bruce*, 956 S.W.2d 636, 640 (Tex. App.—Texarkana 1997), *aff'd*, 998 S.W.2d 605 (Tex. 1999).

a matter that is "obviously" within the jury's "common knowledge," courts have held that, "almost by definition," the expert testimony will not assist the jury.[45] For example, in *K-Mart Corp. v. Honeycutt*,[46] the Texas Supreme Court held that an expert's opinions on negligence and causation with regard to injuries sustained from shopping carts did not assist the jury.[47] The expert's opinions, although based on his "training and experience as a human factors expert," fell within the realm of "the jury's collective common sense" and "the average juror's common knowledge."[48] Additionally, expert testimony may not improperly invade the province of the jury or the court by offering legal conclusions.[49]

No bright-line rules exist to determine if expert testimony will assist the fact finder, and the knowledge required to form an opinion need not be so complex that a jury could not determine the factual issue without expert testimony.[50] Appellate courts may even reach different conclusions with regard to similar testimony. For example, in two separate premises liability cases, the San Antonio Court of Appeals and the El Paso Court of Appeals reached opposite conclusions about the helpfulness of expert testimony regarding the dangerousness of the condition of a walkway.[51] The difference, as explained in the later San Antonio Court of Appeals opinion, *Dietz v. Hill Country Restaurants, Inc.*, is that the expert in the earlier El Paso Court of Appeals case "'provide[d] depth or precision to the trier of fact's understanding of a relevant issue in this case[.]'"[52] In *Dietz*, the expert did not.[53]

2. Relevance

Rule 702's helpfulness requirement also incorporates the traditional relevance analysis of Rules 401 and 402.[54] Under Rule 401, evidence is relevant if it has any tendency to make the existence of any fact that is of consequence to the determination of the action more probable or less probable than it would be without the evidence.[55] Testimony that is "conclusory or speculative" is not relevant evidence because it does not tend to make any material fact more probable or less probable.[56] Similarly, "perfectly equivocal" expert testimony is not relevant.[57]

Expert testimony that meets the helpfulness requirement and the traditional relevance requirements of Rules 401 and 402 may nonetheless be excluded under Rule 403 if its probative value is substantially outweighed by a competing concern, including the danger of: (1) unfair prejudice; (2) confusion of the issues; (3) misleading the jury; (4) undue delay; or (5) needless presentation of cumulative evidence.[58]

Although it is more common for expert testimony to be excluded due to one of these concerns in criminal matters, Texas courts have excluded otherwise relevant expert testimony that threatened to confuse and mislead

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[45] *K-Mart Corp. v. Honeycutt*, 24 S.W.3d 357, 360 (Tex. 2000) (per curiam).

[46] 24 S.W.3d 357 (Tex. 2000).

[47] *Id.* at 361.

[48] *Id.* at 360-61; *but see Richter v. State*, 482 S.W.3d 288, 296 (Tex. App.—Texarkana 2015, no pet.) (trial court did not abuse its discretion by determining police officer was qualified as expert to testify whether prescription medication caused intoxication because he possessed more knowledge than the average juror).

[49] *Texas Peace Officers v. City of Dallas*, 58 F.3d 635 (5th Cir. 1995) (affirming trial court's exclusion of expert testimony: "The issue before the jury was whether the City had violated the TPOA's First Amendment rights. In his excluded testimony, Bell states that the constitutional rights of the TPOA have been violated. Bell is merely giving the jury his view of how its verdict should read.").

[50] *See United States v. Barker*, 553 F.2d 1013, 1024 (6th Cir. 1977).

[51] *Compare Dietz v. Hill Country Rests., Inc.*, 398 S.W.3d 761, 765–66 (Tex. App.—San Antonio 2011, no pet.) (finding no abuse of discretion in excluding expert testimony on the condition of a walkway), *with Burns v. Baylor Health Care Sys.*, 125 S.W.3d 589, 595-96 (Tex. App.—El Paso 2003, no pet.) (finding the trial court abused its discretion in excluding expert testimony on the condition of a parking garage floor).

[52] *Dietz*, 398 S.W.3d at 765 (quoting *Burns*, 125 S.W.3d at 596)

[53] *Id.*

[54] *Daubert*, 509 U.S. at 597 (quoting FED. R. EVID. 702); *Pipitone v. Biomatrix, Inc.*, 288 F.3d 239, 244 (5th Cir. 2002); *Robinson*, 923 S.W.2d at 556.

[55] *See* FED. R. EVID. 401.

[56] *Whirlpool Corp. v. Camacho*, 298 S.W.3d 631, 637 (Tex. 2009) (citing TEX. R. EVID 401).

[57] *See Pipitone*, 288 F.3d at 245 (refusing to admit expert testimony because the expert was unable to conclude that it was more likely than not that the defendant's synthetic fluid caused the plaintiff's injury); *Bro-Tech Corp. v. Purity Water Co. of San Antonio, Inc.*, No. Civ. 3A-08-CV-094-XR, 2009 WL 1748539, at *1, *8 (W.D. Tex. June 19, 2009) (refusing to admit testimony because the expert's opinion failed to show that, more likely than not, the defendant's product was defective); *Christus Health Gulf Coast v. Houston*, 01-14-00399-CV, 2015 WL 9304373, at *6 (Tex. App.—Houston [1st Dist.] Dec. 22, 2015, no pet.) (excluding expert testimony about facts the expert admitted he could not know).

[58] FED. R. EVID. 403.

the jury in civil litigation.[59] A proper Rule 403 exclusion analysis includes, but is not limited to, four factors: (l) the probative value of the evidence; (2) the potential to impress the jury in some irrational yet indelible way; (3) the time needed to develop the evidence; and (4) the proponent's need for the evidence.[60]

It is relatively rare for a court to conclude that relevant evidence should be excluded because the probative value of the evidence is outweighed by the risk of prejudicial effect.[61] If counsel challenging an expert is unable to exclude expert testimony with possible prejudicial effect, counsel may seek to offset such an effect by requesting that the trial court instruct the jury as to the limited relevance of the expert's testimony.[62]

D. Helpfulness and Relevance: Application to Specific Types of Experts

1. Financial Experts

A lack of helpfulness or relevance constitutes a ground for excluding the opinion of a financial expert more often than a lack of qualifications but less frequently than a lack of reliability.[63] A primary hurdle facing counsel making such a challenge is the fact that a valuation opinion usually *is* helpful to the factfinder. For example, the complex calculations required to measure the net present value of future lost profits would be impossible for the average juror to do, let alone understand, without the assistance provided by an expert.

One way to challenge the helpfulness of a damages opinion is to show that the opinion requires only basic math. Instead of giving the imprimatur of an expert to one party's damages calculation, the attorney challenging the opinion could argue that the court should simply allow the jury to do the math. Another common type of exclusion for financial experts is that the opinion invades the province of the court by stating legal conclusions, such as inadvertently stating how a contract provision should be interpreted or what the parties are obligated to do under the contract.[64]

2. Land Valuation Experts

When the value of land is at issue, expert testimony is a common form of evidence utilized. For example, experts are generally required to establish the value of a mineral estate, which not a matter of common knowledge.[65] Because there is a wide range of legal rules that govern how to value real property, experts are often challenged for offering legally improper, and therefore irrelevant, methodologies to establish the value of the land. In one case, an expert's valuation of a piece of condemned property was held inadmissible because it included the "project-enhancement" value, which made the opinion "irrelevant to determining the value of the land taken."[66] In another case, an expert's valuation of undeveloped land based on a "subdivision development analysis" was irrelevant to the issue of market value because the valuation "determined only what a developer could hypothetically afford to pay to profitably subdivide the property, not what a developer would pay in the competitive, risk-filled marketplace of the real world," as legally required.[67]

3. Intellectual Property Experts

As with land valuation, the calculation of royalties for purposes of damages are governed by a number of

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[59] *See Gregg Cnty. Appraisal Dist. v. Laidlaw Waste Sys., Inc*., 907 S.W.2d 12, 19 (Tex. App.—Tyler 1995, writ denied) (refusing to allow expert testimony on appraisal of a property value excluding intangible assets because the testimony was potentially confusing and misleading to the jury).

[60] *State v. Mechler*, 153 S.W.3d 435, 440 (Tex. Crim. App. 2005) (citing *Montgomery v. State*, 810 S.W.2d 372, 378–79 (Tex. Crim. App.—Corpus Christi 1990)).

[61] *United States v. Fields*, 483 F.3d 313, 354 (5th Cir. 2007) ("The application of Rule 403 must be cautious and sparing. Its major function is limited to excluding matter of scant or cumulative probative force, dragged in by the heels for the sake of its prejudicial effect." (quoting United States v. Pace, 10 F.3d 1106, 1116 (5th Cir. 1993)); *Howland v. State*, 966 S.W.2d 98, 103 (Tex. App.—Houston [1st Dist.] 1998), *aff'd*, 990 S.W.2d 274 (Tex. Crim. App. 1999) ("There is a presumption that relevant evidence is more probative than prejudicial").

[62] Courts have discretion to provide such limiting instructions. *Green v. State*, No. 10-09-00241-CR, 2011 WL 1344432, at *4 n.2 (Tex. App.—Waco 2011, no pet.).

[63] PwC, *supra* note 29, at 26.

[64] PwC, *supra* note 29, at 22 ("In case decisions throughout the past 16 years of the study, we have observed financial experts being excluded or partially excluded for offering testimony that veered into the territory of legal conclusions. This can often happen when financial experts opine on contractual obligations or conclude on the interpretation of disputed contracts in the context of their financial testimony.").

[65] *Basic Energy Serv., Inc. v. D-S-B Properties, Inc*., 367 S.W.3d 254, 265–66 (Tex. App.—Tyler 2011, no pet.)

[66] *Exxon Pipeline Co. v. Zwahr*, 88 S.W.3d 623, 631 (Tex. 2002); *see also Enbridge Pipelines (E. Texas) L.P. v. Avinger Timber, LLC*, 386 S.W.3d 256, 262 (Tex. 2012) (holding appraisal expert's testimony inadmissible because it violated the "value-to-taker rule" for land valuation by improperly accounting for the unique benefit to the condemnor).

[67] *City of Harlingen v. Estate of Sharboneau*, 48 S.W.3d 177, 186 (Tex. 2001)

legal constraints, which can be a stumbling block for experts. For example, expert testimony may be excluded for relying on the "rule of thumb" approach to calculating royalties.[68] Because the "rule of thumb" approach is a simplistic, blanket formula that does not account for the specific facts of each case, the Federal Circuit held in 2011 that reliance on this approach results in irrelevant and unhelpful expert testimony.[69] This holding was widely seen as a landmark decision in the admissibility of expert testimony in intellectual property cases and has continued to have an impact in the courts.[70]

E. Reliability

The third grounds for disqualifying an expert is that the expert's testimony is not sufficiently reliable.[71] For scientific expert testimony, the Texas Supreme Court in *Robinson* provided a non-exclusive list of six factors for the trial court to consider when assessing reliability of an expert opinion.[72] Texas courts have recognized that these factors may be difficult to apply to non-scientific expert testimony, such as economic or financial opinions.[73] Thus, Texas courts should "consider the factors mentioned in *Robinson* when doing so will be helpful in determining the reliability of an expert's testimony, regardless of whether the testimony is scientific in nature or experience-based."[74] But, if those factors are not helpful, the court must nevertheless satisfy "Rule 702's general requirement of reliability."[75] This may be done by undertaking "'a rigorous examination of the facts on which the expert relies, the method by which the expert draws an opinion from those facts, and how the expert applies the facts and methods to the case at hand.'"[76]

Even though Texas Rule of Evidence 702, in contrast to Federal Rule of Evidence 702, does not include specific reliability requirements for expert testimony, Texas courts have adopted reliability requirements similar to the federal courts.[77] Thus, a court should find an expert opinion is unreliable if the expert: (1) relies on unproven facts or assumptions (foundational reliability); (2) uses flawed or invalid methods to reach her conclusion (methodological reliability); or (3) espouses an opinion that contains "simply too great an analytical gap" between opinion, on the one hand, and the facts and assumptions or methodology, on the other hand (connective reliability).[78]

These categories of reliability challenges at times overlap and are difficult to distinguish. However, considering the viability of each type of reliability challenge can help an attorney catalogue and evaluate potential avenues of attack.

1. Foundational Reliability: General Standard for a Challenge

A lack of foundational reliability[79] is encapsulated by the old adage "garbage in, garbage out" and refers to an expert opinion based on unsupported facts, unreliable data, or invalid assumptions.[80] Some commentators have asserted that this form of reliability includes two components: (1) the soundness of the underlying facts, data, or assumptions and (2) the probativeness of such foundational information.[81] This second component overlaps with the inquiry into connective reliability but

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[68] *Uniloc USA, Inc. v. Microsoft Corp*., 632 F.3d 1292, 1315 (Fed. Cir. 2011).

[69] *Id*.

[70] PwC, *supra* note 29, at 20–21.

[71] *McMahon v. Zimmerman*, 433 S.W.3d 680, 685–86 (Tex. App.—Houston [1st Dist.] 2014, no pet.).

[72] Those factors are: "(1) the extent to which the theory has been or can be tested; (2) the extent to which the technique relies upon the subjective interpretation of the expert; (3) whether the theory has been subjected to peer review and/or publication; (4) the technique's potential rate of error; (5) whether the underlying theory or technique has been generally accepted as valid by the relevant scientific community; and (6) the non-judicial uses which have been made of the theory or technique." *Robinson*, 923 S.W.2d at 557 (internal citations omitted).

[73] *See Gammill*, 972 S.W.2d at 727; *see also Kumho* Tire, 526 U.S.at 150 ("[W]e can neither rule out, nor rule in, for all cases and for all time the applicability of the factors mentioned in *Daubert*, nor can we now do so for subsets of cases categorized by category of expert or by kind of evidence. Too much depends upon the particular circumstances of the particular case at issue.").

[74] *Mack Trucks, Inc. v. Tamez*, 206 S.W.3d 572, 579 (Tex. 2006).

[75] *Gammill*, 972 S.W.2d at 727.

[76] *Mack Trucks*, 206 S.W.3d at 579 (quoting *Amorgianos v. Amtrak*, 303 F.3d 256, 267 (2d Cir. 2002)).

[77] *Gharda USA Inc. v. Control Solutions Inc.*, 464 S.W.3d 338, 349 (Tex. 2014); *Robinson*, 923 S.W.2d at 557.

[78] *See Mack Trucks*, 206 S.W.3d at 579; *see also Gammill*, 972 S.W.2d at 727 (internal quotation marks and citation omitted). The term "connective reliability" comes from an excellent article on the admissibility of expert testimony written by Justice Harvey Brown of the First Court of Appeals and Melissa Davis. *See* Brown & Davis, *supra* note 21, at 39.

[79] Some commentators refer to this form of reliability as "predicative reliability." *See* Brown & Davis, *supra* note 21, at 93.

[80] *Camacho*, 298 S.W.3d at 637.

[81] *See* Brown & Davis, *supra* note 21, at 101.

limits its focus to the connection between the expert's opinion and the inputs used.

Ultimately, the inquiry into foundational reliability requires a rigorous examination of "the validity of facts and assumptions on which the testimony is based."[82] If the underlying data is "lacking in probative force and reliability" to the extent that no reasonable expert could base an opinion on it, the court must exclude the opinion.[83] To that end, an expert's opinion lacks foundational reliability if (1) the opinion "is based on assumed facts that vary materially from the actual, undisputed facts"[84] or (2) the expert relies on actual facts that simply do not support her opinion.[85] The failure of the expert to identify essential facts or assumptions underlying the opinion may also be a basis for excluding expert testimony.[86] Courts will also reject expert testimony that is grounded in the wrong legal principles.[87]

In evaluating foundational reliability, courts have held that the expert's factual assumptions need not "be uncontested or established as a matter of law" because weighing conflicting evidence is the "province of the jury."[88]

2. Foundational Reliability: Application to Specific Types of Experts

a. Financial Experts

Generally, a lack of reliability (in all forms) is the most cited reason for excluding testimony of financial experts,[89] and a lack of foundational reliability is one of the most common bases for such challenges. When making a challenge based on foundational reliability, it is important to distinguish between the facts, data, or assumptions that render the opinion unsound and the facts, data, or assumptions that merely render the opinion suspect. Only the former will yield a successful challenge.

Foundational reliability is especially important for expert opinions regarding lost profits. In *Total Clean, LLC v. Cox Smith Matthews Inc.*,[90] the court found that a damages expert's two attempts at calculating lost profits were unreliable. With regard to the first attempt, the court found that the expert's estimates were unreliable because the "projected truck wash volumes" of an unbuilt automated truck wash facility used volumes that were "not based on objective facts, figures, or data."[91] The expert had no experience in the industry and formulated his projections using "unverifiable information" and representations by manufacturers of the truck wash systems instead of "analogous business data."[92] Further, the expert admitted he had not seen any information "showing the actual performance of an automatic truck wash operation, and he did not verify that any had been profitable."[93]

The expert's second attempt at calculating lost profits was also found lacking because it assumed that the truck wash business at issue "had been operating successfully for eighteen months," which dramatically increased the projected lost profits.[94] At his deposition, however, the expert conceded that this assumption was false. Because his opinion was based on an assumption "contrary to the undisputed facts," the court found that the opinion lacked foundational reliability and, thus, constituted insufficient evidence to defeat summary

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[82] *Camacho*, 298 S.W.3d at 637.

[83] *Merrell Dow Pharm., Inc. v. Havner*, 953 S.W.2d 706, 713 (Tex. 1997) (quoting *In re Paoli R.R. Yard PCB Litig*., 35 F.3d 717, 747–48 (3d Cir. 1994)).

[84] *Burroughs Wellcome Co. v. Crye*, 907 S.W.2d 497, 499 (Tex. 1995).

[85] *Houston Unlimited, Inc. Metal Processing v. Mel Acres Ranch*, 443 S.W.3d 820, 831 (Tex. 2014) (holding that the expert damages testimony relied on facts that did not "*actually* support" the loss in market value) (emphasis in original).

[86] *See id.* (observing that a case "in which the expert failed to offer any basis for her opinion" would lack foundational reliability but that this case was not one of them).

[87] *Noskowiak v. Bobst SA*, 04-C-0642, 2005 WL 2146073, at *5 (E.D. Wis. Sept. 2, 2005) (excluding expert testimony, stating that the expert's "reliance on OSHA standards is irrelevant and even casts the reliability of his opinion into doubt. The Court agrees with the Defendants that the standards articulated by OSHA are not relevant in the present case. The OSHA standards apply to employers, not to manufacturers.").

[88] *Houston Unlimited, Inc. Metal Processing*, 443 S.W.3d. at 833.

[89] PwC, *supra* note 29, at 16 ("Federal Rules of Evidence Rule No. 702, which incorporates precedent set by *Daubert*, *Kumho Tire*, and other related cases, permits a qualified expert to testify if, among other factors, the testimony 'is based on sufficient facts or data.' This factor has been a common stumbling block for financial experts, and is the most frequent reason for reliability exclusions.").

[90] 330 S.W.3d 657, 665 (Tex. App.—San Antonio 2010, pet. denied).

[91] *Id.* at 666.

[92] *Id*. at 665. *See also Legacy Home Health Agency, Inc. v. Apex Primary Care, Inc*., 13-13-00087-CV, 2013 WL 5305238, at *6 (Tex. App.—Corpus Christi Sept. 19, 2013, pet. denied) (mem. op.) ("Lost profit estimates or opinions must be based on objective facts, figures, or data from which the lost profits amount may be ascertained." (citing *ERI Consulting Eng'rs, Inc. v. Swinnea*, 318 S.W.3d 867, 876 (Tex. 2010))).

[93] *Total Clean*, 330 S.W. 3d at 665.

[94] *Id.* at 664.

judgment.[95] Similarly, a lost profits calculation lacks foundational reliability if the underlying data used is speculative or self-serving.[96]

b. Damages Experts

In *Houston Unlimited, Inc. Metal* Processing *v. Mel Acres Ranch*,[97] an appraisal expert calculated the diminution in value of contaminated ranch land using a sales-comparison method. The court found that the expert's "material assumption" that the diminution in market value of two comparison sites was 100% attributable to the remediated contamination was "entirely lacking evidentiary support," which rendered her testimony unreliable.[98] Other courts have recognized that an expert's failure to rule out alternative possible causes for a plaintiff's injury or loss renders the expert's opinion little more than speculation and, therefore, unreliable.[99]

One important basis for a foundational reliability challenge arises if the valuation includes "items that are not intrinsically irrational, but that the law does not recognize as appropriate means for measuring damages."[100] For example, in *Yzaguirre v. KCS Resources, Inc.*,[101] expert testimony regarding the market value of natural gas relied on pricing under a long term contract, not on prevailing price in comparable sales. The court noted that the legal definition of "market" requires using comparable sales and held that, because the data used by the expert was legally unsound, the opinion resulting from that data was inadmissible.[102]

c. Causation Experts

The United States Supreme Court affirmed the exclusion of an expert's testimony for lack of foundational reliability in *General Electric Company v. Joiner*.[103] The plaintiff in that case alleged that exposure to certain chemicals at his job contributed to his development of lung cancer.[104] The plaintiff's causation expert opined that the chemicals caused his cancer because those chemicals had been found to cause cancer in animal studies.[105] The court noted that these studies were fatally deficient bases for the causation opinions reached because the studies involved infant mice receiving extremely high doses of the chemical injected directly into their systems, whereas the plaintiff was an adult male exposed to a significantly lower dose.[106]

3. Methodological Reliability: General Standard for a Challenge

In *Robinson*, the Texas Supreme Court provided a non-exclusive list of six factors for the trial court to consider with regard to methodological challenges to expert testimony: validation of the technique or method; objectivity; reproducibility and verification of the results; rates of error; acceptance by the scientific community; and non-judicial uses of the method.[107] The *Robinson* Court further emphasized that these factors are neither dispositive nor exclusive.[108] Texas courts have recognized that these factors do not fit every scenario.[109]

One or more of the *Robinson* factors may not aid courts in determining whether non-scientific testimony or testimony that that involves "soft" sciences is

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[95] *Id.*

[96] *Acadia Healthcare Co. v. Horizon Health Corp*., 472 S.W.3d 74, 89 (Tex. App.—Fort Worth 2015), reh'g overruled (Sept. 10, 2015), reconsideration en banc denied (Sept. 17, 2015), review granted (Jan. 20, 2017) (holding that expert testimony on future lost profits was "too speculative" when based on conclusions about hypothetical contracts over a 15-year period); *Wells Fargo Bank Nw., N.A. v. RPK Capital XVI, L.L.C.*, 360 S.W.3d 691, 711-12 (Tex. App.—Dallas 2012, no pet.) (holding that an expert calculating lost profits must have objective evidence to support his conclusions); *Capital Metro. Transp. Auth. v. Cent. of Tenn. Ry. & Nav. Co., Inc*., 114 S.W.3d 573, 578 (Tex. App.—Austin 2003, pet. denied) (expert's opinion unreliable on lost profits because it was "not based on the facts of the case but on his own speculation and surmise").

[97] 443 S.W.3d 820, 834 (Tex. 2014).

[98] *Id.*

[99] *See e.g. TXI Transp. Co.*, 306 S.W.3d 230 at 237 ("An expert's failure to rule out alternative causes of an incident may render his opinion unreliable"); *Emmett Properties, Inc. v. Halliburton Energy Servs., Inc.*, 167 S.W.3d 365, 373 (Tex. App.—Houston [14th Dist.] 2005, pet. denied) ("An expert's failure to rule out other causes of the damage renders his opinion little more than speculation and therefore, unreliable").

[100] STEVEN GOODE ET AL., GUIDE TO THE TEXAS RULES OF EVIDENCE § 702.7 (4th ed. 2016).

[101] *Yzaguirre v. KCS Res., Inc*., 47 S.W.3d 532, 543-44 (Tex. App.—Dallas 2000), *aff'd*, 53 S.W.3d 368 (Tex. 2001).

[102] *Id.* at 537-38, 544.

[103] 522 U.S. 136 (1997).

[104] *Id*. at 136.

[105] *Id*. at 143–45.

[106] *Id*.

[107] *Robinson*, 923 S.W.2d at 557.

[108] *Id.* at 557.

[109] *See, e.g., TXI Transp. Co.*, 306 S.W.3d at 235 (the *Robinson* factors are "particularly difficult to apply in vehicular accident cases involving accident reconstruction testimony"); *Gammill*, 972 S.W.2d at 727.

reliable. In those circumstances, courts have considered (1) whether the field of expertise is a legitimate one; (2) whether the subject matter of the expert's testimony is within the scope of that field; and (3) whether the expert's testimony properly relies upon the principles involved in that field.[110] In other circumstances, courts have found that it is inappropriate to rely entirely on the reliability of the underlying technique used to develop the challenged expert opinion. Instead, reliability should be evaluated through the analysis of "whether the expert's opinion actually fits the facts of the case" by scrutinizing whether there are analytical gaps in the expert's opinion as discussed below.[111]

4. Methodological Reliability: Application to Specific Types of Experts

a. Financial Experts

A financial expert's methodology is rarely susceptible to an analysis using the *Robinson* factors. Accordingly, in *DaimlerChrysler Motors Co. v. Manuel*,[112] the appellate court rejected the application of the *Robinson* factors in analyzing the reliability of an accountant's opinion on lost profits and instead used a "general reliability" test. Regardless of which test or factors apply, a financial expert's methodology offers limited opportunities for challenge because the principles of finance and mathematics relied on by most experts are well-established and generally unquestioned.[113] It is also important to note that, although a financial expert's testimony may rarely be challenged as unreliable because of the methodology the expert employed, such testimony can be challenged if speculative assumptions underlie the expert's opinion.[114]

b. Intellectual Property Experts

Experts are commonly employed to testify regarding the validity of a patent, such as whether the patented invention is not innovative and would have been obvious to a person of ordinary skill in the art. In these cases, courts typically do not apply the *Daubert* factors because the expert's conclusions about the level of ordinary skill in the art are nonscientific expert opinions based on specialized knowledge; instead, courts apply a more flexible test.[115] Expert testimony may be excluded as "not . . . helpful to a lay jury" if it fails to adequately explain and apply the legal standards governing obviousness.[116]

5. The "Analytical Gap" Test ("Connective Reliability"): General Standard for a Challenge

The final form of reliability challenge is based on connective reliability, which is more commonly referred to as the "analytical gap" test. Recognizing that the *Robinson* factors are better suited for evaluating the reliability of scientific expert testimony, the Texas Supreme Court has endorsed this test for testimony based on experience or other non-scientific methodologies.[117]

Although the test is easy enough to state in broad terms—whether "there is simply too great an analytical gap between the data and the opinion proffered"[118]—applying the test to any given expert opinion is a more difficult, context-driven exercise. That said, the gap generally falls into one of two categories: (1) a pronounced gap between the expert's opinion and the underlying facts or data[119] or (2) a pronounced gap

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[110] *In Interest of J.R.*, 501 S.W.3d 738, 748 (Tex. App.—Waco 2016, no pet.); *Five Star Int'l Holdings Inc. v. Thomson, Inc.*, 324 S.W.3d 160, 168 (Tex. App.—El Paso 2010, pet. denied) (citing *Taylor v. Texas Dept. of Protective and Regulatory Services*, 160 S.W.3d 641, 650 (Tex. App.—Austin 2005, pet. denied)).

[111] *TXI Transp. Co.*, 306 S.W.3d at 235.

[112] 362 S.W.3d 160, 190 (Tex. App.—Fort Worth 2012, no pet.).

[113] *See* Brown & Davis, *supra* note 21, at 167. *See also First Bank v. DTSG, Ltd.* 472 S.W.3d 1, 12 (Tex. App.—Houston [14th Dist.] 2015), reh'g overruled (Sept. 22, 2015), review granted (Dec. 23, 2016) (expert testimony reliable when expert employed widely-publicized and peer-reviewed business valuation methodologies); *Guadalupe-Blanco River Auth. v. Kraft*, 77 S.W.3d 805, 808 (Tex. 2002) (noting that "using comparable sales" is an approved methodology for finding market value in condemnation cases).

[114] *See Capital Metro. Transp. Auth. v. Cent. of Tenn. Ry. & Nav. Co., Inc.*, 114 S.W.3d 573, 580 (Tex. App.—Austin 2003, pet. denied) (noting that plaintiff did not dispute the lost profits methodology of the defendant's expert but only the speculative assumptions underlying the expert's opinions).

[115] *Neutrino Dev. Corp. v. Sonosite, Inc.*, 410 F. Supp. 2d 529, 550 (S.D. Tex. 2006).

[116] *Innogenetics v. Abbott Labs.*, 512 F.3d 1363, 1373 (Fed. Cir. 2008) (affirming trial court's exclusion of expert report); *Stone Strong, LLC v. Del Zotto Products of Florida, Inc.*, 455 Fed. App'x 964, 969 (Fed. Cir. 2011) ("conclusory" and "truncated" expert testimony on obviousness is not helpful to the trier of fact); *SynQor, Inc. v. Artesyn Techs., Inc.*, 2:07-CV-497-TJW-CE, 2011 WL 3625036, at *14 (E.D. Tex. Aug. 17, 2011) ("Conclusory opinions in expert reports, such as the one offered by Dr. Mercer, do not satisfy these requirements and properly lead to the exclusion of the expert's testimony") (citing *Innogenetics*, 512 F.3d at 1376 n. 4), aff'd, 709 F.3d 1365 (Fed. Cir. 2013).

[117] *Gammill*, 972 S.W.2d at 727.

[118] *Id.* (quoting *Gen. Elec. Co. v. Joiner*, 522 U.S. 136, 146 (1997)).

[119] This type of analytical gap overlaps with a lack of foundational reliability, but it is helpful to consider them

between the opinion and the methodology (or the application of the methodology).[120]

Regardless of what type of analytical gap a court is analyzing, connective reliability requires the expert to explain the "how" and "why" behind her conclusions.[121] "[A]n expert's simple *ipse dixit* is insufficient to establish a matter."[122] Moreover, an expert may not rely on his or her experience without explaining how that experience led to the expert's conclusion in the case.[123] The mere fact that another expert disagrees does not mean that there is an impermissible analytical gap in the expert's testimony.[124]

The "analytical gap" test is sometimes described in terms of "reliability," although it also has its roots in the concept of relevancy.[125] Simply put, an exposed analytical gap in the expert's testimony is fatal to the testimony's reliability because, "[i]n its most basic sense, the testimony [is] simply not relevant."[126]

6. Connective Reliability: Application to Specific Types of Experts

a. Financial Experts

Connective reliability provides an important basis for challenging financial experts given that reliability challenges are the most often cited reason for excluding evidence.[127] In addition, connective reliability challenges can support a post-trial legal sufficiency challenge to expert testimony on damages.[128]

Such challenges can arise in many different damages contexts, as three recent cases demonstrate. First, in *Elizondo v. Krist*,[129] a legal malpractice case, the Texas Supreme Court refused "to ignore fatal gaps" in an attorney-expert's analysis of a case's settlement value that forced the lower court "to take his word that settlement was inadequate." Despite detailing "the factors or criteria that should inform a determination of the value of the case," the expert failed "to offer specifics on why the value of the case was $2–3 million as opposed to the $50,000 received in settlement."[130] This lack of "a demonstrable and reasoned basis on which to evaluate" the valuation opinion created "[a] fatal analytical gap" dividing the facts of the case that had been settled and the expert's opinion of its settlement value.[131]

Second, in *Houston Unlimited, Inc. Metal Processing v. Mel Acres Ranch*,[132] the Texas Supreme Court identified several analytical gaps in the financial expert's valuation of a contaminated property. After first expressing skepticism of the percentage-reduction approach used by the expert, the Court held that her opinion contained "material shortcomings" that rendered the opinion legally insufficient evidence of damages.[133] Not only did the expert's testimony lack

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separately when identifying potential challenges to expert testimony.

[120] *See Wilson v. Shanti*, 333 S.W.3d 909, 913 (Tex. App.—Houston [1st Dist.] 2011, pet. denied) (describing the analytical gap as one connecting either "the foundational data or methodology with the opinion."); *see also City of San Antonio v. Pollock*, 284 S.W.3d 809, 823 n.2 (2009) (Medina, J., dissenting) ("One observer has suggested that analytical gaps are of two types: (1) the underlying data-facts gap, which focuses on material variances between the data underlying the expert opinion and the actual facts of the plaintiff's case; and (2) the methodology-conclusion gap, which focuses on whether the expert properly explains how the methodology was applied to the plaintiff's facts in arriving at the conclusion.") (quoting Kimberly S. Keller, *Bridging the Analytical Gap: The Gammill Alternative to Overcoming Robinson & Havner Challenges to Expert Testimony*, 33 ST. MARY'S L.J. 277, 310 (2002)) (internal quotation marks omitted).

[121] *See, e.g.*, *Volkswagen of Am., Inc. v. Ramirez*, 159 S.W.3d 897, 912-13 (Tex. 2004) (Hecht, J., concurring) (finding that the only connection to the expert's observations and conclusions was the expert's "say-so," and thus the validity of the expert's conclusions rested on the expert's "personal credibility" and nothing more).

[122] *Gharda USA, Inc. v. Control Sols., Inc.*, 464 S.W.3d 338, 351 (Tex. 2015) (holding an expert's opinion to be unreliable because the expert assumed facts that he admitted he was unable to determine; thus, his conclusions were connected to existing data only by the *ipse dixit* of the expert); *Qui Phuoc Ho v. MacArthur Ranch, LLC*, 395 S.W.3d 325, 333 (Tex. App.—Dallas 2013, no pet.).

[123] *Camacho*, 298 S.W.3d at 639 ("If courts merely accept 'experience' as a substitute for proof that an expert's opinions are reliable and then only examine the testimony for analytical gaps in the expert's logic and opinions, an expert can effectively insulate his or her conclusions from meaningful review by filling gaps in the testimony with almost any type of data or subjective opinions.").

[124] *SAS & Associates, Inc. v. Home Marketing Servicing, Inc*., 168 S.W.3d 296, 300 (Tex. App.—Dallas 2005).

[125] *See* Judge Harvey Brown, *Eight Gates for Expert Witnesses*, 36 HOUS. L. REV. 743, 804 (1999); Richard O. Faulk & Robert M. Hoffman, *Beyond Daubert and Robinson: Avoiding and Exploiting "Analytical Gaps" in Expert Testimony*, 33 THE ADVOC. (TEXAS) 71, 71 (2005).

[126] Faulk & Hoffman, *supra* note 126, 72.

[127] *See* PwC, *supra* note 29, at 26.

[128] *See, e.g.*, *Houston Unlimited*, 443 S.W.3d at 835-36.

[129] *Elizondo v. Krist*, 415 S.W.3d 259, 264 (Tex. 2013).

[130] *Id.* at 265.

[131] *Id.*

[132] *Houston Unlimited*, 443 S.W.3d at 835-36.

[133] *Id.* at 830-31.

foundational reliability,[134] it contained fatal analytical gaps by failing to account for (1) "contamination not attributable" to the defendant and (2) differences between the contaminated property and the two comparison properties and "between the nature of the contamination and remediation" among the three properties."[135]

Finally, in *Royce Homes, L.P. v. Humphrey*,[136] the Beaumont Court of Appeals refused to allow an expert appraiser's experience alone to connect his methodology to his opinion. Although the expert used the proper sales comparison approach, he valued plaintiff's flood-damaged home "as if it had not flooded and then estimated a percentage to deduct for stigma damage."[137] The expert, however, never sufficiently justified the amount of the reduction or "the reduction's application to the property at issue."[138] Instead, the percentage reduction was based simply on the expert's conversations with realtors over the years with regard to flood-damaged properties and the expert's own "experience in selling flooded properties."[139] Because of this analytical gap, the court held that the opinion was speculative and, thus, did not constitute evidence of damages.[140]

These three cases demonstrate that, even if the expert's methodology and the underlying facts and assumptions are sound, her opinion may still be subject to a challenge based on connective reliability if the opinion contains fatal analytical gaps. Locating such gaps in expert opinions is an important source of challenges to financial experts.

b. Causation Experts

The Texas Supreme Court reaffirmed in *Transcontinental Ins. Co. v. Crump* that, in some cases, both the *Robinson* factors and the analytical gap test may be utilized.[141] In that case, the court held that there was no analytical gap between (1) a doctor's technique in assessing the producing cause of death of one of his patients or between the data observed by the doctor and (2) his conclusions.[142]

By contrast, in *Volkswagen of America, Inc. v. Ramirez*, the Texas Supreme Court held that an expert's testimony contained too large an analytical gap.[143] The expert testified that a design defect in the rear wheel assembly of the plaintiff's car caused the wheel to detach, which resulted in her losing control of the car, traveling across a median, and colliding with another vehicle.[144] The Court found the testimony unreliable, noting "[i]t is far from clear how the detached wheel could 'follow the vehicle' in the wheel well as it crossed the median . . . ."[145] Importantly, the expert performed no tests and cited no publications in support of his bare statement that the "principles of physics" produced the result he described.[146]

In *Macy v. Whirlpool Corporation*, the Fifth Circuit affirmed the district court's exclusion of expert testimony regarding the cause of the plaintiffs' neurological damages.[147] The expert testified that a gas range that leaked carbon monoxide into the air caused the plaintiffs' damages.[148] However, the court noted that the studies underlying the causation opinion were not sufficiently analogous because the case studies involved far greater exposure to carbon monoxide over longer periods of time.[149] Because the link between the expert's facts and conclusions was too great, his opinions were not reliable.[150]

IV. WHEN AND HOW TO DISQUALIFY AN EXPERT

A. Challenging Faulty Designation of Expert

Texas Rule 194.2(f) allows a party to request disclosure of "the expert's name, address, and telephone number" and "the subject matter on which the expert will testify." An employed or retained expert (as well as an expert otherwise subject to party control) is required to disclose (1) "the general substance" of her "mental impressions and opinions and a brief summary of the basis for them"; (2) "all documents, tangible things, reports, models, or data compilations that [were] provided to, reviewed by, or prepared by or for the expert in anticipation of" her testimony; and (3) a copy

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[134] *Id.* at 832-35.

[135] *Id*. at 836-37.

[136] *Royce Homes, L.P. v. Humphrey*, 244 S.W.3d 570 (Tex. App.—Beaumont 2008, pet. denied).

[137] *Id.* at 578.

[138] *Id.* at 579.

[139] *Id.* at 578.

[140] *Id.* at 577. The defendant-appellant challenged the legal sufficiency of the expert testimony on appeal, not the court's ruling on admissibility. *See id.* at 577-80.

[141] 330 S.W.3d 211 (Texas 2010).

[142] *Id.* at 219–20.

[143] 159 S.W.3d 897, 906 (Tex. 2004).

[144] *Id*. at 904.

[145] *Id*. at 906.

[146] *Id*.

[147] 613 F. App'x 340, 343 (5th Cir. 2015).

[148] *Id*.

[149] *Id*. at 343–34.

[150] *Id*.

of her "current resume and bibliography."[151] If the expert is not retained by the party, the party is required to disclose documents "reflecting" the general substance of her mental impressions and opinions.[152]

Expert testimony can be challenged if disclosures are not made in a timely manner consistent with state procedural rules and any schedule imposed by the court.[153] Texas Rule 194.2(d) is of particular relevance to calculating economic damages.

Designations must also sufficiently disclose the expert's opinions; conclusory or incomplete opinions are subject to exclusion.[154] In addition, counsel should be on the lookout at trial for testimony that falls outside the scope of the opposing expert's designation.

B. Pre-trial Motions (*Daubert* and *Robinson* challenges)

1. Likelihood of success

The Law and Economics Center at the George Mason School of Law recently conducted an illuminating study on the effectiveness and practical impacts of *Daubert* motions in a variety of contexts.[155] Along with the legal issues already addressed by this paper, practitioners should account for the practical realities surrounding the filing of an expert-challenge motion.

The George Mason study examined 2,127 *Daubert* motions in 1,017 cases from 91 different federal district courts.[156] The sample ranges from 2003-2014 and involves 57 different causes of action.[157]

The researchers found that, over the entire sample, 47% of *Daubert* motions resulted in some measure of limitation on the expert's testimony.[158] Courts completely struck the expert in only 23% of cases.[159] Defendants are more slightly likely than plaintiffs to prevail on a *Daubert* motion (50% to 40%).[160]

A PricewaterhouseCoopers study from 2016 focusing solely on financial experts found that 44% of experts were excluded in some measure in 2016, which is consistent with the average from the previous 15 years.[161] Exclusion rates for financial experts is the highest in intellectual property and product liability cases.[162] Of the different types of financial experts, accountants were the most likely to be subject to a full or partial exclusion.[163]

2. Impact on case resolution

The filing of a *Daubert* motion changes the dynamic of a case and may even affect the timeline for resolution of the case. The George Mason study found that a ruling on a *Daubert* motion greatly accelerates the pace of settlement negotiations or resolution of the case through summary judgment. Of all of the sampled cases that ended in a settlement or summary judgment, a quarter of those resolved within 36 days of a *Daubert* ruling.[164] The researchers hypothesized that this is likely because a *Daubert* ruling can reveal important information about the merits of a plaintiff's case, and the calculus for both sides will likely be significantly affected by the outcome.[165] In some cases, a *Daubert* ruling could negatively affect the plaintiff's case, which highly accelerates the pace of negotiations or results in the pre-trial termination of the case.[166] For example, if a court strikes the testimony of a medical expert in a medical malpractice case, the plaintiff's likelihood of success can immediately drop to very low, if not zero.[167]

However, the *filing* of a *Daubert* motion (until it is ruled on) has the opposite effect, namely, it tends to slow the pace of negotiations or early resolution through

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[151] TEX. R. CIV. P. 194.2(f).

[152] *Id.*

[153] TEX. R. CIV. P. 194.2(d).

[154] *See, e.g., Innogenetics v. Abbott Labs.*, 512 F.3d 1363, 1373 (Fed. Cir. 2008) (affirming exclusion of "vague" expert testimony on the invalidity of patents where the expert's report did not address certain required elements of the invalidity analysis); *SynQor, Inc. v. Artesyn Techs., Inc.*, 2:07-CV-497-TJW-CE, 2011 WL 3625036, at *14 (E.D. Tex. Aug. 17, 2011) ("Such a conclusory, unsupported statement falls far short of the disclosure requirements that must be satisfied to present expert testimony to the jury.") (citing FED. R. CIV. P. 26(a)(2)(B)(i)).

[155] GEORGE MASON UNIVERSITY SCHOOL OF LAW, LAW AND ECONOMICS CENTER, TIMING AND DISPOSITION OF *DAUBERT* MOTIONS IN FEDERAL DISTRICT COURTS: AN EMPIRICAL EXAMINATION (2015), *available at* http://masonlec.org/site/rte_uploads/files/Daubert%20Report%5B1%5D.pdf.

[156] George Mason University School of Law, *supra* note 156, at 2.

[157] *Id*.

[158] *Id*. at 37.

[159] *Id*. at i (Executive Summary).

[160] *Id*. at 8.

[161] PwC, *supra* note 29, at 24.

[162] *Id*.

[163] *Id*.

[164] George Mason University School of Law, *supra* note 156, at 24.

[165] *Id*.

[166] *Id*.

[167] *Id*.

summary judgment. For the sampled cases, every 40 days a *Daubert* motion remained pending was associated with a 10% drop in the relative rate of termination either by settlement or summary judgment.[168]

These realities have a number of implications for practitioners, who should consider whether the type of case being litigated will be especially vulnerable to the chilling effect of a pending *Daubert* motion. Expert challenges have a greater negative impact on resolution in certain types of cases—those that require expert testimony to establish key elements of the claim. This includes medical malpractice, marine torts, several types of product liability claims, as well as copyright and employment claims.[169] Additionally, it is important to consider whether it is advantageous to file only one *Daubert* motion or several. The chilling effect of a pending *Daubert* motion is even greater where there are multiple *Daubert* motions pending.[170] More *Daubert* motions mean more delays.

The timing of a *Daubert* motion can also affect how much the motion delays settlement or summary judgment. In the sampled cases, *Daubert* motions filed before summary judgment rulings remained pending longer than those filed at other times.[171] The researchers hypothesize that this is likely because courts prefer to rule on the *Daubert* and summary judgment motions at the same time.[172] When courts ruled on summary judgment and *Daubert* motions simultaneously, they tended to take approximately one month longer in issuing the rulings than when the Court ruled on the *Daubert* motion before the summary judgment motion.[173]

C. Pre-trial Dispositive Motions

Although not traditionally used as a means to defeat adverse expert testimony, a motion for summary judgment on the legal sufficiency of the evidence should not be overlooked, especially in cases in which the expert is not obviously vulnerable to an admissibility challenge. For example, in *Alcatel USA, Inc. v. Cisco Sys., Inc*., a case involving the misappropriation of trade secrets, the court granted a motion for partial summary judgment that challenged the "factual and legal sufficiency of [the plaintiff's] damage models."[174] The damages expert filed a declaration stating that the plaintiff should be entitled to the entire acquisition price of the company that allegedly misappropriated the trade secrets.[175] The court held that the plaintiff presented no evidence of damages because the acquisition price was a legally unsupportable method of measuring damages for the misappropriation of trade secrets.[176] Although *Alcatel* did not address the admissibility of the plaintiff's expert testimony, the defendant achieved essentially the same result—the court rejected the plaintiff's evidentiary basis for its alleged damages. This approach is similar to the legal sufficiency review on appeal discussed below.

D. During Trial

Another important stage for challenging the opposing party's damages expert is at trial, especially if a party did not file a *Robinson* or *Daubert* motion or otherwise challenge expert testimony before trial. In addition, an objection is often necessary to preserve a challenge to the admissibility of the expert testimony on appeal. An objection, if properly and timely asserted, need not be a lengthy explication of the deficiencies in the expert's testimony. For example, in *Guadalupe-Blanco River Authority v. Kraft*, the court held that the attorney sufficiently preserved error for appeal by stating: "I'm going to make an objection based upon the failure of this witness' methodology to meet the reliability standards as articulated by the Supreme Court in *Gammill versus Jack William[s] Chevrolet* as applying to all expert testimony."[177] A cautionary tale is *County of Bexar v. Santikos*, in which the attorney waived error as to admissibility of expert testimony by objecting only after asking numerous questions on cross-examination first.[178]

E. Post-trial

Although Texas courts have often held that the admission of expert testimony is reviewed only for an abuse of discretion,[179] and Texas Rule of Evidence 103

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[168] *Id*. at 34.

[169] *Id*. at 33. Surprisingly, the amount of time a *Daubert* motion is likely to remain pending is not statistically correlated with the complexity of the case. Perhaps counter intuitively, in the sampled cases, intellectual property and antitrust cases had among the lowest pendency times for *Daubert* motions. *Id*. at 13.

[170] *Id*. at 30.

[171] *Id*. at ii (Executive Summary).

[172] *Id*. at ii (Executive Summary).

[173] *Id*. at 12.

[174] 239 F. Supp. 2d 660, 666 (E.D. Tex. 2002).

[175] *Id*. at 670.

[176] *Id*. at 671.

[177] *Guadalupe-Blanco River Auth. v. Kraft*, 77 S.W.3d 805, 807 (Tex. 2002).

[178] 107 S.W.3d 677, 681 (Tex. App.—San Antonio 2003), *rev'd on other grounds*, 144 S.W.3d 455 (Tex. 2004).

[179] *Gammill*, 972 S.W.2d at 718; *Broders*, 924 S.W.2d at 151–52 (holding that the same abuse of discretion standard applies

is clear that a party must object to the admission of expert testimony in order to preserve error on appeal,[180] there are nevertheless much more forgiving avenues for challenging expert testimony post-trial.

Texas, unlike most other jurisdictions,[181] allows for legal sufficiency challenges to expert testimony.[182] Appellate courts reviewing the legal sufficiency of expert testimony conduct a *de novo*-like review to determine whether expert testimony is reliable even absent an objection to the testimony at trial.[183] This approach dates back to the Texas Supreme Court's 1997 opinion in *Merrell Dow Pharmaceuticals, Inc. v. Havner*.[184] In that case, the Supreme Court considered whether there was any evidence at trial to support the claim that the drug Bendectin caused Kelly Havner to be born with a birth defect.[185] The plaintiffs, Kelly Havner's parents, relied upon expert witnesses to establish causation, and the defendant objected at multiple stages of the case.[186] After a verdict in the plaintiffs' favor, the defendant appealed, challenging, among other things, "the legal sufficiency of the Havners' causation evidence and the admissibility of some of that evidence . . . ."[187] Importantly, the Supreme Court considered only the legal sufficiency challenge—not the admissibility of the plaintiffs' evidence.[188] The Supreme Court held that the plaintiffs' expert testimony on causation was not scientifically reliable and was, therefore, "not evidence of causation." Having found no evidence to support the verdict, the Supreme Court reversed and rendered judgment for the defendant.[189]

Texas courts have continued to adhere to the rule in *Havner*.[190] In fact, while the defendant in *Havner* objected to the legal sufficiency and admissibility of the plaintiffs' causation evidence, such objection is not necessary to challenge the reliability of an expert's testimony on appeal—provided that the challenge is grounded in legal sufficiency rather than admissibility.[191] As the Supreme Court explained in a 2014 opinion, "the evidentiary value of expert testimony is derived from its basis, not from the mere fact that the expert has said it."[192] Therefore, an expert opinion that has no basis or relies on a basis that provides no support for the opinion is merely a conclusory statement and cannot be considered probative evidence, regardless of whether there was an objection to the testimony.[193]

In addition to an apparent departure from the requirement that parties object to expert testimony before or during trial, the *Havner* rule also undercuts the proposition that a trial court's consideration of expert testimony is reviewed only for an abuse of discretion.[194]

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to questions about the expert's methodology as well as qualifications).

[180] TEX. R. EVID. 103(a)(1)(A).

[181] Brown & Davis, *supra* note 21, at 42 (noting that by permitting legal sufficiency review of an expert's reliability, Texas "differs from most jurisdictions" including federal courts, which "treat expert reliability almost exclusively as an admissibility issue").

[182] *See Coastal Transport Co. v. Crown Cent. Petrol.,* 136 S.W.3d 227, 233 (Tex. 2004) (holding that expert testimony on gross negligence was conclusory and thus legally insufficient).

[183] *See, e.g., FFE Transp. Serv., Inc. v. Fulgham*, 154 S.W.3d 84, 89 (Tex. 2004); *see also Gomez v. American Honda Motor Co., Inc.*, 04-14-00398-CV, 2015 WL 1875954, at *2 (Tex. App.—San Antonio Apr. 22, 2015, pet. denied) (quoting *Gross v. Burt*, 149 S.W.3d 213, 237 (Tex. App.—Fort Worth 2004, pet. denied).

[184] 953 S.W.2d 706, 708–09 (Tex. 1997).

[185] *Id.* at 708.

[186] *Id*. at 709.

[187] *Id*.

[188] *Id*.

[189] *Id*. at 730.

[190] *Transcon. Ins. Co. v. Crump*, 330 S.W.3d 211, 213 (Tex. 2010) (holding that "the treating physician's opinion was based on a reliable foundation and, therefore, legally sufficient evidence"); *Volkswagen of Am., Inc. v. Ramirez*, 159 S.W.3d 897, 906 (Tex. 2004) (reversing and rendering judgment for defendant where the plaintiff's expert's opinion was "unreliable and constitutes no evidence of causation"); *Gross*, 149 S.W.3d at 237 ("even when challenged expert testimony is admitted by the trial court, a party may later complain on appeal that the expert testimony is legally insufficient to support the judgment because it is unreliable.").

[191] *Coastal Transp. Co., Inc. v. Crown Cent. Petroleum Corp.*, 136 S.W.3d 227, 233 (Tex. 2004) ("We therefore conclude that when a reliability challenge requires the court to evaluate the underlying methodology, technique, or foundational data used by the expert, an objection must be timely made so that the trial court has the opportunity to conduct this analysis. However, when the challenge is restricted to the face of the record [,] for example, when expert testimony is speculative or conclusory on its face [,] then a party may challenge the legal sufficiency of the evidence even in the absence of any objection to its admissibility.")

[192] *Houston Unlimited, Inc. Metal Processing v. Mel Acres Ranch*, 443 S.W.3d 820, 829 (Tex. 2014).

[193] *Id.; City of San Antonio v. Pollock*, 284 S.W.3d 809, 818 (Tex. 2009).

[194] S. GOODE, ET AL., TEXAS PRACTICE SERIES: GUIDE TO THE TEXAS RULES OF EVIDENCE § 901.1 (4th ed. 2016) ("The Texas Supreme Court . . . has used its power to conduct legal sufficiency (no evidence) reviews both to negate the timely-

Texas courts now commonly state that reliability of expert testimony is subject to "'an almost *de novo*-like review'" on appeal.[195]

V. CONCLUSION

Both legal and practical issues abound when considering the admissibility of expert testimony. Practitioners should consider which of the three bases for a challenge are most appropriate given the type of expert testimony at issue. It is equally important to consider from a strategic standpoint how the filing of a motion to strike could impact the resolution of a case through settlement or summary judgment. Although filing a motion will likely freeze the parties in their respective positions while the motion is pending, a ruling on expert qualification could quickly accelerate the case toward resolution. Practitioners should be ready for these inflection points and craft their arguments—and prepare their clients—accordingly.

objection requirement and to undercut the abuse of discretion standard for review.").

[195] *Gross*, 149 S.W.3d at 237.