

OPINION AND EXPERT TESTIMONY
(TEXAS RULES OF EVIDENCE – TITLE VII)

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I. EXPERT TESTIMONY UNDER THE RULES OF EVIDENCE

Adopted in 1986, the Rules of Criminal Evidence in many ways expanded the admissibility of evidence in criminal trials. Expert testimony, addressed in Article VII, was no exception. The general rule for admissibility is Rule 702, which reads:

If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion or otherwise.¹

A. The “Early Days”

The first Court of Criminal Appeals case addressing admissibility under Rule 702 was the 1989 case of *Pierce v. State*.² *Pierce* considered the admissibility of psychological evidence questioning the validity of an eyewitness identification.³ Drawing from the commentary of the Federal Rules of Evidence, the court set forth the test:

The threshold determination for admitting expert testimony is whether the “specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue” ... “There is no more certain test for determining when experts may be used than the commonsense inquiry whether the untrained layman would be qualified to determine intelligently and to the best possible degree the particular issue without enlightenment from those having a specialized understanding of the subject involved in the dispute.” When opinions are excluded, it is because they are unhelpful and therefore superfluous and a waste of time.⁴

The court held that expert testimony on eyewitness identification simply did not assist the trier of fact and therefore it was not an abuse of discretion for the trial court to exclude it.⁵

A year later, the Court of Criminal Appeals issued two seminal cases interpreting the Rules of Criminal Evidence: *Montgomery v. State*,⁶ and *Duckett v. State*.⁷ Both of these cases recognized that with the advent of the Rules, the presumptive inadmissibility of evidence had been reversed. *Duckett*, which specifically addressed psychiatric expert testimony, expanded upon the observations in *Pierce* while at the same time incorporating the new rule of presumptive admissibility:

The test [for admissibility of expert testimony] is whether the expert’s testimony, if believed, will

¹TEX. RULES CRIM. EVID. Rule 702.

²777 S.W.2d 399 (Tex. Cr. App. 1989).

³*Id.* at 414.

⁴*Id.* (quoting TEX. RULES CRIM. EVID. Rule 702; FED. RULES EVID. Rule 702 advisory committee’s note)(citations omitted).

⁵*Id.* at 415.

⁶810 S.W.2d 372 (Tex. Cr. App. 1991)(on rehearing).

⁷797 S.W.2d 906 (Tex. Cr. App. 1990).

assist the untrained layman trier of fact to understand the evidence or determine a fact in issue and whether it is otherwise admissible under general rules of relevant admissibility. To the extent the evidence is relevant to a matter or issue in the case, our evidentiary rules now require the party opposing the proffered evidence not only demonstrate the negative attributes of the evidence but also show how these negative attributes substantially outweigh the probative value of the evidence.⁸

Thus, if an opinion would “assist the trier of fact” under Rule 702, the only real limits as to what expert opinions would be admissible under the Rules were relevance under Rule 401, and unfair prejudicial effect under Rule 403. This has proven to generally be the case, although it must be noted by all who are honest that where state’s evidence is concerned, the courts have tended to err on the side of admissibility (testimony on future dangerousness, child sexual abuse accommodation syndrome), whereas the opposite is true where defense evidence is concerned (fallibility of eyewitness identification, coerced confessions).

B. The Rule 702 “Scientific Evidence” Analysis Begins to Take Shape

As the reader is no doubt aware, the Criminal and Civil Rules of Evidence were merged in 1998. Thus, at least theoretically, decisions of the Texas Supreme Court should carry roughly the same weight as those from the Texas Court of Criminal Appeals as pertains to evidentiary issues where the rules do not differentiate between civil and criminal trials (such as Rule 702). This has not proven to be true.⁹ Nonetheless, the following cases, some of which are civil cases, are cited enough by the Court of Criminal Appeals so that they can be considered authoritative. They trace the evolution of the treatment of expert testimony under the Rules of Evidence after *Duckett* and *Montgomery*.

***Kelly v. State*, 824 S.W.2d 568 (Tex. Cr. App. 1992).**

Kelly was the first case in Texas to evaluate DNA evidence under the Rules of Criminal Evidence. The Court of Criminal Appeals decided that Rule 702 has taken the place of (and rendered obsolete) the *Frye* “general acceptance” test.¹⁰ Building upon the reasoning first discussed in *Pierce v. State*¹¹ and *Duckett v. State*,¹² the court reiterated that the admission of expert testimony will depend upon

⁸*Id.* 797 S.W.2d at 914 (emphasis in original).

⁹The inherent bias alluded to in the previous paragraph is reversed on the civil side, although it is perhaps not as pronounced as we see in the criminal cases. The court’s analysis on the civil cases also tends to run much deeper, which may be a by-product of the deposition versus the 705(b) hearing and the state of the record made by each.

¹⁰*See Frye v. United States*, 293 F. 1013 (D.C. Cir. 1923).

¹¹777 S.W.2d 399 (Tex. Cr. App. 1989).

¹²797 S.W.2d 906, 910 (Tex. Cr. App. 1990). Prior to the Rules of Evidence, expert testimony had been presumed inadmissible unless its proponent could show that its probative value outweighed its prejudicial effects. *See, e.g., Holloway v. State*, 613 S.W.2d 497, 500-01 (Tex. Cr. App. 1981). With the advent of the Rules of Evidence, this presumption was turned around. The *Duckett* court recognized this dramatic shift in the law. *See Duckett*, 797 S.W.2d at 914 (“To the extent the evidence is relevant to a matter or issue in the case, our evidentiary rules now require the party opposing the proffered evidence not only *demonstrate* the negative attributes of the evidence but also show how these negative attributes *substantially outweigh* the probative value of the evidence.”). *Id.* (emphasis in original). The “assist the

whether that testimony is “helpful” to the jury in its determination of a fact in issue.¹³ In order for expert testimony to be helpful, the court declared, it must be both “reliable” and “relevant.”¹⁴ Additionally, the trial court should conduct a Rule 403 analysis on any testimony that would be otherwise admissible.¹⁵

The court then expanded upon the reliability requirement. “As a matter of common sense,” the court declared, “evidence derived from a scientific theory, to be considered reliable, must satisfy three criteria in any particular case: (a) the underlying scientific theory must be valid; (b) the technique applying the theory must be valid; and (c) the technique must have been properly applied on the occasion in question.”¹⁶ The burden of proving these three factors *by clear and convincing evidence* would fall upon the proponent of the evidence.¹⁷ The proof, however, may be presented to the trial court outside the presence of the jury.¹⁸ The court then listed a non-exclusive set of factors to be considered by the trial court in determining reliability:

- (1) the extent to which the underlying scientific theory and technique are accepted as valid by the relevant scientific community, if such a community can be ascertained;
- (2) the qualifications of the expert(s) testifying;
- (3) the existence of literature supporting or rejecting the underlying scientific theory and technique;
- (4) the potential rate of error of the technique;
- (5) the availability of other experts to test and evaluate the technique;
- (6) the clarity with which the underlying scientific theory and technique can be explained to the court; and
- (7) the experience and skill of the person(s) who applied the technique on the occasion in question.¹⁹

jury” requirement, though, existed in the case law prior to the enactment of the Rules. *See, e.g., Holloway*, 613 S.W.2d at 501.

¹³*See Kelly*, 824 S.W.2d at 572.

¹⁴*See id.* The *Kelly* court spoke of relevance and reliability as though they were the same thing, with relevance being a natural consequence of reliability. Later cases separate these requirements a bit more, keeping the *Kelly* reasoning on reliability and giving relevance the same meaning as under Rule 401, et seq. *See, e.g.,*

¹⁵*See id.*

¹⁶*Id.* at 573 (citing P. GIANELLI & E. IMWINKELRIED, SCIENTIFIC EVIDENCE § 1-1 (1986)).

¹⁷*See id.*

¹⁸*See id.* (citing Rule 104(a) and (c)).

¹⁹*Id.* (citing 3 J. WEINSTEIN & M. BERGER, WEINSTEIN’S EVIDENCE ¶ 702[03] (1991)).

***Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993).**

The plaintiffs in this case were infants who had been born with birth defects, allegedly caused by their mothers' ingestion of Bendectin during pregnancy. They wanted to present expert testimony dependent partially upon reanalyses of epidemiological studies.²⁰ The studies themselves had been published, but the expert's reanalyses of them were not.²¹

In analyzing the proffered testimony in light of the Rules of Evidence, the Supreme Court set out a framework very similar to that which the Court of Criminal Appeals had set out the year before in *Kelly*.²² *Daubert* went further than *Kelly*, however, in discussing the relevance analysis.²³ The Court noted that in order to be "helpful" to the jury, the evidence must not only be reliable but must be "sufficiently tied to the facts of the case that it will aid the jury in resolving [the] factual dispute."²⁴ This the Court referred to as the "fit" of the evidence to the facts.²⁵ Essentially, not only must the evidence be reliable, it must be reliable for the *purpose to which it is directed*.²⁶ To illustrate, the Court gave the following example:

The study of the phases of the moon ... may provide valid scientific 'knowledge' about whether a certain night was dark, and if darkness is a fact in issue, the knowledge will assist the trier of fact. However, (absent credible grounds supporting such a link), evidence that the moon was full on a certain night will not assist the trier of fact in determining whether an individual was unusually likely to have behaved irrationally on that night.²⁷

"Rule 702's 'helpfulness' standard," the Court concluded, "requires a valid scientific connection to the pertinent inquiry as a *precondition to admissibility*."²⁸

The Supreme Court remanded the case back to the Ninth Circuit, which in turn found that the expert testimony was not reliable.²⁹ Analyzing the reanalyses in light of the new Rule 702 framework, the

²⁰Explain what this is — is it a retrospective study of pre-existing data which is not a scientifically sound as a prospective study using clinical trials and controls?

²¹*See Daubert*, 509 U.S. at 583-584.

²²*See id.* at 589-95 (especially Section II.C of the majority opinion, which discusses the "reliability" analysis).

²³*See id.* at 591.

²⁴*Id.* at 591 (quoting *United States v. Downing*, 753 F.2d 1224, 1242 (3rd Cir. 1985)).

²⁵*See id.*

²⁶*See id.* ("'Fit' is not always obvious, and scientific validity for one purpose is not necessarily scientific validity for other, unrelated purposes.").

²⁷*Id.* at 591.

²⁸*Id.* at 591-92 (emphasis added).

²⁹*See Daubert v. Merrill Dow Pharmaceuticals, Inc.*, 43 F.3d 1311, 1322 (9th Cir. 1995)(on remand).

court determined that the evidence was unreliable for two main reasons — first, the experts had conducted their research in anticipation of litigation, and second, there was no peer review or publication of the of the experts’ research.³⁰ For these reasons, the experts’ testimony was declared unreliable and hence unhelpful to the jury. In addition, the work was declared irrelevant because it actually, for scientific reasons (unreliability), did not support the proposition to which it was aimed — that Bendectin caused birth defects.³¹

E.I. du Pont de Nemours & Co., Inc. v. Robinson, 923 S.W.2d 549 (Tex. 1995).

This was a warranty and DTPA case over a product (“Benlate” -- a fungicide for trees and plants) made by DuPont and which the Robinsons alleged damaged their pecan orchard.³² The Robinsons produced an expert on causation, a Dr. Whitcomb, who conducted the following research on the Robinsons’ orchard:

- (1) he inspected the orchard;³³
- (2) he visited the orchard and conducted an inspection that lasted 2 1/4 hours;
- (3) he “visually scanned the orchard, which consists of about 200 trees;”
- (4) he closely viewed forty to fifty trees;
- (5) he took pictures.³⁴

Dr. Whitcomb’s opinion was that the Benlate was contaminated with certain substances, including “sulfonyleurea herbicides” at the time it was manufactured by DuPont and that these substances are what damaged the Robinsons’ trees.³⁵

Dr. Whitcomb did not, however, do other procedures that the court seemed to think were important:

- (1) he did no soil or tissue testing;
- (2) he did not research relevant weather conditions;

³⁰See *id.* at 1317-18 (“[T]he only review the plaintiffs’ experts’ work has received has been by judges and juries, and the only place their theories and studies have been published is in the pages of federal and state reporters.”).

³¹See *id.* at 1322.

³²See *Robinson*, 923 S.W.2d at 550-51.

³³Done, the court pointed out, “at the request on their attorney.” *Id.* at 551.

³⁴See *id.* at 551.

³⁵See *id.*

- (3) he did not test any of the Benlate still possessed by the Robinsons;
- (4) he had not visited any other pecan orchards for the purpose of investigating possible Benlate damage;
- (5) he admitted in his deposition that he did not know what levels of sulfonyleurea herbicides it would take to harm pecan trees;
- (6) he acknowledged in his deposition that there was no consistent pattern of damage to the trees.³⁶

Dr. Whitcomb's ultimate opinion that the Benlate had damaged the trees³⁷ was based on a method called "comparative symptomology" — "because the Robinsons' pecan trees exhibited symptoms common to other plants treated with allegedly contaminated Benlate under dissimilar growing conditions, Benlate, the only common factor among all the plants, caused the damage."³⁸

The court also reviewed the research personally conducted by Dr. Whitcomb, finding it insufficient as well.³⁹ Dr. Whitcomb had conducted an experiment⁴⁰ in connection with suspected Benlate contamination in Florida.⁴¹ The experiment was conducted on plants in an environment controlled to simulate Florida. He divided the plants in two, one experimental and one control, keeping all other conditions identical. Dr. Whitcomb discovered that the plants treated with Benlate had stunted growth and discolored leaves.⁴² Based on this experiment, Dr. Whitcomb arrived at the opinion that it was the Benlate that caused the symptoms. Dr. Whitcomb had also previously sampled ten boxes of Benlate and found that the chemical makeup was not consistent across the samples (although the testing apparently did not reveal the presence of sulfonyleurea herbicides). Dr. Whitcomb also conducted a review of the relevant literature and had reviewed internal DuPont documents concerning other Benlate claims.⁴³

The trial court excluded the testimony on the grounds that it was not reliable and would not assist the trier of fact.⁴⁴ The court of appeals reversed, however, *holding that any weakness in the expert's methods was a matter of weight and credibility for the jury, not admissibility for the trial judge.*⁴⁵

³⁶*See id.* at 550-51.

³⁷Which, the court again felt it necessary to note, was delivered to the Robinsons' attorney. *See id.*

³⁸*Id.*

³⁹*See id.*

⁴⁰At the request of another attorney, as the court pointed out. *See id.*

⁴¹*See id.*

⁴²*See id.*

⁴³*See id.* at 551-52.

⁴⁴*See id.* at 552.

⁴⁵*See id.*

The Texas Supreme Court disagreed. Like the United States Supreme Court and the Texas Court of Criminal Appeals before it, the court held that in order for expert testimony to be *admissible*, it must be “relevant” and “reliable.”⁴⁶ In setting up its own analytical framework, the court basically adopted the relevance analysis from *Daubert*⁴⁷ and incorporated the reliability analysis of *Kelly*.⁴⁸ The inquiry should

⁴⁶*See id.* at 556. “[W]e hold that in addition to showing that an expert witness is qualified, Rule 702 also requires the proponent to show that the expert’s testimony is relevant to the issues in the case and is based upon a reliable foundation. The trial court is responsible for making the preliminary determination of whether the proffered testimony meets the standards set forth today. ... Rule 702 contains three requirements for the admission of expert testimony: (1) the witness must be qualified; (2) the proposed testimony must be ‘scientific ... knowledge’; (3) the testimony must ‘assist the trier of fact to understand the evidence or to determine a fact in issue.’” *Id.*

⁴⁷“The requirement that the proposed testimony be relevant incorporates traditional relevancy analysis under Rules 401 and 402 of the Texas Rules of Civil Evidence. To be relevant, the proposed testimony must be ‘sufficiently tied to the facts of the case that it will aid the jury in resolving a factual dispute. Evidence that has no relationship to any of the issues in the case is irrelevant and does not satisfy Rule 702’s requirement that the testimony be of assistance to the jury. It is thus inadmissible under Rule 702 as well as under Rules 401 and 402.” *Id.* at 556 (citations omitted).

⁴⁸“In addition to being relevant, the underlying scientific technique or principle must be reliable. Scientific evidence which is not grounded ‘in the methods and procedures of science’ is no more than ‘subjective belief or unsupported speculation.’ Unreliable evidence is of no assistance to the trier of fact and is therefore inadmissible under Rule 702.

There are many factors that a trial court may consider in making the threshold determination of admissibility under Rule 702. These factors include, but are not limited to:

- (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.

Id. at 557.

be directed toward the “underlying principles and methodology” of the expert’s testimony, not the conclusions he has reached.⁴⁹ The burden of satisfying the requirements of Rule 702 falls upon the proponent of the evidence.⁵⁰ Once the Rule 702 requirements are met, the trial court must then conduct a Rule 403 analysis.⁵¹ The trial court’s decision whether to admit the evidence or not is reviewed for abuse of discretion.⁵²

The supreme court held that in this case, the trial court did not abuse its discretion and reversed the court of appeals’ decision. The testimony failed the reliability prong of Rule 702. In arriving at its determination, the court went through a list of deficiencies that fell into three major areas: (1) Dr. Whitcomb did not rule out other possible causes for the damage to the trees;⁵³ (2) Dr. Whitcomb’s analysis was faulty and result-oriented;⁵⁴ (3) Dr. Whitcomb was retained in anticipation of litigation;⁵⁵ and

⁴⁹“The trial court’s role is not to determine the truth or falsity of the expert’s opinion. Rather, the trial court’s role is to make the initial determination whether the expert’s opinion is relevant and whether the methods and research upon which it is based are reliable. There is a difference between the reliability of the underlying theory or technique and the credibility of the witness who proposes to testify about it. An expert witness may be very believable, but his or her conclusions may be based upon unreliable methodology. As DuPont points out, a person with a degree should not be allowed to testify that the world is flat, that the moon is made of green cheese, or that the Earth is the center of the solar system.” *Id.* at 558.

⁵⁰*See id.*

⁵¹*See id.* at 557.

⁵²*See id.* at 558.

⁵³“Dr. Whitcomb conducted no testing to exclude other possible causes of the damage to the Robinsons’ pecan orchard, even though he admitted in his deposition that many of the symptoms could be caused by something other than Benlate. For instance, Dr. Whitcomb stated in his deposition that any number of things, including root rot, could have caused chlorosis, a yellowing of the leaves, on the Robinsons’ trees. An expert who is trying to find a cause of something should carefully consider alternative causes. *Dr. Whitcomb’s failure to rule out other causes of the damage renders his opinion little more than speculation.*” *Id.* at 558-59 (emphasis added)(citations omitted).

⁵⁴*See id.* “Dr. Whitcomb’s testimony is also problematic because of his methodology. Scientists may form initial hypotheses. *However, ‘coming to a firm conclusion first and then doing research to support it is the antithesis of this [scientific] method.’* ... In this case, Dr. Whitcomb had no proof that the Robinsons’ Benlate was contaminated with [sulfonyleurea herbicides], and no knowledge as to what amount or concentration of [sulfonyleurea herbicides] would damage pecan trees. *Nonetheless, he determined, without any testing to exclude other causes, that because the Robinsons applied Benlate to their trees, and the trees showed signs of damage, the Benlate must have been contaminated.*” *Id.* at 559 (emphasis added)(citations omitted).

⁵⁵*See id.* “The fact that an opinion was formed solely for the purposes of litigation does not automatically render it unreliable. However, ‘when an expert prepares reports and findings before being hired as a witness, that record will limit the degree to which he can tailor his testimony to serve a party’s interests.’ On the other hand, opinions formed solely for the purpose of testifying are more likely to be biased toward a particular result.” *Id.* (citations omitted).

(4) there was no proof that “comparative symptomology” was an “appropriate and reliable method to determine chemical contamination.”⁵⁶

As to this final reason, the court drew a distinction between a conclusion and the method used for reaching that conclusion.⁵⁷ The court found that the method of comparative symptomology had not been subjected to peer review or publication, had not been subjected to a rate of error analysis, and there was no evidence that it had been generally accepted by members of the relevant scientific community.⁵⁸ Importantly, the court refused to consider as sufficient evidence Dr. Whitcomb’s *assertions* that the technique was generally accepted and relied upon by other experts in his field.⁵⁹

***Jordan v. State*, 928 S.W.2d 550 (Tex. Cr. App. 1996).**

This case represented a further exploration by the Court of Criminal Appeals into the subject of relevance for purposes of Rule 702. The expert evidence at issue was testimony regarding the fallibility of eyewitness identification — testimony that, because of prior rulings of the court, was as a practical matter impossible to get admitted at trial.⁶⁰

⁵⁶*See id.*

⁵⁷*See id.* “[A statistician] found that there was a ninety-nine percent probability that Dr. Whitcomb’s conclusion that Benlate damaged the plants in Dr. Whitcomb’s study was correct. However, the approach we adopt today inquires whether the particular *technique or methodology* has been subjected to a rate of error analysis.” *Id.* (emphasis added).

⁵⁸*See id.* At the end of his analysis, Justice Gonzalez almost casually throws in the observation that “[a]lso not sufficient to show general acceptance of Dr. Whitcomb’s theory or technique is the fact that other organizations were *studying* the effects of Benlate on plant life.” *Id.* (emphasis in original). Should this be taken to mean that *all* the research on a topic must be *complete* before Rule 702 can be satisfied?

⁵⁹*See id.* “Dr. Whitcomb’s self-serving statements that his methodology was generally accepted and reasonably relied upon by other experts in the field are not sufficient to establish the reliability of the technique and theory underlying his opinion.” *Id.* (citing *Daubert*, 43 F.3d at 1316 (upon remand)(stating that an “expert’s bald assurance of validity is not enough”). Should this be taken to mean that the Rule 702 predicate cannot be made through the testimony of the expert? Is testimony plus journal articles enough? Assuming this rule is uniformly and evenly applied, this has some interesting implications for criminal trials.

⁶⁰*See Pierce v. State*, 777 S.W.2d 399, 414 (Tex. Cr. App. 1989); *Rousseau v. State*, 855 S.W.2d 666, 685-86 (Tex. Cr. App. 1993); and see also *Jordan v. State*, 877 S.W.2d 902, 905-06 (Tex. App. — Fort Worth), *reversed*, 928 S.W.2d 550 (Tex. Cr. App. 1996)(the court of appeals analysis in light of *Pierce* and *Rousseau*). The court of appeals pointed out that “[t]he *Pierce* court ... was not saying that this type of testimony should be excluded in all cases.” *Jordan*, 877 S.W.2d at 905 (citing *Pierce*, 777 S.W.2d at 416 n.5). The simple fact is, though, that in light of the analysis of *Pierce* and *Rousseau*, it would have been virtually impossible to show that this type of testimony “fit” the facts of the case. The first *Jordan* opinion out of the court of appeals is a good case in point. *See Jordan*, 877 S.W.2d at 905 (“However, Dr. Finn’s testimony did not consider all of the factors affecting the reliability of the eyewitness’ identification ...”). The rub, of course, is that the “factors” any expert could consider are virtually innumerable.

The reason for the difficulty in getting this type of evidence admitted was always that the testimony could not be sufficiently shown to “fit” the facts of the case.⁶¹ Usually, the expert had not interviewed the eyewitness(es),⁶² had failed to take into account a sufficient number of conditions at the scene⁶³ or had failed to review certain pieces of evidence possessed by the state.⁶⁴ In fact in *Jordan*, the court of appeals observed that the expert did not consider “*all* of the factors affecting the reliability of the eyewitness’ identification”⁶⁵ The expert did not consider the length of time the witnesses saw the defendant, the lighting conditions under which they saw him, or the physical descriptions given by the witnesses to the police before the photo lineups were given to those witnesses. The expert also did not interview the witnesses or examine the original photo lineup used by the witnesses in making the identification.⁶⁶ The court of appeals held that the trial court had not abused its discretion in disallowing the testimony.

The Court of Criminal Appeals refused to hold *Jordan* to such a high burden. In a 7-2 opinion, the court held that the court of appeals had erred, stating that the expert’s testimony was “sufficiently tied to the facts to meet the simple requirement that it be ‘helpful’ to the jury on the issue of eye witness reliability,” even though he did not interview the witnesses or examine certain pieces of evidence, and even though he “did not testify to *every conceivable factor* that might affect the reliability of the eyewitness identification.”⁶⁷ The requirement that the evidence “fit” the facts of the case, the court continued, should not be so strict that the expert is required to “address every foreseeable issue pertinent to his testimony that might be raised by the relevant facts” This, the court held, is more than Rule 702 requires.⁶⁸ “The expert must make an effort to tie pertinent facts of the case to the scientific principles which are the subject of his testimony[, but] [e]stablishing this connection is not so much a matter of proof ... as a matter of application.”⁶⁹ It was apparent that relevance was not to be as difficult to show as reliability. The court remanded the case to the court of appeals to consider that “more difficult question.”⁷⁰

⁶¹See *Pierce*, 777 S.W.2d at 414-16; *Rousseau*, 855 S.W.2d at 668.

⁶²See e.g., *Rousseau*, 855 S.W.2d at 686.

⁶³See *Jordan*, 877 S.W.2d at 905.

⁶⁴See *id.*

⁶⁵*Id.* (emphasis added).

⁶⁶See *id.*

⁶⁷*Jordan*, 928 S.W.2d at 555-56.

⁶⁸See *id.* (“The question under Rule 702 is not whether there are some facts in the case that the expert failed to take into account, but whether the expert’s testimony took into account enough of the pertinent facts to be of assistance to the trier of fact on a fact in issue. That some facts were not taken into account by the expert is a matter of weight and credibility, not admissibility.”).

⁶⁹*Id.*

⁷⁰See *id.*

On remand, Jordan argued that this type of expert testimony should be “subjected to less scrutiny because the psychological sciences are not susceptible to the measurable results often associated with ‘hard science.’”⁷¹ The Fort Worth Court of Appeals applied the straight *Kelly/Daubert/Robinson* “scientific evidence” analysis, interpreting the Court of Criminal Appeals’ remand to determine whether the testimony was “scientifically reliable” as a mandate to do so.⁷² Jordan failed to carry his burden.

In keeping with the “scientific evidence” analysis, the court’s stated reasons for declaring the evidence unreliable were:

- (1) the failure by Jordan to prove the “validity of the scientific theories underlying [the expert’s] opinion;”
- (2) Jordan’s failure to prove “the validity of the techniques used to apply the theories;”
- (3) the expert’s work has never been subjected to peer review;
- (4) the expert had never himself conducted any experiments to test the validity of the scientific theory; and
- (5) there was no evidence of rate of error.⁷³

The court of appeals agreed with the trial court that, because the evidence was not reliable, *it was not admissible*.⁷⁴ Jordan’s petition for discretionary review to the Court of Criminal Appeals was refused on January 28, 1998.

C. The Problem of “Non-Scientific” Expert Testimony

It should be obvious that testimony such as that offered in *Jordan* could never satisfy the standard developed in the *Kelly, Daubert* and *Robinson* cases. As was the case with *Kelly, Daubert* limited its own application to “scientific” evidence.⁷⁵ Expressly limiting its discussion (and the scope of the opinion) to scientific knowledge, the United States Supreme Court spent a considerable amount of time discussing what “scientific knowledge” is and finally concluded that it is knowledge derived from “the methods and procedures of science” — literally that the expert’s opinions must have been derived by the scientific method.⁷⁶ This, the Court held, is a *condition of admissibility*.⁷⁷ *Robinson* also expressly dealt with

⁷¹*Jordan v. State*, 950 S.W.2d 210, 211-12 (Tex. App. — Fort Worth, 1997, pet. ref’d).

⁷²*See id.*

⁷³*See id.* at 212.

⁷⁴*See id.* at 212-13.

⁷⁵*Kelly* actually characterized and analyzed DNA as “novel scientific evidence.” *See id.* at 573. The Court of Criminal Appeals, in *Hartman v. State*, 946 S.W.2d 60 (Tex. Crim. App. 1997), however, held that the analytical framework would apply to “all scientific evidence,” thus ending any debate as to whether the analysis would only apply to “novel” scientific evidence. *See id.* at 62-63.

⁷⁶*Id.* at 589-90, n.8.

“scientific evidence.”

Later cases would be faced with this and other perceived limitations to the *Kelly* analytical framework, not the least of which was the question of whether *Kelly* applied at all to expert testimony other than that which could be classified as “scientific.” Not surprisingly, the courts would ultimately hold that such non-scientific expert knowledge could be judged by a test that is more suited for that type of field. In Texas, also not surprisingly, that decision would come in a case where the state of offering the evidence.

D. *Nenno, Gammill & Kumho Tire*: “Soft Science” Arrives.

Just as was the case with *Kelly*, the Texas Court of Criminal Appeals, in *Nenno v. State*,⁷⁸ delivered an opinion on “soft science” expert testimony before the United States Supreme Court did. Shortly thereafter, the Texas Supreme Court spoke to the issue in *Gammill v. Jack Williams Chevrolet, Inc.*,⁷⁹ And just as in the case with *Kelly, Robinson and Daubert, Nenno, Gammill and Kumho Tire Co., v. Carmichael*,⁸⁰ the Supreme Court’s statement on the matter, are substantially the same, at least as the law goes.

***Nenno v. State*, 970 S.W.2d 549 (Tex. Crim. App. 1998).**⁸¹

In *Nenno* the defendant contended the trial court erred in admitting expert testimony in the punishment stage of his death penalty trial from Kenneth Lanning, a Special Agent in the Behavioral Science Unit of the FBI who specialized in studying the sexual victimization of children, regarding the defendant's future dangerousness.⁸² He argued that Lanning's testimony was inadmissible under Rule 702 because it failed to meet the *Kelly* test.⁸³ In language far different from that of the court of appeals in *Jordan*, the Court of Criminal Appeals observed:

Courts must keep in mind the statement in *Daubert* that the inquiry is “a flexible one.” The general approach of the Federal Rules--and by inference, the state rules that were patterned upon them--was to “relax[] the traditional barriers to opinion testimony.” The Supreme Court, while setting out four factors relevant to scientific reliability, cautioned that “we do not presume to set out a definitive checklist or test.” The factors listed were based upon “general observations” about the nature of scientific evidence. And, the standard of evidentiary reliability set forth was derived from Rule 702's requirement that the expert's

⁷⁷*See id.*

⁷⁸970 S.W.2d 549 (Tex. Crim. App. 1998), *overruled on other grounds*, *State v. Terrazas*, 4 S.W.3d 720 (Tex. Crim. App. 1999).

⁷⁹972 S.W.2d 713 (Tex. 1998).

⁸⁰526 U.S. 137 (1999).

⁸¹*overruled on other grounds*, *State v. Terrazas*, 4 S.W.3d 720 (Tex. Crim. App. 1999).

⁸²*See id.*, 970 S.W.2d at 562.

⁸³*See id.* at 560.

testimony pertain to “*scientific* knowledge.” While various federal circuits may sometimes purport to disagree with each other, a close examination of the cases shows a general agreement about two important propositions: (1) *Daubert*'s prescription that trial judges act as gatekeepers” in determining the reliability of expert evidence applies to all forms of expert testimony, and (2) the four factors listed in *Daubert* do not necessarily apply outside of the hard science context; instead methods of proving reliability will vary, depending upon the field of expertise.

...

When addressing fields of study aside from the hard sciences, such as the social sciences or fields that are based primarily upon experience and training as opposed to the scientific method, *Kelly* 's requirement of reliability applies but with less rigor than to the hard sciences. To speak of the validity of a “theory” or “technique” in these fields may be roughly accurate but somewhat misleading.

The appropriate questions are:

- (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 and/or utilizes the principles involved in the field.

These questions are merely an appropriately tailored translation of the *Kelly* test to areas outside of hard science. And, hard science methods of validation, such as assessing the potential rate of error or subjecting a theory to peer review, may often be inappropriate for testing the reliability of fields of expertise outside the hard sciences.⁸⁴

In a footnote the paragraph immediately above, the Court of Criminal Appeals rather ominously observed, “We do not categorically rule out employing such factors in an appropriate case.”⁸⁵

***Gammill v. Jack Williams Chevrolet, Inc.*, 972 S.W.2d 713, 726 (Tex.1998).**

The Texas Supreme Court followed similar reasoning in concluding that nonscientific expert testimony must meet the reliability standards required in *Daubert/Robinson*, but recognized the specific *Daubert/Robinson* factors for assessing the reliability of scientific evidence “cannot always be used with other kinds of expert testimony.”⁸⁶ The court stated:

We conclude that whether an expert's testimony is based on “scientific, technical or other specialized knowledge,” *Daubert* and Rule 702 demand that the district court evaluate the methods, analysis, and principles relied upon in reaching the opinion. The court should ensure that the opinion comports with applicable professional standards outside the courtroom and that it “will have a reliable basis in the knowledge and experience of [the]

⁸⁴*Id.* at 561 (citations omitted).

⁸⁵*Id.* at 561 n.9.

⁸⁶*Id.* at 726.

discipline.”

Rule 702's fundamental requirements of reliability and relevance are applicable to all expert testimony offered under that rule. Nothing in the language of the rule suggests that opinions based on scientific knowledge should be treated any differently than opinions based on technical or other specialized knowledge.

That said, it is equally clear that the considerations listed in *Daubert* and in *Robinson* for assessing the reliability of scientific evidence cannot always be used with other kinds of expert testimony. To borrow [another] court's analogy, a beekeeper need not have published his findings that bees take off into the wind in a journal for peer review, or made an elaborate test of his hypotheses. Observations of enough bees in various circumstances to show a pattern would be enough to support his opinion. But there must be some basis for the opinion offered to show its reliability. Experience alone may provide a sufficient basis for an expert's testimony in some cases, but it cannot do so in every case. A more experienced expert may offer unreliable opinions, and a lesser experienced expert's opinions may have solid footing. The court in discharging its duty as gatekeeper must determine how the reliability of particular testimony is to be assessed. As the United States Supreme Court recently stated [], “[N]othing in either *Daubert* or the Federal Rules of Evidence requires a district court to admit opinion evidence which is connected to existing data only by the *ipse dixit* of the expert. A court may conclude that there is simply too great an analytical gap between the data and the opinion proffered.”⁸⁷

***Kumho Tire Co., LTD. v. Carmichael*, 526 U.S. 137 (1999).**

In *Kumho Tire*, the United States Supreme Court was confronted with the testimony of an expert in “tire failure analysis.”⁸⁸ The trial court excluded the testimony on the grounds that it did not pass the *Daubert* reliability test, although it noted that the testimony could more accurately be described as “technical” rather than “scientific.”⁸⁹

Engineering testimony rests upon scientific foundations, the reliability of which will be at issue in some cases. In other cases, the relevant reliability concerns may focus upon personal knowledge or experience. As the Solicitor General points out, there are many different kinds of experts, and many different kinds of expertise. See Brief for United States as *Amicus Curiae* 18-19, and n. 5 (citing cases involving experts in drug terms, handwriting analysis, criminal *modus operandi*, land valuation, agricultural practices, railroad procedures, attorney's fee valuation, and others). Our emphasis on the word “may” thus reflects *Daubert*'s description of the Rule 702 inquiry as “a flexible one.” *Daubert* makes clear that the factors it mentions do *not* constitute a “definitive checklist or test.” And *Daubert* adds that the gatekeeping inquiry must be “tied to the facts” of a particular “case.” We agree with the Solicitor General that “[t]he factors identified in *Daubert* may or may not be pertinent in assessing reliability, depending on the nature of the issue, the expert's particular expertise, and the subject of his testimony.” Brief for United States as *Amicus*

⁸⁷*Id.* at 725-26.

⁸⁸See *Kumho Tire Co., LTD. v. Carmichael*, 526 U.S. 137, 142 (1999).

⁸⁹See *id.* at 145.

Curiae 19. The conclusion, in our view, is that we 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.

Daubert itself is not to the contrary. It made clear that its list of factors was meant to be helpful, not definitive. Indeed, those factors do not all necessarily apply even in every instance in which the reliability of scientific testimony is challenged. It might not be surprising in a particular case, for example, that a claim made by a scientific witness has never been the subject of peer review, for the particular application at issue may never previously have interested any scientist. Nor, on the other hand, does the presence of *Daubert*'s general acceptance factor help show that an expert's testimony is reliable where the discipline itself lacks reliability, as, for example, do theories grounded in any so-called generally accepted principles of astrology or necromancy.⁹⁰

II. THE INCONSISTENT ANALYSIS OF "SOFT SCIENCE"

With the advent of the *Nenno* soft science framework, creativity in offering expert testimony has certainly flourished. Specialties like "play therapy" and "art therapy" have been given serious consideration by the courts. Unfortunately, the latitude provided the gate-keeper, along with the much relaxed soft science standards has bred much inconsistency as well, which becomes institutional once cases are affirmed on appeal under the abuse of discretion standard. For a period of time, while play therapy was being considered by juries, eyewitness identification testimony, which seems much more scientifically grounded, was constantly excluded under a nearly impossible requirement that it "fit" the facts of the case to the point where the expert would have almost had to be at the incident (*ala Pierce*, 777 S.W.2d 399 (Tex. Crim. App. 1989) *supra*, Section I). At least as to eyewitness identification testimony, the times are a-changin' somewhat. *See, e.g., Stephenson v. State*, 226 S.W.3d 622, 625-27 (Tex. App. -- Amarillo 2007, no pet.). More and more courts are giving a favorable review to this type of testimony. A hundred or so exonerations from death row based on bad eyewitness IDs probably hasn't hurt the cause. Nonetheless, inconsistency persists in this area and, given the amorphous standards, it probably will from now on.

A. Early Application of the Soft Science Standard

Nenno, *Gammill* and *Kumho Tire* all say essentially the same thing. What is amazing is how the different courts apply the same analysis and achieve seemingly impossibly inconsistent results. A comparison of the facts and analysis of *Nenno* and *Gammill* will demonstrate this point.

In *Gammill*, one of the issues was whether the rear seat belt system in the plaintiff's car had been defectively designed.⁹¹ To address this issue, the plaintiff presented two expert witnesses, Ronald Huston and David Lowry.⁹²

Huston's qualifications, investigation and conclusions were:

⁹⁰*Id.* at 150-51 (citations omitted).

⁹¹*See id.*, 972 S.W.2d at 715.

⁹²*See id.* at 716.

[He was] a licensed professional engineer with a bachelor's, master's, and doctoral degree in mechanical engineering from the University of Pennsylvania, [and] has been a professor of mechanical engineering at the University of Cincinnati since 1962. He has conducted research in mechanics, dynamics, biomechanics, vehicle occupant kinematics, and vehicle occupant restraint systems. Huston has had occasion to examine and test many vehicle restraint systems. His tests on restraint systems have focused on retractor locking dynamics, buckle integrity, premature buckle release, and belt positioning on occupants. Huston has written over 100 journal articles, 125 conference papers, 45 technical reports, and two books summarizing the results of his research. Since 1975, he has worked as a consultant in litigation matters, testifying as an expert in over 325 depositions and more than 145 trials.

Huston has previously tested seat belts like those in the Gammills' vehicle, and at their instance, he inspected the rear seat belt in their vehicle that Jaime was alleged to have been wearing. Huston also reviewed accident photographs, the police report, Jaime's x-rays and medical records, her shirt, the depositions taken in the case, and defendants' experts' affidavits.

Based on this information, Huston concluded in his affidavit that: Deborah “was wearing her seat belt, but this did not prevent her incapacitating injuries from the impact and occupant compartment intrusion”; Jaime “received [a] fatal head injury from striking the right rear corner of the driver's seat back” where Huston found a dent, a tear in the seat cover material, and blood; Jaime “was wearing her seat belt at the beginning of the accident as evidenced by gliding abrasions found on her body, markings on the shirt she was wearing, apparent shirt fibers observed in the seat belt webbing, marks on the seat belt webbing, and the impact location on the driver's seat back”; Jaime's “seat belt prematurely released during the impact of the accident”; “[a] properly fitting and secure lap and shoulder seat belt system (three-point system) would have prevented Jaime Gammill’s fatal injuries”; “[t]he webbing loop at the buckle of the right rear seat belt allowed the webbing to flow through the loop in turn allowing looseness to occur in the webbing”; “the use of a side push button buckle release on the right rear seat belt and with the buckle positioned approximately 5 inches away from the seat bottom/back rest crease created a configuration ideally suited for premature release upon impact”; and “[t]he use of the webbing loop and buckle release ... were design defects allowing the fatal injuries of Jaime Gammill to occur.”⁹³

Lowry’s qualifications, investigation and conclusions were:

[He was a] licensed professional engineer with a bachelor's and master's degree in mechanical engineering from Texas A & M University, is employed by Lockheed Martin Tactical Aircraft, where he is responsible for incorporating design details in the F-22 fighter plane's construction. He has previously worked on a high speed anti-radiation missile for Texas Instruments and on the F-111 fighter plane for General Dynamics. Lowry also owns his own consulting firm, Forensic & Analysis Consulting Technologies, Inc. While pursuing his master's degree, Lowry worked as an automobile mechanic, installing cruise controls, replacing rear ends and transmissions, and repairing brakes, water pumps, cylinder heads, engine mounts, electrical shorts, and universal joints. He has previously served as an expert in other automotive products liability cases.

⁹³*Id.* at 716-17.

Lowry inspected the vehicle three separate times and reviewed the police reports, Jaime's medical records, the autopsy report and photographs, and the affidavits of defendants' experts. ... Regarding the rear seat belt, Lowry's affidavit states the following in a paragraph headed "Theories":

"Based on my inspections and the materials of the accident I have reviewed to date, my theory is that Jaime Gammill was wearing her seat belt at the time of the initial impact of the vehicle with fixed objects. I believe the seat belt served as a pivot about which Jaime rotated as her body was carried forward. She was released from the seat belt restraint and then struck the back of her mother's front seat. This movement is evidenced by a relatively low impact on the seat back approximately 10 inches above the height of the rear seat bottom. If she had not been belted, Jaime would have impacted the front windshield and possibly gone through it, or in any event would have struck the rear of the front seat backs much higher than markings of the seat show. Had the seat belt functioned properly, it would have been heavily loaded and it would have saved Jaime's life. The restraining force of the seat belt was equivalent to the force required to produce the dislocated hip, bruised pelvis, and bruised chest that Jaime incurred immediately prior to her head injuries resulting in her death. The seat belt caused injuries to the young girl, and was defective in that it failed to keep her restrained but released her to impact."⁹⁴

The trial court excluded the testimony of both of these experts, holding that "they were not qualified to testify about the matters in their affidavits and that their opinions were not scientifically reliable."⁹⁵ The Texas Supreme Court, though calling the issue "a close one", held that the trial court did not abuse its discretion.⁹⁶

Compare that with the Court of Criminal Appeals' analysis in *Nenno*. In that case, the issue was the future dangerousness of the defendant facing the death penalty.⁹⁷ The expert was Kenneth Lanning. His qualifications, investigation and conclusions were as follows:

Kenneth Lanning was a Supervisory Special Agent in the Behavioral Science unit of the FBI who specialized in studying the sexual victimization of children. Lanning had been studying the sexual victimization of children for fifteen years full-time and eight years part-time prior to that. He had been with the FBI for over twenty-five years, and had been assigned to the Behavioral Science Unit of the FBI Academy in Quantico, Virginia for fifteen years. Lanning testified that his analysis was based upon his experience studying cases. He did not contend that he had a particular methodology for determining future dangerousness. ... Lanning testified that he studied in excess of a thousand cases that concerned the issue of future dangerousness in some fashion. His research involved studying solved cases to attempt to understand the dynamics of what occurred. This research included personal interviews with inmates convicted of child sex offenses, examining the inmates' psychological records, and examining the facts of the offenses

⁹⁴*Id.* at 717.

⁹⁵*Id.* at 718.

⁹⁶*Id.* at 728.

⁹⁷*See* 970 S.W.2d 549 at 552.

involved.

From information given about appellant, Lanning concluded that appellant was a pedophile. Lanning testified that such a person was difficult to rehabilitate. After being given a lengthy hypothetical matching the facts shown by the evidence, Lanning testified that an individual matching the hypothetical “would be an extreme threat to society and especially children within his age preference.”⁹⁸

The Court of Criminal Appeals found “the reliability of Lanning’s testimony to be sufficiently established under Rule 702,”⁹⁹ observing,

Research concerning the behavior of offenders who sexually victimize children appears to be a legitimate field of expertise. Through interviews, case studies, and statistical research, a person may acquire, as a result of such experience, superior knowledge concerning the behavior of such offenders. Moreover, Lanning's testimony shows that future dangerousness is a subject that often surfaces during the course of research in this field. ... Appellant complains about the lack of peer review. But the absence of peer review does not necessarily undercut the reliability of the testimony presented here. To the extent that a factfinder could decide that the absence of peer review cast doubt on the credibility of the testimony, such affects the weight of the evidence rather than its admissibility.¹⁰⁰

It is difficult to come away with the impression that the *Gammill* court could have turned around and decided *Nenno* the same way the Court of Criminal Appeals did. Indeed, it is hard to imagine that a civil plaintiff (or, for that matter, a criminal defendant) could get away with offering the type of expert or the quality of testimony found in *Nenno*. This mysterious inconsistency is no doubt explained by the observation the court made up front in *Nenno*, “The facts of the present offense were egregious.”¹⁰¹

In *Henderson v. State*, 77 S.W.3d 321, 324-25 (Tex. App. – Fort Worth 2002, no pet.), the court held that the testimony of a board-certified pediatric neurosurgeon and a board-certified pediatric neurologist testifying about pediatric head injuries were testifying on a “soft” science and therefore the “softer” *Nenno* standard for reliability applied. The court’s reasoning: the matters about which these two doctors testified were not derived by the scientific method, but by their experience. *See id.* at 325.

On its face this reasoning is logical enough. After all, probably nobody has really examined head injuries using the scientific method since the fall of the Third Reich. But what this case demonstrates is the inconsistency in how scientific testimony is treated by the appellate courts. With the addition of *Nenno*, the appellate courts are now free to be as result-oriented as they want to be.

Comparing opinions such as those above, one would have to agree that the Texas Supreme Court and the Texas Court of Criminal Appeals have different visions as to what constitutes admissible soft science testimony. While the Rules of Evidence have now been consolidated for some time, the ways in

⁹⁸*Id.* at 552, 562.

⁹⁹*Id.* at 562.

¹⁰⁰*Id.* (emphasis added).

¹⁰¹*Id.* at 552.

which the two highest courts analyze soft experts is anything but. It is pretty obvious that if only the Texas Supreme Court did the analyzing, then there would be entire categories of evidence that we often see that would never be heard from again. Thus, it was interesting to read *Vela v. State*, 209 S.W.3d 128 (Tex. Crim. App. 2006).

In *Vela*, a rape case, the defense offered the testimony of an expert, a certified nurse consultant, who would say that in the absence of physical evidence, then no rape occurred. *See id.* at 129-130. The trial judge excluded the testimony, but the court of appeals reversed.

The Court of Criminal Appeals directed its analysis at the expert's qualifications rather than to the "soft science." In doing so, the court enlisted a little help from Texas Supreme Court precedent:

Qualification is distinct from reliability and relevance and, therefore, should be evaluated independently. Although this Court has touched on the qualification analysis in prior cases, we have never discussed it in depth. We therefore look to Texas Supreme Court opinions for additional guidance. As that Court recognized in *Broders v. Heise*, the mere fact that a witness "'possess[es] knowledge and skill not possessed by people generally ...' does not in and of itself mean that such expertise will assist the trier of fact regarding the issue before the court." And because a witness will not always qualify as an expert merely by virtue of a general background, qualification is a two-step inquiry. A witness must first have a sufficient background in a particular field, but a trial judge must then determine whether that background "goes to the very matter on which [the witness] is to give an opinion."

Id. at 131 (quoting *Broders v. Heise*, 924 S.W.2d 148, 153 (Tex. 1996); and citing *Gammill v. Jack Williams Chevrolet, Inc.*, 972 S.W.2d 713, 719 (Tex. 1998)). *Gammill* was cited for the proposition that "Just as not every physician is qualified to testify as an expert in every medical malpractice case, not every mechanical engineer is qualified to testify as an expert in every products liability case." *Id.* at n.14 (quoting *Gammill*, 972 S.W.2d at 719).

The Court of Criminal Appeals went on to set out the reasoning from *Broders* (a medical negligence case) that "there is no validity ... to the notion that every licensed medical doctor should be automatically qualified to testify as an expert on every medical question." *Id.* at 132 (quoting *Broders*, 924 S.W.2d at 152). The court went on to also give the *Gammill* facts a good run through (see above).

To cap off this new qualifications analysis, the Court of Criminal Appeals said the following:

The focus, then, is on the "fit" between the subject matter at issue and the expert's familiarity therewith, and not on a comparison of the expert's title or specialty with that of the defendant or a competing expert. We discussed the "fit" requirement in *Jordan v. State* and explained that the issue under the reliability and relevance conditions "is whether the expert's testimony took into account enough of the pertinent facts to be of assistance to the trier of fact on a fact in issue."

But "fit" is not just a component of reliability and relevance - it is also a component of the qualification inquiry. Just as the subject matter of an expert's testimony should be tailored to the facts of a case, the expert's background must be tailored to the specific area of expertise in which the expert desires to testify.

Id., 209 S.W.3d at 133 (quoting *Broders*, 924 S.W.2d at 153; *Jordan v. State*, 928 S.W.2d 550, 556 (Tex.

Crim. App. 1996).

Amazingly, one of the cases cited for this analysis was *Rodgers v. State*, 205 S.W.3d 525 (Tex. Crim. App. 2006). *Rodgers* dealt with an expert offered by the state to prove up tire and shoe print comparisons. Problem was, the expert was actually a latent fingerprint examiner. The court's analysis went something like this:

In the present case, the State established, on direct examination, that Mr. Jumper is a latent print examiner for the Dallas County Southwestern Institute of Forensic Sciences (SWIFS). His qualifications as an expert latent print examiner included: training in the physical evidence section of the Dallas County Sheriff's Office; an apprenticeship with a certified print examiner; classes and courses on the matching of shoe and tire imprints at the Dallas County Sheriff's Office and at the University of North Texas; a shoe and tire imprint training class with a former FBI expert; and a tire imprint training class at an FBI conference.

When asked if he was "able then to take a, not just fingerprints but a tire print or shoe print and make comparisons between an item from a crime scene and some other item or known item that you later located," Mr. Jumper replied that he could. He also stated that he had testified "[o]ver 150 times" in Texas courts. Appellant then took Mr. Jumper on voir dire "to test his qualifications under 702." That voir dire revealed, among other things, that Mr. Jumper had never graduated from college, had never written articles on tire prints, had only a few days of class work specific to the matching of shoe and tire imprints, and had testified only twice before regarding tire-print comparisons. When asked, "Is most of your job fingerprints?" Mr. Jumper answered, "That's the bulk of it."

Id., 205 S.W.3d at 529. Needless to say, there was not much of a "fit" between Jumper's qualifications and his testimony about tire and shoe prints. But he was still allowed to testify because his opinions were really soft and mushy:

Mr. Jumper testified: "I can't exclude this shoe and I can't state ... as a fact that this shoe made that imprint. It has similar characteristics and design as you can see in the, the photograph...." Asked if he could "say for sure" that appellant's tires made the tracks found at the scene, he answered "No sir, I can't say that those are the only tires that could have made those tracks.... I can tell you that there is a similarity in the physical shape and design as I pointed out...."

Id. at 529-530. Here is how the court explained its reasoning:

Appellate courts may consider several criteria in assessing whether a trial court has clearly abused its discretion in ruling on an expert's qualifications. First, is the field of expertise complex? The degree of education, training, or experience that a witness should have before he can qualify as an expert is directly related to the complexity of the field about which he proposes to testify. If the expert evidence is close to the jury's common understanding, the witness's qualifications are less important than when the evidence is well outside the jury's own experience. For example, DNA profiling is scientifically complex; latent-print comparison (whether of fingerprints, tires, or shoes) is not. Second, how conclusive is the expert's opinion? The more conclusive the expert's opinion, the more important is his degree of expertise. Testimony that "a given profile occurred one time in 2.578 sextillion (2.578 followed by 21 zeroes), a number larger than the number of known stars in the universe

(estimated at one sextillion)” requires a much higher degree of scientific expertise than testimony “that the defendant's tennis shoe could have made the bloody shoe print found on a piece of paper in the victim's apartment.” And third, how central is the area of expertise to the resolution of the lawsuit? The more dispositive it is of the disputed issues, the more important the expert's qualifications are. If DNA is the only thing tying the defendant to the crime, the reliability of the expertise and the witness's qualifications to give his opinion are more crucial than if eyewitnesses and a confession also connect the defendant to the crime.

Id. at 528 (citations omitted)(emphasis added). This obviously sets out some kind of a sliding scale for soft science testimony. Taking this to its logical extreme, you could say that an expert in a field which is barely helpful to the jury may testify to matters that are barely relevant just as long as he doesn't act like he's too sure of his opinions. Wow.

Finally, consider the breathtaking opinion in *Malone v. State*, 163 S.W.3d 785 (Tex. App. -- Texarkana 2005, pet. ref'd). In this case, the state put up an expert, Jamie English, who was the director of the local children's advocacy center. *See id.* at 791-92. English had a bachelor's degree in social work and was working on her master's. She was licensed by the "American Professional Society on the Abuse of Children." *See id.* at 792. She had completed more than 600 forensic interviews of children and had gone to "several" week-long training seminars dealing with child abuse and family violence. She had also gone to seminars for interviewing children. While she had testified in other cases, she had never been qualified as an expert. *See id.*

The state proposed to put her on to testify about:

the types - the different types of pedophilia versus situational offender and narcissistic personality disorder." After defense objections were overruled, she testified to the jury that, "in general, some individuals turn to children as sexual partners because those individuals may have personality defects. Relying on the [DSM-IV], she described the characteristics of narcissistic personality disorder and explained that this is one type of personality who may commit incest. She also provided general testimony about child abuse victims. She did not specifically diagnose Malone as an incest perpetrator.

Id. at 792. In preparing to testify, she reviewed the police report and several "scholarly articles" concerning "incest, situational offenders versus pedophilia, and narcissistic personality disorder." *Id.*

The court of appeals began its analysis with the proposition that "[a] degree alone is not enough to qualify a purported expert to give an opinion, as the case may be, on every conceivable medical question, legal question, or psychological question. *Id.* at 793 (citing *Roise v. State*, 7 S.W.3d 225, 234 (Tex. App. -- Austin 1999, pet. ref'd). The court cited *Broders v. Heise* (see supra), pointing out that "[t]he inquiry must be into the actual qualification. That is, there must be a 'fit' between the subject matter at issue and the expert's familiarity therewith. The proponent must establish that the expert has knowledge, skill, experience, training, or education regarding the specific issue before the trial court which would qualify the expert to give an opinion on that particular subject." *Id.* (citing *Broders*, 924 S.W.2d at 153).

So then the court of appeals sustained the defendant's point of error and reversed, right? Wrong. Check out the lengths the court went to to affirm this conviction:

The “fit” between English's expertise and her testimony on the types of incest offenders is

less comfortable [than the "fit" between her expertise and her testimony regarding behaviors of child sexual abuse victims]. First, to the extent her testimony was based on the DSM-IV, Malone waived any error when he affirmatively did not object to the admission of the portion of the DSM-IV on the topic of narcissistic personality disorder. When the State offered the excerpt from the manual, Malone stated that he "[has] no objection as to a summary of her testimony." As to the remainder of English's testimony on offender profiles, that which she based largely on articles from the internet, the question is whether English testified within the scope of her expertise by incorporating as her own those opinions expressed in the reviewed articles. She did have advanced education and training in a behavioral sciences field, had significant experience dealing with the victims of abuse, and had attended training conferences on child abuse and family violence. Her testimony seems to lie in a more specialized field, one relating to psychological profiles of the sexually deviant and one probably better suited to one in that specific field. While such a situation may easily run afoul of the *Nenno* standard and we urge caution in this scenario, here we have a unique set of circumstances. English had extensive experience in dealing with sexually abused victims. Considering her experience and her education in the behavioral sciences in general and in the area of child abuse more specifically, she is in a position in which she would be able to evaluate, interpret, and incorporate research articles on topics of personality types with the tendency to commit incest. While we may not have made the same determination as the trial court on this matter, we cannot conclude the trial court's decision fell outside the zone of reasonable disagreement. Considering English's education, training, and experience, the trial court did not act arbitrarily or unreasonably in overruling Malone's objection to English's expert testimony on the basis of her qualifications.

Id. at 794 (citations and footnotes omitted). After reading this paragraph, one can easily see why the court was not "comfortable" with the "fit" between English's "expertise" and her testimony about offender profiles. Basically, there wasn't any fit. Sometimes I am amazed they write stuff like this down.

VII. SPECIFIC APPLICATION TO DIFFERENT TYPES OF TESTIMONY

DNA :

Finding that the scientific principle was valid, that the technique used was valid and that it was properly applied in that case, the Court of Criminal Appeals upheld the admission of RFLP, DNA profiling. *Kelly v. State*, 824 S.W.2d 568 (Tex.Crim.App. 1992).

A couple of later unpublished opinions show the courts treating some of the more recent DNA testing methods. *Fanniel v. State*, 2002 Tex. App. LEXIS 2260 (Tex. App. – Houston [1st Dist.], March 28, 2002, no pet.)(nfp) covers STR (short tandem repeats) analysis. *Sheckells v. State*, 2001 Tex. App. LEXIS 6730 at **8-12 (Tex. App. – Dallas, Oct. 8, 2001, no pet.)(nfp) covers mitochondrial DNA analysis. Needless to say, it was held properly admitted in both cases. They are good examples of the analysis, however.

REPRESSED MEMORIES :

The Texas Supreme Court has held that evidence of repressed memories is inadmissible. *S.V. v. R.V.*, 933 S.W.2d 1 (Tex. 1996).

PLAY THERAPY :

Campos v. State, 977 S.W.2d 458 (Tex. App. – Waco 1998, no pet.).

IMMERSION BURNS & HOW CHILD GOT THEM :

In re D.S., 19 S.W.3d 525 (Tex. App. – Fort Worth 2000, no pet.).

CHILD SEXUAL ABUSE ACCOMMODATION SYNDROME :

An expert witness may testify regarding the behavior characteristics of a child abuse victim and to the Child Sexual Abuse Accommodation Syndrome. *Duckett v. State*, 791 S.W.2d 906, 914-15 (Tex.Crim.App. 1990); *see also Cohn v. State*, 849 S.W.2d 817 (Tex. Crim. App. 1993)(state may do so in its case in chief).

DIRECT OPINION ON TRUTHFULNESS:

While it is still the rule that an expert is generally not allowed to give an opinion that a complainant or the class to which the complainant belongs is truthful, *see Yount v. State*, 872 S.W.2d 706, 712 (Tex. Crim. App. 1993), subsequent cases out of the Court of Criminal Appeals have blurred the lines a little bit. *See Schutz v. State*, 957 S.W.2d 52 (Tex. Crim. App. 1997).

MUNCHAUSEN SYNDROME BY PROXY :

In *Reid v. State*, 964 S.W.2d 723 (Tex. App. — Amarillo 1998, pet. ref'd) the court held that the trial court did not abuse its discretion in admitting testimony opining that the defendant suffered from Munchausen Syndrome by Proxy to establish the intent to kill her child.

FUTURE DANGEROUSNESS:

Of course, *Nenno v. State* is itself a future dangerousness case. *See id.*, 970 S.W.2d at 562. Obviously, this is treated as a "soft science." Other cases dealing with future dangerousness include *Russeau v. State*, 171 S.W.3d 871, 883 (Tex. Crim. App. 2005); *Allen v. State*, 2006 WL 1751227 at *5, No. AP-74951 (Tex. Crim. App., June 28, 2006)(nfp); and *Espada v. State*, 2008 WL 4809235 at *8, No. AP-75,219 (Tex. Crim. App. 2008)(nfp). In 2010, the Court of Criminal Appeals actually used the *Nenno* analysis to find that the trial court had erred by not excluding a future dangerousness expert from testifying. *See Coble v. State*, 330 S.W.3d 253 (Tex. Crim. App. 2010). This occasion is momentous enough – and useful enough as an object lesson on Daubert hearings – that I have included the entire section of the case dealing with the expert issue. This does not include the footnotes, which are very good. The analysis goes as follows:

In points of error three and four, appellant contends that Dr. Richard Coons's expert testimony concerning future dangerousness was not admissible under Rule 702 because it was insufficiently reliable. We agree.

...

A. The *Daubert/Kelly* Hearing.

At trial, appellant objected to Dr. Coons's proposed testimony and requested a *Daubert/Kelly*

hearing outside the presence of the jury. At that hearing, Dr. Coons testified that he is board certified in general psychiatry and has been practicing forensic psychiatry for thirty-one years. He has evaluated the competency or sanity of between 8,000 to 10,000 people, has performed 150 evaluations of “future dangerousness,” and has testified in fifty trials as an expert.

Dr. Coons testified that psychiatric principles are commonly used when making determinations of a person's danger to himself or others in the context of involuntary psychiatric commitments. He said that he also relies upon psychiatric principles when he evaluates defendants for “future dangerousness” for capital murder trials. He repeatedly stated that “the best predictor of the future is the past” and noted that there are certain trends in people who are, in other words, habit patterns or personality patterns that—that we rely on. Um, and then, of course, there's the experience one has, the training and then the experience that one has in seeing quite a number of people and, uh—uh—watching classifications within various jails and so forth. Uh, those are kind of the principles or the things that are—opinions are based on.

Dr. Coons noted that there are some psychiatric diagnoses that are listed in the DSM, such as antisocial personality disorder, that might indicate that a person is dangerous. But in this case, Dr. Coons relied on materials supplied by the District Attorney's Office.

Dr. Coons explained his standard methodology in assessing the issue of future dangerousness. For at least the past twenty years he has relied upon several different factors:

- (1) The person's history of violence;
- (2) The person's attitude toward violence;
- (3) The particulars of the criminal offense;
- (4) The person's personality and general behavior;
- (5) The person's conscience; and
- (6) Where the person will be—in or out of prison.

He assesses these factors based on the information that he has been given. This is his own personal methodology. He does not know whether others rely upon this method, and he does not know of any psychiatric or psychology books or articles that use his factors. But “[t]hese are matters that are discussed commonly at—at forensic meetings and among forensic psychiatrists.... [B]ut generally speaking, those are the—are the kinds of things that, uh, forensic psychiatrists would take into consideration in reaching an opinion.” He doubts that his methodology is shared by everyone because different psychiatrists construct their own methodologies.

Dr. Coons stated that multiple psychiatrists would not necessarily agree on what is important in the first factor—looking to past conduct to predict future conduct. “I'm the one who's making the decision—about whether it means something to me in terms of what I—my education or experience or background is.” It is a subjective evaluation. When assessing past violence, Dr. Coons looks at its nature and context.

The same subjectivity is true for the second factor, a person's attitude about violence, as well as the third factor, the circumstances of the offense. Two different psychiatrists may come to different conclusions based on the same facts. Dr. Coons said that forensic psychiatrists

develop an experiential body of knowledge and information and approach that helps them make their decisions. But Dr. Coons disagreed that it was “just a gut feeling.”

When it comes to the fourth factor of personality and behavior, Dr. Coons looks to whether the crime was an aberration or whether that person has had a problem looking out for other people. Is he controlling? Manipulative? With the fifth factor, “conscience is involved in—in helping people control their behavior. And, I mean, really, I guess almost everybody knows that.” There is no yardstick to measure it. With the final factor, Dr. Coons stated that if the person is on death row he will be less violent because “everybody that’s on death row is on appeal by definition. And they tend to be on their good behavior. Uh, because if they—on their bad behavior and they get another trial or punishment, they uh—they know they’ll hear about it again. Their violence on death row or threats or whatever.”³¹

All of these factors overlap and blend, but Dr. Coons knows of no book or article that discusses these factors or their overlap. He is not aware of any studies in psychiatric journals regarding the accuracy of long-term predictions into future violence in capital murder prosecutions or of any error rates concerning such predictions. Nor is he aware of any psychiatric studies which support the making of these predictions. Dr. Coons has never gone back and obtained records to try to check the accuracy of the “future dangerousness” predictions he has made in the past. He cannot tell what his accuracy rate is.

On redirect, the prosecutor asked Dr. Coons to read from a legal brief containing the names and titles of some articles on future dangerousness that had been filed in a different case, but Dr. Coons was not familiar with any of those articles.

Based on this testimony, the trial judge found that Dr. Coons qualified as an expert witness, that the subject matter of his testimony was an appropriate one for experts, and “that admitting the expert testimony will actually assist the factfinder in deciding this case.”

Dr. Coons then testified before the jury and, in response to a lengthy hypothetical setting out the salient features of appellant’s life and crimes, opined that there was a probability that appellant would commit future acts of violence.

B. Legal Principles Concerning the Admission of Expert Psychiatric or Psychological Testimony Concerning Future Dangerousness.

The admission of expert testimony is reviewed on appeal for an abuse of discretion. However, trial judges must act as a true “gatekeeper” when addressing the reliability and relevance of expert testimony. In *Daubert*, the United States Supreme Court held that when the subject of the expert’s testimony is “scientific knowledge,” the basis of his testimony must be grounded in the accepted methods and procedures of science. As that court explained,

[I]n order to qualify as “scientific knowledge,” an inference or assertion must be derived by the scientific method. Proposed testimony must be supported by appropriate validation—*i.e.*, “good grounds,” based on what is known. In short, the requirement that an expert’s testimony pertain to “scientific knowledge” establishes a standard of evidentiary reliability.

Four “general observations” guide the inquiry into scientific reliability: (1) falsifiability; (2)

peer review and publication; (3) the existence of methodological standards, including the error rate; and (4) general acceptance within the relevant scientific field. The goal of these “flexible” guidelines is to evaluate the admissibility of expert testimony by the standards that comparable experts within the same scientific field use in evaluating each other's professional work.

In *Kelly v. State*, this Court adopted several procedural and substantive limitations upon the admission of expert scientific testimony to ensure that unreliable expertise would be excluded from the jury's consideration.³⁹ Under *Kelly*, a trial judge must, upon request, conduct a “gatekeeping” hearing outside the presence of the jury to determine whether scientific evidence is sufficiently reliable and relevant to help the jury in reaching an accurate result. Then the judge must decide whether, on balance, that expert testimony might nonetheless be unhelpful or distracting for other reasons. To be considered reliable, evidence from a scientific theory must satisfy three criteria: “(a) the underlying scientific theory must be valid; (b) the technique applying the theory must be valid; and (c) the technique must have been properly applied on the occasion in question.” The trial court's essential gatekeeping role is to ensure that evidence that is unreliable because it lacks a basis in sound scientific methodology is not admitted.

Forensic psychiatry is certainly a science; as Dr. Coons stated, it is practiced solely by those with a medical degree. It may be a “soft science,” but trial courts, in their gatekeeping function, must ensure that the expertise is not only soft, but that it is science as well. “Soft” science does not mean soft standards. When “soft” sciences are at issue, the trial court must inquire “(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 and/or utilizes the principles involved in the field.”

This inquiry is somewhat more flexible than the *Kelly* factors applicable to Newtonian and medical science. “The general principles announced in *Kelly* (and *Daubert*) apply, but the specific factors outlined in those cases may or may not apply depending upon the context.” Under either *Daubert/Kelly* or *Nenno*, reliability should be evaluated by reference to the standards applicable to the particular professional field in question.

Appellant does not quarrel with the first prong—the legitimacy of the field of forensic psychiatry, nor, apparently, with the second prong—Dr. Coons's testimony is within the scope of forensic psychiatry, but he contends that Dr. Coons's testimony did not properly rely upon the accepted principles of forensic psychiatry, at least as far as those principles apply to the prediction of long-term future dangerousness.

While the United States Supreme Court (as well as other American courts) has recognized the fallibility of psychiatric assessments of future dangerousness, it nevertheless acknowledged the necessary reliance on psychiatry to assist in judicial decisionmaking. We reaffirm that such expert testimony may, in a particular case, be admissible under Rule 702 and helpful to the jury in a capital murder trial. However, the burden is on the proponent of such psychiatric testimony to establish its admissibility in each individual case. Science is constantly evolving and, therefore, the Rule 702–703 “gatekeeping” standards of the trial court must keep up with the most current understanding of any scientific endeavor, including the field of forensic psychiatry and its professional methodology of assessing long-term future dangerousness. The objective of the “gatekeeping” requirement is to make certain that

an expert employs the same professional standards of intellectual rigor in the courtroom as is expected in the practice of the relevant field. The validity of the expert's conclusions depends upon the soundness of the methodology.

C. The Application of *Daubert/Kelly* and *Nenno* Principles in This Case.

As the Seventh Circuit observed in *Rosen v. Ciba-Geigy Corp.*, “under the regime of *Daubert* a district judge asked to admit scientific evidence must determine whether the evidence is genuinely scientific, as distinct from being unscientific speculation offered by a genuine scientist.” Here, there is no question that Dr. Coons is a genuine forensic psychiatrist with a lengthy medical career, but the issue under Rule 702 is whether his “future dangerousness” testimony is based upon the scientific principles of forensic psychiatry.

From this record, we cannot tell what principles of forensic psychiatry Dr. Coons might have relied upon because he cited no books, articles, journals, or even other forensic psychiatrists who practice in this area. There is no objective source material in this record to substantiate Dr. Coons's methodology as one that is appropriate in the practice of forensic psychiatry. He asserted that his testimony properly relied upon and utilized the principles involved in the field of psychiatry, but this is simply the *ipse dixit* of the witness. Dr. Coons agreed that his methodology is idiosyncratic and one that he has developed and used on his own for the past twenty to thirty years. Although there is a significant body of literature concerning the empirical accuracy of clinical predictions versus actuarial and risk assessment predictions, Dr. Coons did not cite or rely upon any of these studies and was unfamiliar with the journal articles given to him by the prosecution.

Dr. Coons stated that he relies upon a specific set of factors: history of violence, attitude toward violence, the crime itself, personality and general behavior, conscience, and where the person will be (i.e., the free community, prison, or death row). These factors sound like common-sense ones that the jury would consider on its own, but are they ones that the forensic psychiatric community accepts as valid? Have these factors been empirically validated as appropriate ones by forensic psychiatrists? And have the predictions based upon those factors been verified as accurate over time? Some of Dr. Coons's factors have great intuitive appeal to jurors and judges, but are they actually accurate predictors of future behavior? Dr. Coons forthrightly stated that “he does it his way” with his own methodology and has never gone back to see whether his prior predictions of future dangerousness have, in fact, been accurate. Although he had interviewed appellant before the first trial in 1990, Dr. Coons had lost his notes of that interview in a flood and apparently had no independent memory of that interview. He relied entirely upon the documentary materials given to him by the prosecution, including his 1989 report. Dr. Coons, therefore, did not perform any psychiatric assessment of appellant after his eighteen years of nonviolent behavior on death row, nor did he refer to any psychological testing that might have occurred in that time frame.

Based upon the specific problems and omissions cited above, we conclude that the prosecution did not satisfy its burden of showing the scientific reliability of Dr. Coons's methodology for predicting future dangerousness by clear and convincing evidence during the *Daubert/Kelly* gatekeeping hearing in this particular case. We conclude that the trial judge therefore abused his discretion in admitting Dr. Coons's testimony before the jury.

Id at, 270-80 (footnotes omitted).

Seems very responsible, doesn't it? After all, we are talking about the death penalty here (always are when the subject of future dangerousness comes up). Well, before you go thinking the Court of Criminal Appeals has turned over a new leaf on future dangerousness testimony, have a look at the 2012 case of *Rubio v. State*, AP-76383, 2012 WL 4833809 (Tex. Crim. App., Oct. 10, 2012)(nfp). This case is just about as breath-takingly bad as *Coble* is apparently good. Like *Coble*, I am installing the entire expert section from the opinion so you can see the entire analysis:

In his first point of error, appellant asserts that the trial court abused its discretion by permitting State's witness Alan Brantley to testify as an expert at the punishment phase that appellant is a continuing threat to society. Specifically, he argues that Brantley's methodology was not reliable because: (1) there is no relevant scientific community; (2) Brantley has never tried to show that his methodology produces accurate and consistent results; (3) his methodology has not been recognized by any peer group; and (4) there is no basis for his methodology in the relevant scientific literature. Appellant reasons that Brantley's methodology was similar to the methodology that was employed by the future dangerousness expert in *Coble*, which this Court rejected as not sufficiently reliable.

Brantley testified that he is the president of a behavioral-science consulting business. Before he started that business, Brantley was a Supervisory Special Agent for the Federal Bureau of Investigations ("FBI"), where he had worked for over twenty years. For most of his career at the FBI, he had been a criminal investigative analyst, responsible for threat analysis and assessment of dangerousness in violent crime matters. Before he joined the FBI, he was a senior psychologist for the North Carolina Department of Corrections, where he provided services to the inmate population as well as evaluations for pre-sentence diagnostic studies, testing for parole consideration, and evaluations of inmates for assignment to the governor's mansion.

Brantley has a Master's degree in counseling and psychology. He has received specialized professional training and has lectured and taught on the topics of criminal investigative analysis, crime scene analysis, threat assessment, and assessment of dangerousness. He has published an article about future dangerousness in a peer-reviewed journal, and he is a member of several professional organizations. He has testified as a future dangerousness expert in criminal and civil cases around the country. In Texas, he has testified on the subject of future dangerousness in seven capital cases.

Brantley described his criminal investigative analysis as "basically a detailed and careful review of submitted case materials ... from [an] investigative, forensic science[,] and behavior perspective." The purpose of this analysis "is to provide ... information about violent criminal behavior that may go beyond the personal and professional life experiences of those requesting the services." Brantley testified that his methodology "is just a complete in-depth review of all the case materials."

In preparing his analysis in this case, Brantley reviewed voluminous materials, including: crime scene photographs; autopsy photographs; investigative reports and police reports; mental health evaluations and reports from psychiatrists and psychologists; witness statements; statements from appellant and Camacho; school records; jail records; Texas

Department of Criminal Justice records which included medical, mental health, and custody-related records; and transcripts from court proceedings. Brantley also interviewed correctional officers who had knowledge of the security measures and custody classification system of death row. Based on this information, Brantley organized his assessment into ten major categories: (1) nature and severity of the offense; (2) history of emotional problems and mental health complaints; (3) history of drug abuse and arrest; (4) age of onset of childhood adjustment problems; (5) history of childhood physical and sexual abuse; (6) lack of remorse and empathy for victims; (7) poor insight and judgment; (8) victim population; (9) failure to benefit from past intervention efforts; and (10) history of institutionalization.

Brantley opined that appellant, “when confronted with multiple acute stressors, and when under the influence of illicit drugs or chemicals, can be very dangerous.” The stressors that confronted appellant at the time of the offense were financial (threat of eviction because he could not pay the rent), relational (the children's mother was threatening to leave him if he did not end his affair with Moreno), being physically and psychologically unable to provide adequate care for the children, and the prospect of going to jail on a probation revocation. For an individual like appellant, the pressure of those destabilizing influences, plus the effects of drugs or alcohol, created a lethal combination.

Brantley stated that if appellant were placed into the general prison population, he would be exposed to some of the same types of stressors that confronted him at the time of the offense, and he would have access to illegal substances. In the general population, appellant would interact with other inmates who had a variety of personalities and agendas, and based on appellant's history, it was likely that he would have adjustment problems stemming from money and sex. Appellant's disciplinary records reflected that, even when he was in the most secure custody level of death row, appellant had set multiple fires and tested positive for marijuana. There would be increased opportunities for such behavior in the general population. Brantley testified that there was a high probability that a person like appellant would commit criminal acts of violence in the future if housed in the general population.

On cross-examination, Brantley acknowledged that there is no way to describe a rate of error with his technique and that his outline was a guide, not a test or psychometric instrument. He also acknowledged that his expertise was based on his review of relevant literature and his professional knowledge and experience, rather than clinical testing and studies. Brantley believed that other similarly qualified professionals would rely on the same information that he had reviewed and would replicate his findings, although they might not organize the information into the same ten categories that he used. He acknowledged that he could not predict violence; he could only assess a probability of dangerousness. He could not assign a percentage to the likelihood that someone would be violent in the future but instead described the likelihood as a high, moderate, medium, or low probability.

Appellant's complaints, and the record of Brantley's testimony, are similar to the appellant's complaints and the record of Kenneth Lanning's testimony in *Nenno*. Nenno complained that the State failed to show the validity of the scientific theories underlying Lanning's testimony or the validity of the method used for applying the theories, and that Lanning's testimony did not satisfy all of the *Kelly* factors. Specifically, Nenno argued that the State failed to produce any evidence that: (1) the theories underlying Lanning's testimony were accepted as valid by the relevant scientific community; (2) the alleged literature on the theories supported his theories; (3) there were specific data or published articles regarding the area of future

dangerousness of prison inmates; (4) his theories had been empirically tested; (5) he had conducted any studies or independent research in the area of future dangerousness; or (6) anyone else had tested or evaluated the theories upon which his testimony was based.

We disagreed and found that the reliability of Lanning's testimony was sufficiently established under Texas Rule 702 even though it did not strictly meet all of the *Kelly* factors. *Kelly*'s requirement of reliability applies to fields of study aside from the hard sciences, but with less rigor than to the hard sciences. Rather than addressing the validity of a “theory” or “technique” in these fields, the appropriate questions are whether: (1) the field of expertise is a legitimate one; (2) the subject matter of the expert's testimony is within the scope of that field; and (3) the expert's testimony properly relies upon and/or utilizes the principles involved in the field. In addition, hard science methods of validation, such as assessing the potential rate of error or subjecting a theory to peer review, may often be inappropriate for testing the reliability of fields of expertise outside the hard sciences.

Lanning was a Supervisory Special Agent in the Behavioral Science Unit of the FBI, where he had been assigned for fifteen years. He had been with the FBI for over twenty-five years. Lanning testified that his analysis was based upon his experience studying cases. He did not contend that he had a particular methodology for determining future dangerousness. He testified that he studied in excess of a thousand cases that concerned the issue of future dangerousness in some fashion. His research involved studying solved cases to attempt to understand the dynamics of what occurred. This research included personal interviews with inmates, examining the inmates' psychological records, and examining the facts of the offenses involved.

From the information he had reviewed about Nenno, Lanning concluded that Nenno was a pedophile. He testified that such a person was difficult to rehabilitate. After being given a lengthy hypothetical that matched the facts shown by the evidence, Lanning testified that an individual matching the hypothetical would be an extreme threat to society.

As with Lanning, Brantley's expertise came primarily from his years of studying violent criminal behavior as a law enforcement professional. Brantley similarly did not purport to apply a scientific methodology, instead acknowledging that his analysis was just an in-depth review of the case materials. He further acknowledged that the ten categories he used in his assessment were a means of organizing information, not a test or a psychometric instrument. Brantley's expertise was not in a “hard science” field, and he did not hold himself out as a psychiatric expert. Hence, the analysis we adopted in *Nenno* applies to this case, and we reach a similar result.

Contrary to appellant's arguments, the record reflects that Brantley's work in the field of future dangerousness has been accepted as useful and reliable within his professional community. Because Brantley did not purport to apply a scientific methodology, he was not required to show that he had conducted formal testing to verify that his methodology produces accurate and consistent results. He testified that other professionals similarly qualified would use the same information he had used and would replicate his findings in this case. Appellant's claim that Brantley's methodology has not been recognized by any peer group is unavailing because Brantley did not purport to apply a scientific methodology. Further, Brantley testified that he co-authored an article on future dangerousness that was published in a peer-reviewed journal. Finally, Brantley testified that his expertise is based on

his review of the literature and his professional experience. As such, Brantley's analysis has a basis in the relevant literature. Brantley sufficiently established the reliability of his testimony by reference to the standards applicable to his particular professional field.

This case is readily distinguishable from *Coble*, in which we held that Dr. Richard Coons's expert testimony concerning future dangerousness was not admissible under Rule 702 because it was not sufficiently reliable. Coons was a medical doctor and forensic psychiatrist who purported to apply psychiatric principles in making a forensic psychiatric assessment of future dangerousness. However, he described a wholly subjective methodology that he had created for his own use, and he relied solely on materials supplied by the District Attorney's Office. Coons acknowledged that he did not know of any books or articles in the fields of psychiatry and psychology that used his factors. He admitted that other psychiatrists might not apply the factors he had relied upon to assess future dangerousness, and that they might disagree over the conclusions that could be drawn from the application of these factors. When the prosecutor read him the names and titles of articles on future dangerousness that had been cited in a legal brief, Coons was not familiar with any of them. Nevertheless, the trial court admitted his expert testimony. As a result, Coons presented his expert opinion to the jury with an aura of scientific certainty that was not supported by his assessment.

Unlike Coons, Brantley did not purport to be a psychiatrist or to apply the principles of forensic psychiatry, and he acknowledged that his methodology was not scientific. However, he sufficiently established the reliability of his testimony by reference to the standards of his particular professional field. We hold that the trial court did not abuse its discretion by admitting Brantley's testimony.

Id., 2012 WL 4833809 at **13-17.

So there you go. In *Coble*, “Soft science does not mean soft standards.” *Id.*, 330 S.W.3d at 274. In *Rubio*, the fact that the “expert” was basically not an expert at all and didn’t pretend to be (“he acknowledged that his methodology was not scientific”) was what made his expert testimony admissible. *Id.*, 2012 WL 4833809 at *17. Oh, and in the *Coble* case, the Court of Criminal Appeals went on to find that the trial court’s error in allowing Coons to testify was harmless. *See id.*, 330 S.W.3d at 287.

So what go make of this apparent inconsistency? *Coble’s* Coons and *Rubio’s* Brantley had virtually the same *Nenno* hearing. In the end, whether their testimony was admissible depended not on the content of what they said, but on who they were. The testimony was more admissible if given by a former law enforcement officer based solely on experience than by a medical doctor. For the medical doctor, the fact he had read no books was a devastating liability. For the former FBI agent, it was an asset. What should we take from this?

In *Morris v. State*, 361 S.W.3d 649, 670 (Tex. Crim. App. 2011), a case where the majority found a Texas Ranger’s testimony on “child grooming” to be good enough for *Nenno*, Judge Cochran, in a concurring opinion, had this to say:

Given the ground for review that we granted in this case, I agree with the majority's resolution. This is the ground that we granted:

The court of appeals erred in holding that purportedly expert testimony about “grooming” was admissible where there was no showing that the study of “grooming” was a legitimate

field of expertise.

The only question that we need address is the legitimacy of a phenomenon known as “grooming” behavior by those who use a particular method to get a person to comply with what the groomer wants. This is not rocket science. It does not depend upon any scientific, technical, or psychological principles or methodology. This type of testimony does not depend upon educational expertise, any calculable rate of error, learned treatises, peer review, or any other esoteric skill. This is not even “soft science.” It is just “horse sense” expertise developed over many years of personal experience and observation. It is “modus operandi” evidence that may or may not be relevant in a particular case. We may take judicial notice of the *legitimacy* of such a behavioral phenomenon by, *inter alia*, looking to decisions from other courts that have addressed that issue. What our decision in *Hernandez* forbids is taking judicial notice, for the first time on appeal, of *the scientific reliability* of a particular machine, such as the Adx machine in that case, or of an intoxilyzer machine, or DNA or blood lab technology, or a particular scientific methodology for which there has not been some showing, in a trial court hearing, of its scientific reliability.

Texas law has long allowed such experiential “horse sense” expertise. For example, in one 1929 case, the court of civil appeals held that an experienced cowman was qualified to give his opinion on how many men were needed to handle a herd of cattle. Just as Texas has long recognized that farmers may be expert witnesses in matters peculiarly within their knowledge, so may police officers. We, along with federal courts and other state courts have recognized that police officers, based solely on their years of experience and training, may qualify as experts to testify about a wide variety of “modus operandi” techniques of illegal enterprises or conduct. Their expert “modus operandi” testimony may be admissible when it is both relevant to a disputed issue and when that “modus operandi” testimony is of appreciable assistance to the jury because it is outside the average juror's experience or full understanding.

The adoption of Rule 702 by both Texas and the federal courts has not changed this aspect of experiential expertise. Indeed, the advisory committee to the Federal Rules of Evidence has explicitly discussed the “reliability” aspect of “modus operandi” expertise offered by police officers:

The [2002] amendment [to Rule 702 of the Federal Rules of Evidence] requires that the testimony must be the product of reliable principles and methods that are reliably applied to the facts of the case. While the terms “principles” and “methods” may convey a certain impression when applied to scientific knowledge, they remain relevant when applied to testimony based on technical or other specialized knowledge. For example, when a law enforcement agent testifies regarding the use of code words in a drug transaction, the principle used by the agent is that participants in such transactions regularly use code words to conceal the nature of their activities. The method used by the agent is the application of extensive experience to analyze the meaning of the conversations. So long as the principles and methods are reliable and applied reliably to the facts of the case, this type of testimony should be admitted.

Appellant argued in the trial court, and on appeal, that “the State had presented no evidence that ‘the theory under which he's going to express these opinions [is] accepted by the scientific community or the psychiatric community or the psychological community[.]’” He

is absolutely correct. This Court need not take judicial notice of the scientific, psychological, or psychiatric “reliability” of expertise concerning the “modus operandi” of grooming. Indeed we should not. As the dissent appropriately notes, the concept of scientific “reliability” has no application to such testimony. “Grooming” is simply a behavioral phenomenon that may or may not apply in a given scenario. One cannot, for example, determine the scientific reliability of a police officer's testimony that when Dan sidled up to Simon, looked around to make sure no one else was watching, then quickly gave Simon a \$10 bill and took something from Simon's hand, that this was a drug transaction. There is no determinable “error rate” for how many times this type of interaction is a drug transaction versus something else. There are probably few treatises, research studies, or peer review articles written on the topic of the reliability of a drug transaction “modus operandi.” There is no psychological principle involved in such experiential “modus operandi” expertise; it is simply that the police officer, like Justice Stewart on seeing pornography, “knows it when he sees it,” or at least he has an expert opinion, based on his experience and training, concerning the significance of the particular circumstances. What the witness must be able to do is explain how his experience and training qualifies him to make assessments of a certain type of behavior and precisely why, based on that experience and training, he has formed an opinion of this particular set of circumstances.

The witness may be wrong, of course, in the particular case. Not every street corner encounter such as described above is a drug transaction. Not every developing close relationship between a young boy and an older man that involves lollipops, back-rubs, or trips to the ice-cream store is an instance of “grooming.” But the relative likelihood of these particular circumstances involving that particular “modus operandi” are generally matters for cross-examination.

Nor is this an example of a scientific expert, such as a psychiatrist like Dr. Coons, testifying to unscientific “horse sense” dressed up in a doctor's white robe. As we stated in *Coble v. State*, the danger with unscientific expertise posing as science is that the jury will accept it uncritically. There is no such danger when evaluating a police officer's testimony concerning a “modus operandi” such as “grooming.” It is “horse sense” in plain clothes; the jury can immediately grasp the concept and use it or reject as they see fit.

Because the only question before us is whether the behavioral phenomenon of “grooming” is a legitimate one that may a suitable subject for expert testimony, I join the majority opinion.

Id. at 670-74 (footnotes omitted). So there you go again. There are actually three categories of expert testimony now. We have “hard science,” “soft science” and “horse sense expertise.” If your proposed testimony falls into this third category, then be mindful of the old cowboy’s warning against putting a \$1,000 saddle on a \$10 dollar horse. If your witness is going to talk like a horse, she can’t be dressed like a doctor. Actually, the Court of Criminal Appeals has all but said this before. *See Mendoza v. State*, AP-75213. 2008 WL 4803471 at *22 n.62 (Tex. Crim. App., Nov. 5, 2008)(nfp)(because “soft science” expert had what he called a “methodology,” then it was not an abuse of discretion to consider it had not been peer reviewed).

SEXUAL ABUSE OF CHILDREN:

Here are just a few more of the many cases dealing with "expert" testimony pertaining to the behaviors of sexually abused children:

Morris v. State, 361 S.W.3d 649 (Tex. Crim. App. 2011)(expert testimony on “grooming”); *Wyatt v. State*, 23 S.W.3d 18 (Tex.Crim. App. 2000)(testimony regarding sex offenders); *Wright v. State*, 2007 WL 1726253 (Tex. App. -- Fort Worth, June 14, 2007, pet. ref'd)(forensic interviewing protocols); *Escamilla v. State*, 2006 WL 220861, No. 06-05-00082-CR (Tex. App. -- Texarkana, Jan. 31, 2006)(grooming, delayed outcry); *Dennis v. State*, 178 S.W.3d 172 (Tex. App. -- Houston [1st Dist.] 2005, pet. ref'd)(behaviors of abused children); *Mulvihill v. State*, 177 S.W.3d 409 (Tex. App. -- Houston [1st Dist.] 2005, pet. ref'd)(behaviors of sexual abuse victims); *Comeaux v. State*, 2005 WL 1149795, No 14-03-01223-CR (Tex. App. -- Houston [14th Dist.] 2005, pet. ref'd)(grooming, delayed outcry, behaviors consistent with sexual abuse); *Johnson v. State*, 2005 WL 2155203, No. 12-03-00306 (Tex. App. -- Tyler, Sept. 7, 2005, no pet.)(delayed outcry).

Of course, you should always read *Duckett* and *Cohn*.

Olsen v. State, AP-76175, 2012 WL 1438475 (Tex. Crim. App., April 25, 2012) analyzed the defense proffered testimony on an expert on grooming and the effect of a female sex offender on a male child (the male defendant tried unsuccessfully to present this testimony in mitigation in his death penalty trial). The trial court’s exclusion of the evidence was reversible error that resulted in a new punishment trial after a death sentence had been rendered. The trial counsel had made a good *Kelly/Daubert/Neeno* record.

BITE MARK COMPARISONS:

Chanthakoummane v. State, AP-75794, 2010 WL 1696789 (Tex. Crim. App., April 28, 2010).

EYEWITNESS IDENTIFICATION:

Eyewitness identification had a bumpy beginning during the bad old days of *Pierce* to *Weatherred* (see above). It now has arrived, after gaining steady acceptance in Texas courts, no doubt due to the steady stream of exonerations from bad convictions based on eyewitness identification. The evolution seems to now be complete with *Tillman v. State*, 354 S.W.3d 425 (Tex. Crim. App. 2011).

HYPNOTICALLY ENHANCED TESTIMONY:

State v. Medrano, 127 S.W.3d 781 (Tex. Crim. App. 2004); *Zani v. State*, 758 S.W.2d 233 (Tex. Crim. App. 1988). *Zani* sets a standard for this testimony that is higher than *Kelly* or *Neeno*, which is intended to reflect its inherent great risks. In *Medrano*, the Court of Criminal Appeals reaffirmed *Zani*, holding that it was not overruled by *Neeno*.

DRUG ADDICTION:

Roberts v. State, 220 S.W.3d 521 (Tex. Crim. App. 2007).

PRISON GANGS:

Garza v. State, 2008 WL 5049910, No. AP-75477 (Tex. Crim. App., Nov. 26, 2008).

MEMORY IMPLANTATION:

The implantation of memories of sexual abuse in an alleged victim. *Ex parte Ard*, AP-75704, 2009 WL 618982 (Tex. Crim. App., March 11, 2009) found that counsel's failure, not to call, but to effectively present such an expert, in a bare allegation sexual abuse case was ineffective assistance that prejudiced the defendant. *See id.* at **2-6. Counsel actually did call the expert, but his questioning was so substandard and incomplete that representation was rendered ineffective. The writ lawyers called the expert during the writ hearing and his testimony there was so convincing that the trial court recommended relief and the CCA granted it. This is a great case for how to demonstrate harm if a court does not allow your expert to testify.

"DIMINISHED CAPACITY":

More accurately referred to as psychiatric psychological evidence of a mental disease or defect directed at a specific intent element of an offense which contains one.

Jackson v. State, 160 S.W.3d 568 (Tex. Crim. App. 2005).

Ruffin v. State, 270 S.W.3d 586 (Tex. Crim. App. 2008).

Diminished capacity, however, cannot be caused solely by voluntary intoxication. *Davis v. State*, 313 S.W.3d 317, 328 (Tex. Crim. App. 2010).

SHOE AND TIRE PRINTS:

See Rodgers v. State, 205 S.W.3d 525 (Tex. Crim. App. 2006); *Frankenfield v. State*, 2008 WL 4603572, Tex. App. Austin, Oct. 16, 2008, no pet.(nfp). Dealing with this evidence on its merits is a straightforward *Nenno* analysis.

SCENT LINEUPS (Certified Junk) AND OTHER DOG ISSUES:

Winston v. State, 78 S.W.3d 522 (Tex. App. -- Houston [14th Dist.] 2002, pet. ref'd) was a case of first impression dealing with "scent lineups." A scent lineup is a procedure whereby a dog picks someone out of a lineup based upon his smell. Applying the *Nenno* standard, the court held that such a procedure can be reliable. The court first observed that the defendant had not really questioned whether the handler's (Deputy Pinkett's) testimony fell within his area of expertise as a dog handler.

The court went on to analyze the question at hand, and, in language quite complimentary of certain breeds of dogs to track scents - especially blood hounds - the court held that the field of expertise is indeed legitimate. *See id.* But no more. In *Winfrey v. State*, 323 S.W.3d 875, 881-82 (Tex. Crim. App. 2010), the scent line-up and with it, the trail-blazing Deputy Pickett, met a seemingly ignominious end

In the 2007 case of *Trejos v. State*, 243 S.W.3d 30 (Tex. App. - Houston [1st Dist.] 2007, pet. ref'd), the court of appeals modified the analysis to fit a different kind of dog - a "cadaver dog." This case was another "third prong" case and used the same test for the third *Nenno* prong from *Winston* (the qualifications of the particular trainer, the qualifications of the particular dog, and the objectivity of the particular lineup), except in this case, the court changed the third factor to "objectivity of the particular cadaver search." *Id.*, 243 S.W.3d at 50.

Basically, the court holds that a dog called upon to distinguish between a human dead body and an

animal dead body just doesn't have to be as good as one that can do scent lineups. Hence, the "breed characterized by acuteness of scent and power of discrimination" has been dropped.

This modified analysis really kind of makes sense. Whatever remains the dog finds can ultimately be conclusively proven to either be human remains or not. Just be sure that if you are faced with a scent lineup, you use the scent lineup analysis, because the cadaver dog analysis is far less rigorous.

ABEL ASSESSMENT :

The "Abel Screen" or "Abel Assessment" is a commonly-used substitute for the penile plethysmograph. It doesn't fare so well in *In re CDK*, 64 S.W.3d 679 (Tex. App. – Amarillo 2002, no pet.). In a colorful opinion sprinkled with references to literary works dealing with witchcraft (Harry Potter, for one) the court of appeals makes one wonder if the Abel Screen could ever be admissible.

It didn't do so hot in the Texas Supreme Court, either, in *In re M.P.A.*, 364 S.W.3d 277, 284-89 (Tex. 2012), although its problems were compounded by the fact that the expert sponsoring it testified extremely falsely.

HORIZONTAL GAZE NYSTAGMUS :

An officer can testify as an expert on the administering of the Horizontal Gaze Nystagmus Test and his conclusions therefrom if he is qualified as an expert in both the administration and technique of the test. *See Emerson v. State*, 880 S.W.2d 759, 769 (Tex. Crim. App. 1994). To qualify as an expert in the administration of the test, the officer has to show that he has a "practitioner certification" from the State of Texas. *See id.* The officer is allowed to testify as to performance on the test, but not to correlate that performance to an actual blood alcohol concentration. *See id.*

In *Smith v. State*, 65 S.W.3d 332, 343-44 (Tex. App. – Waco 2001, no pet.), the court held that a certification from Texas A&M will do in a pinch, joining the Fort Worth court, which had previously decided the same thing in *Kerr v. State*, 921 S.W.2d 498, 502 (Tex. App. – Fort Worth 1996, no pet.). The same court, however, later held that no certification at all – from anywhere – was going to far. *See Ellis v. State*, 86 S.W.3d 759 (Tex. App. – Waco 2002, pet. ref'd). And if it weren't for the good ol' harmless error rule, they might have even had to reverse that case.

In *Hunt v. State*, 2002 Tex. App. LEXIS 621 (Tex. App. – Houston [14th Dist.], Jan. 31, 2002, no pet.) (nfp) the appellant was successfully able to show at trial that the cop really did not administer the HGN test very well. He messed it up in a number of respects. He then pointed out that the NHTSA manual states that the HGN must be administered exactly as shown in the manual or the results are scientifically invalid. *See id.* at *3. He also reminded the court that the third prong of *Kelly* requires that "the technique must have been properly applied on the occasion in question." *Id.*, 824 S.W.2d at 573.

Faced with an argument like that, the court did what courts are want to do – skipped the question and went directly to harm. But toward the end of the harm analysis, the court did mention that it was assuming that the admission of the HGN test and testimony was error. *See id.* at *6. This would be a good argument to remember.

SATANISM:

The CCA recently had the opportunity to wade into Satanism in *Davis v. State*, 329 S.W.3d 798

(Tex. Crim. App. 2010), *cert. denied*, 132 S. Ct. 128, 181 L. Ed. 2d 50 (2011).

The court held that a particular Satanism expert (Donald Haley) was qualified to testify in a (you guessed it) death penalty case under the *Nenno* factors for soft science.

COMPARATIVE BULLET LEAD ANALYSIS (Certified Junk)

Comparative Bullet Lead Analysis (CBLA), like scent line-ups, was an area of expertise that must have seemed brilliant on paper – that with a trained eye and proper equipment bullet fragments at the scene of a crime could be matched to a partial box of bullets found with the defendant by merely matching the materials to determine if it is likely they came from the same source. The expert would call this a “match” in trial. *See Gonzales v. State*, 13-03-674-CR, 2005 WL 1508484 at **6-8 (Tex. App.--Corpus Christi, June 23, 2005, pet. ref'd)(nfp).

Only problem was, the science was junk. But even a junk science that appears to solve crimes and get convictions is very attractive indeed. So like the scent line-ups, CBLA was relied on, until, of course, it wasn't. *See Gonzales v. State*, PD 1661-09, 2010 WL 711783 at **1-3 (Tex. Crim. App., Feb. 24, 2010)(nfp).