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Admissibility of Expert Testimony After *Daubert* and *Foret*: A Wider Gate, A More Vigilant Gatekeeper

No one will deny that the law should in some way effectively use expert knowledge wherever it will aid in settling disputes. The only question is as to how it can do so best.

Learned Hand (1901)¹

I. INTRODUCTION

Even in Learned Hand's day, when the use of expert testimony was rare, the question of when to admit such testimony was problematic. Today the use of expert testimony is rampant and the admission or exclusion of this testimony often determines the outcome of the case. The standards used to decide admissibility have varied within the federal court system and between the federal and state systems. The United States Supreme Court settled a number of vital questions for federal courts about the admissibility of expert testimony in general, and expert scientific testimony in particular, in *Daubert v. Merrell Dow Pharmaceuticals, Inc.*,² decided on June 28, 1993.

The Louisiana Supreme Court, faced with admissibility of borderline, scientific evidence, adopted the *Daubert* reasoning in *State v. Foret*,³ on November 30, 1993. The admissibility of expert testimony for Louisiana state courts will now follow the same standards as set by *Daubert* for federal courts.

The major change initiated by *Daubert* is to establish a gatekeeping role for trial judges—to require them to make a preliminary assessment on expert testimony, which may require an evidentiary hearing. The judge must assess four aspects of expert testimony: (1) the qualifications of the expert;⁴ (2) the reliability of the expert testimony;⁵ (3) the "helpfulness" of the testimony to the trier of fact;⁶ and (4) the prejudicial effect of the testimony.⁷ When the expert testimony offered is scientific in nature, then *Daubert* gives guidance on how to determine the second aspect, reliability.

Part II will explain the Supreme Court's opinion in *Daubert* in light of the confusion of the lower courts prior to the decision and will analyze the new standards to be used in deciding admissibility of expert scientific testimony.

7. Id. at 2798.

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^{1.} Learned Hand, Historical and Practical Considerations Regarding Expert Testimony, 15 Harv. L. Rev. 40, 40 (1901).

^{2. 113} S. Ct. 2786 (1993).

^{3. 628} So. 2d 1116 (La. 1993).

^{4.} Daubert, 113 S. Ct. at 2796.

^{5.} Id. at 2795.

^{6.} Id.

Additionally, Part II will assess the success of lower federal courts that have interpreted and applied *Daubert*. Part III will concentrate on the Louisiana Supreme Court opinion in *Foret*, a criminal case in which the court was concerned with admissibility of testimony of a psychologist giving an opinion on the veracity of a child witness alleged to be the victim of child sexual abuse. Part III will also consider how the *Daubert* reasoning adopted by the *Foret* court will change existing law in Louisiana state courts. Part IV will summarize the current law pertaining to the admissibility of expert testimony, especially expert scientific testimony, and discuss potential differences in application between a civil trial and a criminal trial.

II. DAUBERT AND THE FEDERAL COURTS

A. Facts of Daubert

The Daubert case is a classic example of the problems facing courts in deciding the admissibility of expert scientific testimony. Typically, an injured, sympathetic plaintiff can establish the element of causation only by expert testimony. Jason Daubert was born with a severe limb reduction, a birth defect occurring in less than 1 of 1000 live births.⁸ Jason's mother believed the defect was due to the prescription anti-nausea drug Bendectin, taken for severe morning sickness during the first few weeks of her pregnancy when the limbs are forming in the fetus.⁹ The Dauberts sued Merrell Dow Pharmaceuticals, Inc. ("Merrell Dow"), the manufacturer of the drug, in the federal district court for the Southern District of California.¹⁰

The plaintiffs proffered eight experts who would testify to four types of studies to support causation: chemical structure activity analysis, *in vitro* animal cell experiments, *in vivo* animal teratology studies, and reanalysis of previously published epidemiological studies.¹¹ The district court held that causation

^{8.} Lynch v. Merrell-National Lab., 830 F.2d 1190, 1193 (1st Cir. 1987) (according to Murray G. Feingold, Physician-in-Chief at the National Birth Defects Center).

^{9.} Daubert v. Merrell Dow Pharmaceuticals, Inc., 727 F. Supp. 570, 571 (S.D. Cal. 1989), aff^{*}d, 951 F.2d 1128 (9th Cir. 1991), vacated, 113 S. Ct. 2786 (1993).

^{10.} Id.

^{11.} See generally Joseph Sanders, The Bendectin Litigation: A Case Study in the Life Cycle of Mass Torts, 43 Hastings L.J. 301 (1992). Chemical structure analysis compares the structure of Bendectin with chemicals known to be teratogenic (able to cause severe anatomical defects). In vitro animal cell studies expose single cells, organs, or whole embryos to Bendectin and then examine the biochemical effects. Extrapolation to whole animals, including humans, is very difficult. In vivo animal teratology studies examine the effects of Bendectin at various dose levels, usually very high, on animal species thought to be similar to humans in their response. Problems include extrapolation to humans and to a lower, more realistic drug exposure. Epidemiological studies compare the incidence of birth defects among humans exposed and those not exposed to Bendectin. The benefit of this type of study is that humans are used and no extrapolation from other animal species is necessary. Epidemiological studies do have problems in the methodology used in collecting and analyzing the data.

shown through epidemiological data was the only method generally accepted by the scientific community; therefore, any expert opinion not based on such studies was inadmissible. Using this reasoning, the first three types of studies were ruled inadmissible.¹² The plaintiff's epidemiological data was judged weak evidence because of the following: (1) the reanalysis technique had not been subjected to peer review of the epidemiological community; (2) the reanalysis did not establish a statistically significant correlation between Bendectin and limb birth defects; and (3) the thirty published epidemiological studies presented by defendant's expert had found no statistical association between the ingestion of Bendectin and limb reduction birth defects.¹³ The court granted summary judgment for Merrell Dow, ruling that the plaintiffs' evidence, as a matter of law, did not support causal connection between use of the drug and this type of birth defect. The strongest inference from the admissible data was that Bendectin possibly could have caused the injury; the plaintiffs did not reach the more probable than not standard needed to overcome summary judgment.¹⁴

The United States Court of Appeals for the Ninth Circuit upheld the finding of the district court that the evidence presented by the Dauberts provided insufficient foundation to allow admission of expert testimony suggesting that Bendectin caused the plaintiffs' injury.¹⁵ The circuit court stated the reanalysis data did not meet the "general acceptance" standard, emphasizing that the reanalysis had not been subjected to peer review, and that most other courts had refused to admit this particular testimony.¹⁶ The United States Supreme Court vacates the judgment and remands on the basis that the lower courts had used the wrong standard to decide admissibility of expert scientific testimony.¹⁷

B. "Certworthiness" of Daubert

1. Overview of the Confusion in the Courts Prior to Daubert

The use of expert testimony in trials has increased exponentially over the years. The *Daubert* case represents the confusion that has plagued the courts in facing increasing numbers of experts willing to testify to a wide range of "scientific" opinions. In dealing with this confusion, a trial judge has to face a number of questions. The first question is whether the judge will be an active or passive player in monitoring the expert testimony.¹⁸ Some play an entirely

^{12.} Daubert, 727 F. Supp. at 575.

^{13.} Id. at 575-76.

^{14.} Id. at 576.

^{15.} Daubert v. Merrell Dow Pharmaceuticals, Inc., 951 F.2d 1128 (9th Cir. 1991), vacated, 113 S. Ct. 2786 (1993).

^{16.} Id. at 1130-31.

^{17.} Daubert v. Merrell Dow Pharmaceuticals, Inc., 113 S. Ct. 2786, 2799 (1993).

^{18.} See L. L. Plotkin, Brock v. Merrell Dow Pharmaceuticals, Inc.: What Is the Court's Role in Evaluating Expert Testimony?, 64 Tul. L. Rev. 1263 (1990).

passive role.¹⁹ As one judge stated, "[I]f experts are willing to testify that such a link exists, it is for the jury to decide whether to credit such testimony."²⁰ Increasingly, judges are taking a more active role in screening the expert testimony before allowing it to be presented to the jury. Judge Weinstein, an authority on evidence,²¹ in *In Re "Agent Orange" Product Liability Litigation*,²² stated, "The uncertainty of the evidence in such cases, dependent as it is upon speculative scientific hypotheses and epidemiological studies, creates a special need for robust screening of experts and gatekeeping ... by the court."²³

The second question facing a judge who chooses an active role is what standard to use in evaluating the expert testimony. Prior to *Daubert*, federal lower courts were divided over whether expert scientific testimony must be based on techniques or principles that were "generally accepted" in the appropriate scientific community.²⁴ Before the promulgation of the Federal Rules of Evidence in 1975, most courts followed this "general acceptance" standard announced in *Frye v. United States*:²⁵

Just when a scientific principle or discovery crosses the line between the experimental and demonstrable stages is difficult to define. Somewhere in this twilight zone the evidential force of the principle must be recognized, and while courts will go a long way in admitting expert testimony deduced from a well-recognized scientific principle or discovery, the thing from which the deduction is made must be sufficiently established to have gained general acceptance in the particular field in which it belongs.²⁶

After adoption of the Federal Rules of Evidence, a controversy began in the lower federal courts whether *Frye* was still applicable. Some circuit courts abandoned the use of the strict "general acceptance" threshold for a more liberal approach compatible with the underlying policy of the Rules.²⁷ Others held that the *Frye* standard co-existed with the Rules and continued to apply it.²⁸

^{19.} See, e.g., Wells v. Ortho Pharmaceuticals Corp., 788 F.2d 741 (11th Cir.), cert. denied, 479 U.S. 950, 107 S. Ct. 437 (1986); Ferebee v. Chevron Chem. Co., 736 F.2d 1529 (D.C. Cir.), cert. denied, 469 U.S. 1062, 105 S. Ct. 545 (1984).

^{20.} Ferebee, 736 F.2d at 1534.

^{21.} Judge Weinstein is co-author of a treatise on evidence, Jack B. Weinstein & Margaret Berger, Weinstein's Evidence (1982).

^{22. 611} F. Supp. 1223 (E.D.N.Y. 1985), aff²d on other grounds, 818 F.2d 187 (2d Cir. 1987), cert. denied, 487 U.S. 1234, 108 S. Ct. 2898 (1988).

^{23.} Id. at 1260.

^{24.} See Paul C. Giannelli, The Admissibility of Novel Scientific Evidence: Frye v. United States, a Half-Century Later, 80 Colum. L. Rev. 1197 (1980).

^{25. 293} F. 1013 (D.C. Cir. 1923).

^{26.} Id. at 1014 (emphasis added).

^{27.} United States v. Downing, 753 F.2d 1224 (3d Cir. 1985); United States v. Williams, 583 F.2d 1194 (2d Cir. 1978), cert. denied, 439 U.S. 1117, 99 S. Ct. 1025 (1979).

^{28.} Christophersen v. Allied-Signal Corp., 939 F.2d 1106 (5th Cir. 1991), cert. denied, 112 S.

Another area of confusion in deciding admissibility of expert scientific testimony is interpreting and distinguishing between Federal Rules of Evidence 702 and 703.²⁹ Rule 702, "Testimony by Experts," states:

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.³⁰

Thus, Rule 702 presents a two-part test: "does the witness qualify as an expert, and, if so, will the proffered testimony assist the trier of fact?"³¹

Rule 703, "Bases of Opinion Testimony by Experts," states:

The facts or data in the particular case upon which an expert bases an opinion or inference may be those perceived by or made known to the expert at or before the hearing. If of a type reasonably relied upon by experts in the particular field in forming opinions or inferences upon the subject, the facts or data need not be admissible in evidence.³²

Rule 703 expands the permissible bases for expert testimony to include any data, admissible or not, "as long as other experts in the field would 'reasonably' rely" upon similar data.³³ However, some courts have erroneously relied upon Rule 703, instead of Rule 702, when excluding expert testimony because of an opinion based on an unreliable methodology or because of reaching conclusions contrary to generally recognized studies.³⁴

The final area of confusion is in dealing with borderline expert testimony and its use in granting summary judgment or directing a verdict. In a trial, two levels of inquiry are available to a judge to monitor expert testimony: (1) the admissibility level, where the court decides whether the testimony will be considered at all; and (2) the sufficiency level, where the evidence is admitted but the weight of the evidence as a whole is considered to determine whether the evidence is sufficient to meet the standard of proof required. The discrepancy between courts on which level to handle borderline evidence is particularly well demonstrated by the Bendectin litigation.³⁵ Some judges have ruled the

- 32. Fed. R. Evid. 703.
- 33. McCarthy, supra note 29, at 356.
- 34. See generally McCarthy, supra note 29.
- 35. See generally Sanders, supra note 11.

Ct. 1280 (1992); United States v. Smith, 869 F.2d 348 (7th Cir. 1989); United States v. Shorter, 809 F.2d 54 (D.C. Cir.), *cert. denied*, 484 U.S. 817, 108 S. Ct. 71 (1987); United States v. Solomon, 753 F.2d 1522 (9th Cir. 1985).

^{29.} See Michael C. McCarthy, "Helpful" or "Reasonably Reliable"? Analyzing the Expert Witness's Methodology Under Federal Rules of Evidence 702 and 703, 77 Cornell L. Rev. 350 (1992).

^{30.} Fed. R. Evid. 702.

^{31.} McCarthy, supra note 29, at 355.

plaintiff's evidence inadmissible and then granted summary judgment for the defendant.³⁶ Others have allowed the evidence to be presented and either granted a directed verdict for the defendant or a judgment n.o.v.³⁷ after a jury verdict for the plaintiff.³⁸ There is only one reported Bendectin case where a jury verdict for the plaintiff was allowed to stand. In *Oxendine v. Merrell Dow Pharmaceuticals, Inc.*,³⁹ the D.C. appellate court allowed the plaintiff to recover damages by reversing the trial court's ruling for the defendant of a judgment n.o.v. The appellate court, following a passive judge policy, stated: "The case was thus a classic battle of the experts, a battle in which the jury must decide the victor."⁴⁰

2. Why was writ of certiorari granted in Daubert?

The Supreme Court granted certiorari in *Daubert* after having denied writs in several other cases on admissibility of expert testimony⁴¹ and even on Bendectin use.⁴² Why was the writ granted? Three Justices had previously dissented to writ denials of similar cases believing that the confusion in the circuit courts, especially over the use of the *Frye* standard, warranted intervention by the Supreme Court.⁴³ *Daubert* presented a perfect test case because the lower courts expressed strong opinions on sensitive issues: (1) most of the evidence was excluded and not merely ruled insufficient; (2) the courts relied on the *Frye* standard of admissibility and set publication or peer review as the major way to achieve that standard; (3) the circuit court placed great emphasis on the

39. 506 A.2d 1100 (D.C. 1986), cert. denied, 493 U.S. 1074, 110 S. Ct. 1121 (1990).

^{36.} Daubert v. Merrell Dow Pharmaceuticals, Inc., 951 F.2d 1128 (9th Cir. 1991), vacated, 113 S. Ct. 2786 (1993); Lynch v. Merrell-National Lab., 830 F.2d 1190 (1st Cir. 1987).

^{37.} In federal courts, this term has been replaced with "judgment as a matter of law." Fed. R. Civ. P. 50.

^{38.} Turpin v. Merrell Dow Pharmaceuticals, Inc., 959 F.2d 1349 (6th Cir.), cert. denied, 113 S. Ct. 84 (1992); Brock v. Merrell Dow Pharmaceuticals, Inc., 874 F.2d 307 (5th Cir.), modified, 884 F.2d 166 (5th Cir. 1989), cert. denied, 494 U.S. 1046, 110 S. Ct. 1511 (1990); Richardson v. Richardson-Merrell, Inc., 857 F.2d 823 (D.C. Cir. 1988), cert. denied, 493 U.S. 882, 110 S. Ct. 218 (1989). For a discussion of the evolution of the changing name of Merrell Dow, see Sanders, supra note 11, at 311.

^{40.} Id. at 1110 (quoting Ferebee v. Chevron Chem. Co., 736 F.2d 1529, 1535 (D.C. Cir.), cert. denied, 469 U.S. 1062, 105 S. Ct. 545 (1984) (quoting Jenkins v. United States, 307 F.2d 637, 646 (D.C. Cir. 1962))).

^{41.} Christophersen v. Allied-Signal Corp., 939 F.2d 1106 (5th Cir. 1991), cert. denied, 112 S. Ct. 1280 (1992); United States v. Mustafa, 22 M.J. 165 (C.M.A.), cert. denied, 479 U.S. 953, 107 S. Ct. 444 (1986).

^{42.} See cases cited supra note 38; Ealy v. Richardson-Merrell, Inc., 897 F.2d 1159 (D.C. Cir.), cert. denied, 498 U.S. 950, 111 S. Ct. 370 (1990); In re Bendectin Litig., 857 F.2d 290 (6th Cir. 1988), cert. denied, 488 U.S. 1006, 109 S. Ct. 788 (1989).

^{43.} See Christophersen v. Allied-Signal Corp., 112 S. Ct. 1280, 1281 (1992) (White, J., and Blackmun, J., dissenting); Mustafa v. United States, 479 U.S. 953, 107 S. Ct. 444 (1986) (White, J., and Brennan, J., dissenting).

fact that the conclusions of the reanalysis study was opposite the majority of the studies and that this evidence had been excluded by other courts; and (4) both district and circuit courts held that epidemiological data was the accepted method to establish causation in Bendectin cases.⁴⁴

C. The Supreme Court Opinion in Daubert

The Supreme Court in *Daubert* unequivocally changes the standards and approach to expert testimony. The court imposes upon the trial judge the duty to be an active gatekeeper in screening expert testimony. However, because Rule 702 only requires that the evidence proffered be reliable and relevant, the *Frye* standard cannot be required as the exclusive threshold for admission.⁴⁵ The Federal Rules of Evidence are more liberal. Although expert scientific testimony must be screened for reliability, "general acceptance" is not invariably required. The Court holds that reliability of expert scientific testimony is to be determined in light of four non-exclusive factors, of which the *Frye* standard is only one.⁴⁶

1. The death of Frye

A unanimous Court, in an opinion written by Justice Blackmun, announces the death of the "general acceptance" standard of *Frye* as a threshold to admission of expert testimony. Relying on *Beech Aircraft Corp. v. Rainey*,⁴⁷ the Court holds that the Federal Rules of Evidence should be interpreted like any other statute.⁴⁸ The basic principle of the Rules is contained in Rule 402, which establishes a liberal standard to admission of evidence. Rule 402 states: "All relevant evidence is admissible, except as otherwise provided by the Constitution of the United States, by Act of Congress, by these rules, or by other rules prescribed by the Supreme Court pursuant to statutory authority. Evidence which is not relevant is not admissible."⁴⁹

The interaction of the Federal Rules of Evidence with the background of previous common law was considered in *United States v. Abel.*⁵⁰ The Court in *Abel* held that evidence questions are "governed by the Federal Rules of Evidence"⁵¹ but common-law knowledge could be used to aid in their interpretation and application. Where a well-defined common-law doctrine, however, was not found in the Rules, then the Court held the Rules superseded the past

- 50. 469 U.S. 45, 105 S. Ct. 465 (1984).
- 51. Id. at 49, 105 S. Ct. at 467.

^{44.} Daubert v. Merrell Dow Pharmaceuticals, Inc., 727 F. Supp. 570, 572-75 (S.D. Cal. 1989), aff'd, 951 F.2d 1128 (9th Cir. 1991), vacated, 113 S. Ct. 2786 (1993).

^{45.} Daubert v. Merrell Dow Pharmaceuticals, Inc., 113 S. Ct. 2786, 2794 (1993).

^{46.} Id. at 2796-97.

^{47. 488} U.S. 153, 163, 109 S. Ct. 439, 446 (1988).

^{48.} Daubert, 113 S. Ct. at 2793.

^{49.} Fed. R. Evid. 402.

common-law evidence rule. In *Bourjaily v. United States*,⁵² for instance, the Court refused to find that the Rules had implicitly incorporated the common-law "bootstrapping rule."⁵³ Following this precedent, in *Daubert*, the *Frye* standard, as an exclusive test for admissibility, is deemed to be too rigid for the liberal philosophy of the Rules. Justice Blackmun writes: "That austere standard, absent from and incompatible with the Federal Rules of Evidence, should not be applied in federal trials."⁵⁴

2. Rule 702, Limits on Admissibility of Expert Scientific Testimony

In the second part of the opinion, seven members of the Court choose to give guidance to the lower courts in interpreting Rule 702 to set limits on the admissibility of expert scientific testimony. Chief Justice Rehnquist, with Justice Stevens joining, dissents on this issue, believing the Court should decide only the question presented, the interaction of the Federal Rules of Evidence and the *Frye* standard.⁵⁵

Justice Blackmun first settles the question of whether the trial court judge should play an active or passive role in the process. In strong language he assigns an active role to the judge: "Nor is the trial judge disabled from screening such evidence. To the contrary, under the Rules the trial judge *must ensure* that any and all scientific testimony or evidence admitted is not only relevant, but *reliable*."⁵⁶

The majority find that Rule 702 governs the reliability of expert scientific testimony by regulating both the "subjects and theories about which an expert may testify."⁵⁷ The language of the Rule that imparts this regulation is the requirement of "scientific . . . knowledge."⁵⁸ The Court limits discussion on determination of reliability to expert scientific testimony and does not consider the other two types of testimony contemplated by Rule 702: "technical, or other specialized knowledge."⁵⁹ Justice Blackmun defines "scientific knowledge" as an inference or assertion that is derived by methods and procedures with a solid grounding in science.⁶⁰ The methods and procedures must be based on what are known to be valid scientific principles. A valid scientific principle is one

57. Id.

58. Id.

59. Id. n.8.

60. Id. at 2795.

^{52. 483} U.S. 171, 107 S. Ct. 2775 (1987).

^{53.} Id. at 181, 107 S. Ct. at 2781. The "bootstrapping rule" under the common law stated that to use a co-conspirator's statement against a defendant, the conspiracy first must be proven independent of the statement. In *Bourjaily*, the Court held that a co-conspirator's statement could be used to help prove the conspiracy.

^{54.} Daubert v. Merrell Dow Pharmaceuticals, Inc., 113 S. Ct. 2786, 2794 (1993).

^{55.} Id. at 2800.

^{56.} Id. at 2795 (emphasis added).

that supports what is being stated and is well-established.⁶¹ Thus, the expert's testimony cannot be based on a "subjective belief or unsupported speculation"⁶² but must be based on a body of known facts with inferences supported by experiments that use scientific methods. For instance, a scientific expert would not be allowed to testify on the effects of a drug if that expert's opinion is based on an untested, religious belief.

Justice Blackmun struggles to find a basis for "evidentiary reliability" for the testimony of experts. He defines evidentiary reliability as "trustworthiness."⁶³ The traditional basis for evidentiary reliability for testimony of witnesses is first-hand knowledge. Expert witnesses are given special treatment in the Rules because first-hand knowledge is not required and they are allowed to give opinion testimony.⁶⁴ This "wide latitude" given to experts is based on the "assumption that the expert's opinion will have a reliable basis in the knowledge and experience of his discipline."⁶⁵ Though not stated in the opinion, based on this reasoning, the requirement for reliability would stand for all expert testimony, including "technical, or other specialized knowledge" listed in Rule 702.⁶⁶

Another requirement found in the language of Rule 702 by the majority is relevance. Rule 702 states that the testimony must "assist the trier of fact to understand the evidence or to determine a fact in issue."⁶⁷ This requirement was described by Judge Becker in *United States v. Downing*⁶⁸ as "sufficiently tied to the facts of the case that it will aid the jury in resolving a factual dispute." Justice Blackmun requires a "valid scientific connection to the pertinent inquiry as a precondition to admissibility."⁶⁹ An example, given in the opinion, is the relevance of expert testimony on the fullness of the moon on a particular night. This testimony would be admissible in a case to prove how dark a certain night was, but would not be allowed in a case where the issue was the likelihood of irrational behavior.⁷⁰

The Court thus finds in Rule 702 the authority for a trial judge to regulate expert scientific testimony by making an initial decision about the reliability and relevance of the evidence. Justice Blackmun *again* declares that the trial judge

^{61.} Id. n.9.

^{62.} Id. at 2795.

^{63.} Id. n.9.

^{64.} Fed. R. Evid. 602 states:

A witness may not testify to a matter unless evidence is introduced sufficient to support a finding that the witness has personal knowledge of the matter. Evidence to prove personal knowledge may, but need not, consist of the witness' own testimony. This rule is subject to the provisions of rule 703, relating to opinion testimony by expert witnesses.

^{65.} Daubert v. Merrell Dow Pharmaceuticals, Inc., 113 S. Ct. 2786, 2796 (1993).

^{66.} Fed. R. Evid. 702.

^{67.} Id.

^{68. 753} F.2d 1224, 1242 (3d Cir. 1985).

^{69.} Daubert, 113 S. Ct. at 2796.

^{70.} Id.

should play an active role in this determination: "Faced with a proffer of expert scientific testimony, then, the trial judge *must* determine at the outset, pursuant to Rule 104(a), whether the expert is proposing to testify to (1) scientific knowledge that (2) will assist the trier of fact to understand or determine a fact in issue."⁷¹

Justice Blackmun then gives the trial judge guidance on making a determination of scientifically valid reasoning or methodology. He discusses an illustrative list of four factors to be considered. The first factor, a "key" factor, in determining the validity of a theory or technique is "whether it can be (and has been) tested."72 In his dissent, Chief Justice Rehnquist regards this factor particularly as being too ambiguous to be of assistance.⁷³ This test of "falsifiability, or refutability, or testability"⁷⁴ refers to the basic way knowledge in science progresses, i.e., the scientific method. This method requires first developing a hypothesis concerning an interesting observation. Then the hypothesis is tested by setting up an experiment. The experiment, if set up correctly with the right controls, will be able to either reject the hypothesis (falsify it) or support the hypothesis. Thus, the test of "falsifiability" means that the theory or technique is susceptible to being tested by appropriate experiments. What theory or technique cannot be tested? Any theory or technique that when traced back through the mental inferential steps eventually comes to a subjective belief or comes to an assertion counter to known laws of nature, i.e., an astrological prediction or religious belief, could not be tested experimentally.

The second factor lists peer review and publication as relevant to the inquiry of evidentiary reliability, but Justice Blackmun emphasizes that lack of peer review is not dispositive.⁷⁵ He recognizes that there are well-grounded and innovative theories that have not been subjected to peer review either because they are too new or because they are so specialized to the litigation at hand that these theories do not warrant publication. The trial judge may consider whether proffered testimony has been subjected to peer review and, if not, may inquire into the reasons why. One question repeatedly asked in the Bendectin litigation was why the experts did not publish their reanalysis of the epidemiological data. The reanalysis was not new since it had been used in trials since 1985⁷⁶ and was certainly of general interest if able to show a correlation between Bendectin ingestion and reduced limb birth defects.

72. Daubert, 113 S. Ct. at 2796.

73. Id. at 2800 (Rehnquist, J., dissenting in part).

74. Id. at 2797 (quoting Kenneth Popper, Conjectures and Refutations: The Growth of Scientific Knowledge 37 (5th ed. 1989)).

75. Id.

76. Sanders, supra note 11, at 346 n.199.

^{71.} Id. (emphasis added). Fed. R. Evid. 104(a) states, "Preliminary questions concerning the qualification of a person to be a witness, the existence of a privilege, or the admissibility of evidence shall be determined by the court"

The third factor is especially useful to evaluate scientific techniques, for instance DNA fingerprinting or polygraph tests. Justice Blackmun indicates that the court "ordinarily *should* consider the known or potential rate of error and the existence and maintenance of standards controlling the technique's operation."⁷⁷ This factor restricts use of scientific techniques to those that have been developed to the point where the error rate and appropriate standards are known. New, unique scientific techniques that are offered would face a substantial obstacle for admission.

The fourth factor is the "general acceptance" standard from *Frye*. This is still a relevant inquiry and is an easy way to admit testimony based on well-established scientific principles. Testimony previously admitted under the "general acceptance" standard should be admissible under *Daubert*. The lack of general acceptance will not in itself prevent the evidence from being admitted but will require a more in depth inquiry upon which to base reliability, and the theory "may properly be viewed with skepticism."⁷⁸

Justice Blackmun emphasizes the flexibility of the inquiry. He also states emphatically that the inquiry should focus solely on the principles and methodology and not on the conclusions that are generated.⁷⁹ This directly negates the tendency in the lower courts to exclude evidence when the conclusion clashes with that supported by the majority of the evidence, as demonstrated in *Daubert* and in Judge Weinstein's decision in *In re "Agent Orange" Product Liability Litigation.*⁸⁰

3. Interaction of Rule 702 with Other Federal Rules of Evidence

Justice Blackmun correctly recognizes that Rule 702 governs the admissibility of expert testimony⁸¹ while Rule 703 governs the data or facts from the particular case upon which the expert is basing his opinion, and does not govern the validity of his methodology.⁸² Rule 703 states in part: "If of a type reasonably relied upon by experts in the particular field in forming opinions or inferences upon the subject, the facts or data need not be admissible in evidence."⁸³ This rule allows the use of facts or data by the expert that might otherwise be inadmissible hearsay. It does not refer to the methodology used by the expert witness to analyze the facts or data.

80. 611 F. Supp. 1223 (E.D.N.Y. 1985), aff'd on other grounds, 818 F.2d 187 (2d Cir. 1987), cert. denied, 487 U.S. 1234, 108 S. Ct. 2898 (1988).

81. Daubert, 113 S. Ct. at 2794.

83. Fed. R. Evid. 703.

^{77.} Daubert v. Merrell Dow Pharmaceuticals, Inc., 113 S. Ct. 2786, 2797 (1993) (emphasis added).

^{78.} Id.

^{79.} Id.

^{82.} Id. at 2797-98.

Justice Blackmun reminds courts of the availability of Rule 706, which allows the court to appoint its own expert for assistance.⁸⁴ This method has been cited as a way to counter "junk science" in the courtroom.⁸⁵

Even if the evidence is admissible by Rule 702, the trial judge must still consider Rule 403, which allows exclusion of relevant evidence "if its probative value is substantially outweighed by the danger of unfair prejudice, confusion of the issues, or misleading the jury⁸⁶ Given the deference afforded an expert witness by the jury and to the possibility of misleading the jury, "the judge in weighing possible prejudice against probative force . . . exercises more control over experts than over lay witnesses.⁸⁷ Testimony admissible under Rule 702 may still be excluded under Rule 403 if the probative value of the testimony is low and the prejudicial effect is high.

4. The Dilemma of Expert Scientific Testimony

The Daubert case generated great interest in the scientific and medical communities, as illustrated by the 22 amicus briefs filed. The concerns expressed in these briefs could be divided into two ends of a spectrum. At one end are those primarily interested in keeping "junk science" out of the courtroom by restricting testimony to "general acceptance" within the appropriate scientific community, i.e., to maintain the Frye standard as a threshold to admissibility.⁸⁸ On the opposite end are those worried about valid scientific theories being excluded from the courtroom resulting in a plaintiff losing his case because the theory has not been tested sufficiently to have reached "general acceptance."89 Justice Blackmun acknowledges the legitimate concern of both sides but dismisses them both by emphasizing the role of the adversarial system in a trial and recognizing the time limitation in resolving legal disputes. "Shaky" evidence, admissible under Rule 702 and the new guidelines, is more appropriately attacked by "[v]igorous cross-examination, presentation of contrary

87. Jack B. Weinstein, Rule 702 of the Federal Rules of Evidence Is Sound; It Should Not Be Amended, 138 F.R.D. 631, 632 (1991).

88. See, e.g., Brief for The American Association for the Advancement of Science and the National Academy of Sciences as *Amici Curiae* at 13, and Brief for The American Medical Society et al. as *Amici Curiae* at 11, Daubert v. Merrell Dow Pharmaceuticals, Inc., 113 S. Ct. 2786 (1993) (No. 92-102).

89. See, e.g., Brief of Amici Curiae American Society of Law, Medicine, and Ethics Devra Lee at 16; Brief Amici Curiae of Physicians, Scientists, and Historians of Science at 13, Daubert v. Merrell Dow Pharmaceuticals, Inc., 113 S. Ct. 2786 (1993) (No. 92-102).

^{84.} Fed. R. Evid. 706(a) states, in pertinent part: "The court may on its own motion or on the motion of any party enter an order to show cause why expert witnesses should not be appointed, and may request the parties to submit nominations."

^{85.} Peter W. Huber, Galileo's Revenge: Junk Science in the Courtroom 206 (1991).

^{86.} Fed. R. Evid. 403 in its entirety states, "Although relevant, evidence may be excluded if its probative value is substantially outweighed by the danger of unfair prejudice, confusion of the issues, or misleading the jury, or by considerations of undue delay, waste of time, or needless presentation of cumulative evidence."

evidence, and careful instruction on the burden of proof."⁹⁰ Additionally, in a civil trial, the judge is always able to rule on the weight of the evidence in a motion for summary judgment or directed verdict, a practice preferred by Justice Blackmun instead of wholesale inadmittance. He cites with approval the handling of evidence in two Bendectin cases: *Brock v. Merrell Dow Pharmaceuticals, Inc.*⁹¹ and *Turpin v. Merrell Dow Pharmaceuticals, Inc.*⁹² The court in *Brock* reversed a jury verdict for the plaintiff by granting a judgment n.o.v. for the defendant on the basis that the evidence regarding causation was insufficient.⁹³ The *Turpin* court granted the defendants a summary judgment, ruling the evidence was insufficient to take the issue to the jury.⁹⁴ Thus, Justice Blackmun favors admitting "borderline" evidence and then ruling on the weight of the evidence. A question not addressed in the opinion is whether Justice Blackmun would follow the same reasoning and admit borderline evidence in a criminal case.⁹⁵

Justice Blackmun concedes that "in practice, a gatekeeping role for the judge, no matter how flexible, inevitably on occasion will prevent the jury from learning of authentic insights and innovations."⁹⁶ This is a necessary result of the differences in the constraint of time on the legal and scientific communities: legal disputes must be resolved quickly and finally, unlike scientific inquiry, which may continue indefinitely. "That, nevertheless, is the balance that is struck by Rules of Evidence," Justice Blackmun writes, "designed not for the exhaustive search for cosmic understanding but for the particularized resolution of legal disputes."⁹⁷ Justice Blackmun recognizes that scientific investigation into a phenomenon often takes decades, even centuries, before a consensus is reached. In a legal setting, however, the matter before the court must be resolved in a timely manner with the knowledge then available. The scientific knowledge used in a courtroom need not have gained "general acceptance" within the scientific community but it must at least be based on well-established scientific principles.

5. The Dissenting Opinion

Chief Justice Rehnquist, joined by Justice Stevens, agrees with the ousting of a strict threshold of the *Frye* "general acceptance" standard and with some

92. 959 F.2d 1349 (6th Cir.), cert. denied, 113 S. Ct. 84 (1992).

- 93. Brock, 874 F.2d at 315.
- 94. Turpin, 959 F.2d at 1360-61.

95. This issue is discussed infra Part IV in comparing Daubert with State v. Foret, 628 So. 2d 1116 (La. 1993).

96. Daubert v. Merrell Dow Pharmaceuticals, Inc., 113 S. Ct. 2786, 2798-99 (1993).

97. Id. at 2799.

^{90.} Daubert, 113 S. Ct. at 2798 (citing Rock v. Arkansas, 483 U.S. 44, 61, 107 S. Ct. 2704, 2714 (1987)).

^{91. 874} F.2d 307 (5th Cir.), modified, 884 F.2d 166 (5th Cir. 1989), cert. denied, 494 U.S. 1046, 110 S. Ct. 1511 (1990).

gatekeeping role of the trial judge. He disagrees with the remainder of the opinion, believing the guidelines expressed in the majority opinion to be unnecessary and "to be not only general, but vague and abstract."⁹⁸ He would have the Court decide "only the questions presented, and to leave the further development of this important area of the law to future cases."⁹⁹

Specifically, the Chief Justice dislikes reading into the Rules the requirement of reliability. Furthermore, he believes the illustrative factors given for guidance by the majority will only confuse the trial judges because the factors are vague and ambiguous. For example, he wonders what is the difference in scientific and technical knowledge and what is meant by "falsifiability?"¹⁰⁰ He argues that the trial judges will have to become "amateur scientists" to perform this gatekeeping role as defined by the majority.¹⁰¹

C. Aftermath of Daubert: Helpful or Ambiguous Guidelines?

Does the Daubert decision help to clear the confusion regarding admission of expert testimony or does it just replace a clear standard with an ambiguous one? The decision definitely gives guidelines on how to treat expert testimony. The federal district judge is given an active gatekeeping role in monitoring the expert scientific testimony for both relevance and reliability. The Frye standard is not to be used as a threshold requirement, but remains a factor to be considered. Rule 702, not 703, is to be used in deciding the admissibility of expert scientific testimony when considering the qualifications of the expert, the relevance of the testimony to the case, and the reliability of the testimony. In judging the reliability of the expert scientific testimony, the judge is not to consider the conclusions reached by the expert but only the reasoning and methods used to reach those conclusions. Finally, for borderline scientific evidence, Justice Blackmun definitely favors admitting the evidence and then deciding the case based on sufficiency, determined by presentation of opposing experts and evidence and by flushing out problems with the expert testimony by cross-examination.

How useful have the lower district and circuit courts found the guidelines established in *Daubert*? The overwhelming response to this decision has been positive. Many courts rely on the decision to emphasize the gatekeeping power and responsibility of the trial judge.¹⁰² In *In re Joint Eastern and Southern*

^{98.} Id. (Rehnquist, J., dissenting in part).

^{99.} Id. at 2800 (Rehnquist, J., dissenting in part).

^{100.} *Id*.

^{101.} Id.

^{102.} United States v. Daccarett, 6 F.3d 37, 58 (2d Cir. 1993), cert. denied sub nom. Abuchaibe Hnos. Ltda. v. United States, 62 U.S.L.W. 3454 (U.S. Mar. 21, 1994) (No. 93-1018); Rosado v. Deters, 5 F.3d 119, 124 n.9 (5th Cir. 1993); Chikovsky v. Ortho Pharmaceuticals Corp., 832 F. Supp. 341, 344 (S.D. Fla. 1993); In re Joint E. & S. Dist. Asbestos Litig., 827 F. Supp. 1014, 1032 (S.D.N.Y. 1993).

Districts Asbestos Litigation,¹⁰³ Judge Weinstein describes the need for "Daubert hearings' under Rule 104 of the Federal Rules of Evidence to determine whether, and under what conditions, expert testimony is admissible."¹⁰⁴

In considering expert scientific testimony, the lower courts successfully use the framework and the flexibility in the *Daubert* analysis. Indeed, the courts seem to appreciate the clear language in *Daubert*, using the four factors to help structure a discussion of the admissibility of the testimony. Several courts have found the proposed testimony inadmissible under *Daubert* for various reasons: expert not qualified in the field,¹⁰⁵ opinion based on flawed methodology,¹⁰⁶ opinion based on pure speculation,¹⁰⁷ and opinion based on an unreliable technique.¹⁰⁸ These initial opinions seem to indicate that *Daubert*, by rejecting the *Frye* threshold, is not opening the floodgates to expert testimony, but is supplying a fairer standard on which to base admissibility.

106. Scales v. George Washington Univ., Civ. A. No. 89-0796-LFO, 1993 WL 304016 at *6 (D.D.C. July 27, 1993) (holding that testimony by expert in econometrics was based on flawed data and not derived from a reliable scientific analysis); Haim v. Secretary, Dep't of Health & Human Servs., No. 90-1031V, 1993 WL 346392 at *10-15 (Fed. Cl. Aug. 27, 1993) (discussing *Daubert* at length and finding the expert's testimony unreliable and not grounded in scientific methodology and procedure).

107. O'Connor v. Commonwealth Edison Co., 13 F.3d 1090, 1106-07 (7th Cir. 1994) (holding testimony that mere observation can ascertain that cataracts were caused by radiation as speculative); Porter v. Whitehall Lab., Inc., 9 F.3d 607, 612-16 (7th Cir. 1993) (finding inadmissible testimony of experts concerning ibuprofen as a cause of acute renal failure based on belief and not on research or published reports); Joy v. Bell Helicopter Textron, Inc., 999 F.2d 549, 567-70 (D.C. Cir. 1993) (finding an economist's testimony of future earning capacity as purely speculative); Chikovsky v. Ortho Pharmaceuticals Corp., 832 F. Supp. 341, 344-46 (S.D. Fla. 1993) (holding inadmissible testimony that Retin-A is a teratogen when opinion based upon subjective criteria and not upon experiments or publications); Stanczyk v. Black & Decker, Inc., 836 F. Supp. 565, 566-68 (N.D. Ill. 1993) (finding inadmissible testimony by a mechanical engineer who claimed a blade saw could be designed safer but who had only thought of a new design and had not tested the design or offered any support for its feasibility); Liu v. Korean Air Lines Co., No. 84 Civ. 0690, 1993 WL 478343 (S.D.N.Y. Nov. 16, 1993) (finding some testimony by an economist admissible and some inadmissible since based on speculation about the future employment status); Richardson v. United States, 835 F. Supp. 1236, 1240 (E.D. Wash. 1993) (finding inadmissible testimony by accident reconstructionist based on pure speculation since essential measurements were not made at the scene).

108. United States v. Black, 831 F. Supp. 120, 122-23 (E.D.N.Y. 1993) (holding that even under *Daubert* polygraph evidence is unreliable and inadmissible).

^{103. 151} F.R.D. 540 (E.D.N.Y. 1993).

^{104.} Id. at 545.

^{105.} Rosado, 5 F.3d at 124 (holding as unqualified an accident reconstructionist who was unable to provide an adequate basis for his testimony and who had not been qualified to testify for 20 years); Wilson v. Chicago, 6 F.3d 1233, 1238 (7th Cir. 1993) (finding the witness was not an expert in the "physiology of torture," if such a field exists); Delaney v. Merchants River Transp., 829 F. Supp. 186, 189 (W.D. La. 1993), aff'd, 16 F.3d 1214 (5th Cir. 1994) (finding plaintiff's expert had limited experience in design of inland, open barges).

Several decisions use the framework in *Daubert* to consider the reliability of scientific techniques, including gas chromatography¹⁰⁹ and DNA profile evidence.¹¹⁰ The courts considering DNA profiling under *Daubert* have admitted the testimony, at least in part.

Other courts have cited *Daubert* to support the granting of a directed verdict or judgment n.o.v. for the defendant due to insufficient evidence.¹¹¹ One case, *Elkins v. Richardson-Merrell, Inc.*,¹¹² is a Bendectin case with the same evidence offered as in *Daubert*. The Sixth Circuit, relying on previous decisions in two Bendectin cases,¹¹³ granted summary judgment for the defendant based on the *insufficiency* of the plaintiff's evidence.

One court has even extended the decision in *Daubert* to include "technical, or other specialized knowledge."¹¹⁴ In *United States v. Markum*,¹¹⁵ the court states *Daubert* incorrectly for the proposition that "the trial court must determine whether the expert is proposing to testify to (1) scientific, *technical, or other specialized* knowledge that (2) will assist the trier of fact to understand or determine a fact in issue."¹¹⁶ The testimony of a firefighter with twenty-nine years experience was admitted to establish that a fire was caused by arson.¹¹⁷

Only one court has taken exception to Daubert. In United States v. Locascio,¹¹⁸ the Second Circuit ruled that it was not necessary for the trial

109. United States v. Bynum, 3 F.3d 769, 773 (4th Cir. 1993), *cert. denied*, 114 S. Ct. 1105 (1994) (admitting testimony that three packages of crack cocaine came from the same batch based on gas chromatography).

110. United States v. Bonds, 12 F.3d 540, 551-68 (6th Cir. 1993) (finding that *Daubert* is only concerned with reliability of the methods and not with the validity or reliability of the conclusions which go to the weight of the evidence; holds DNA testimony admissible after a lengthy discussion of the *Daubert* factors to the DNA methodology); United States v. Martinez, 3 F.3d 1191, 1196-98 (8th Cir. 1993), cert. denied, 114 S. Ct. 734 (1994) (holding that courts can take judicial notice of the reliability of the technique of DNA profiling but must still inquire into the validity of the actual application of the method in each case); Government of the Virgin Islands v. Penn, 838 F. Supp. 1054, 1056-74 (D.V.I. 1993) (discussing in detail the method of DNA profiling and then applying the *Daubert* analysis to admit the testimony; an excellent explanation of the theory and technique of DNA profiling).

111. Petruzzi's IGA Supermarkets, Inc. v. Darling-Delaware Co., 998 F.2d 1224, 1236-41 (3d Cir.), *cert. denied*, 114 S. Ct. 554 (1993) (finding that the district court erred in not admitting economists' testimony under the standards expressed by *Daubert*, but that for one defendant the evidence was insufficient to draw any conclusion); Hodges v. Secretary, Dep't Health & Human Servs., 9 F.3d 958 (Fed. Cir. 1993) (finding insufficient evidence that DPT vaccine caused death of infant; dissenting opinion has good discussion of preponderance standard and medical certainty standard).

112. 8 F.3d 1068 (6th Cir. 1993).

113. Lee v. Richardson-Merrell, Inc., 961 F.2d 1577 (6th Cir.), cert. denied, 113 S. Ct. 197 (1992); Turpin v. Merrell Dow Pharmaceuticals, Inc., 959 F.2d 1349 (6th Cir.), cert. denied, 113 S. Ct. 84 (1992).

114. Fed. R. Evid. 702.

115. 4 F.3d 891 (10th Cir. 1993).

116. Id. at 895 (emphasis added; states Daubert incorrectly by adding the emphasized language).

117. Id.

118. 6 F.3d 924 (2d Cir. 1993).

judge to make an explicit determination of trustworthiness for all expert testimony.¹¹⁹ This court, however, was not faced with scientific evidence but with technical or other specialized knowledge—a government agent testifying to the structure and operating rules of organized crime families by using informants and taped conversations.¹²⁰ In addition, the court was addressing a Rule 703 question—the use of facts from informants in formulating an opinion. No language in *Daubert* states or implies that trustworthiness must be proven for the facts or data that fall under Rule 703.

Finally, one court has cited *Daubert* to support the use of a court-appointed expert under Rule 706.¹²¹ The court stated: "The Supreme Court has recently emphasized the role of the trial courts in evaluating expert claims utilizing the tools provided by the Federal Rules of Evidence."¹²² The court asked the parties to prepare a list of experts from which the court would select an expert to analyze all the medical and psychological data in the case.¹²³

In summary, the federal courts citing *Daubert* have had no trouble adapting the decision to their specific cases. The trial judges are able to rise to the gatekeeping role and the loss of the *Frye* standard has not led to more "junk science" in the courtroom. The *Daubert* decision, instead, has proven to be flexible and helpful. More importantly, it has imposed uniformity on the lower courts in requiring an active gatekeeping role by the judge and in establishing the threshold standard for admissibility of expert scientific testimony.

III. DAUBERT, FORET AND THE LOUISIANA COURTS

In State v. Foret,¹²⁴ the Louisiana Supreme Court, considering the admissibility of expert testimony under Louisiana Code of Evidence article 702, adopted the *Daubert* decision as the appropriate analysis to determine the active role of the trial judge, the proper threshold of reliability and relevancy, and the guidelines to determine reliability. In doing so, Louisiana joins five other states that have cited *Daubert* with approval.¹²⁵

122. Id. at 246.

123. Id.

125. The response of other states to the *Daubert* decision depends on the status of the "general acceptance" standard in that state. Four state courts (Oregon, Wyoming, Delaware, and Arkansas) have rejected the *Frye* standard previously and cite *Daubert* in support of their current interpretation and use of Rule 702 (or its equivalent). Jones v. State, 862 S.W.2d 242 (Ark. 1993); Nelson v. State, 628 A.2d 69 (Del. Supr. 1993); State v. Futch, 860 P.2d 264 (Or. App. 1993); Springfield v. State, 860 P.2d 435 (Wyo. 1993). One state, New Mexico, was persuaded by the *Daubert* decision to follow the federal lead and reject the *Frye* standard as a threshold to admissibility. State v. Alberico, 861 P.2d 192 (N.M. 1993). Two state supreme courts (Arizona and South Dakota) take notice of *Daubert* but decline to decide the impact of the case on the use of *Frye* in state courts. State v.

^{119.} Id. at 938-39.

^{120.} Id. at 937.

^{121.} DeAngelis v. A. Tarricone, Inc., 151 F.R.D. 245 (S.D.N.Y. 1993).

^{124. 628} So. 2d 1116 (La. 1993).

A. Facts of Foret

Hypolite Foret was convicted of attempted molestation of a juvenile, his stepdaughter. The alleged molestation occurred over a one-and-a-half to twoyear period when his stepdaughter was twelve to fourteen years old. The victim made the allegations in an interview with a child protection worker. This interview was necessary after the victim was returned from running away from home. The victim was having arguments with her mother and stepfather over refusal to let her date a male eight years her senior. The alleged molestations involved acts of "hugging, kissing, and rubbing the victim's breasts, culminating with the defendant rubbing under the victim's clothes and inserting his finger into her vagina."¹²⁶

The state's main case was testimony of the victim and two experts. One, an expert in family medicine, reported on results of a physical examination of the victim, finding no positive evidence of abuse. He offered his opinion that this was not unusual in this type of case.¹²⁷ The second expert. Dr. Janzen, was a child psychologist who was qualified in the area of child sexual abuse. Dr. Janzen testified that, in his opinion, the victim was telling the truth about being sexually abused.¹²⁸ He based this opinion on three interviews with the victim and a comparison of her symptoms with published background information on behavioral characteristics of victims of child sexual abuse. defendant appealed the decision to the Louisiana First Circuit Court of Appeal.¹²⁹ His major claim was the trial court erred in allowing Dr. Janzen to testify since the state had failed to release his report as required by Code of Criminal Procedure article 719.¹³⁰ Dr. Janzen's report was not made available to the defendant until the morning of the trial even though the state had the report for a week. The court of appeal affirmed the conviction holding that the defendant had failed to show prejudice as a result of the delayed disclosure of the report, thus finding the delay a harmless error.

130. La. Code Crim. P. art. 719 provides:

Bible, 858 P.2d 1152 (Ariz. 1993); Department of Social Serv. *ex rel*. Wolf v. McCarty, 506 N.W.2d 144 (S.D. 1993). Four state supreme courts (Missouri, Florida, New Hampshire and Colorado) retain the use of *Frye* for special circumstances, particularly the admissibility of novel or technical scientific evidence. Public Serv. Co. v. Willows Water Dist., 856 P.2d 829 (Colo. 1993); Flanagan v. State, 625 So. 2d 827 (Fla. 1993); Callahan v. Cardinal Glennon Hosp., 863 S.W.2d 852 (Mo. 1993); State v. Cressy, 628 A.2d 696 (N.H. 1993).

^{126.} Foret, 628 So. 2d at 1118.

^{127.} Id.

^{128.} Id. at 1119.

^{129.} State v. Foret, 612 So. 2d 1070 (La. App. 1st Cir. 1992) (unpublished).

Upon motion of the defendant, the court shall order the district attorney to permit or authorize the defendant to inspect and copy ... any results or reports ... of physical or mental examination, and of scientific tests or experiments, made in connection with or material to the particular case, that are in the possession, custody, control, or knowledge of the district attorney and intended for use at trial.

The Louisiana Supreme Court granted writ and reverses the court of appeal.¹³¹ The opinion offers two theories for reversal: (1) the tardy delivery of the report was prejudicial, "especially given the questionable scientific basis and highly influential nature of his testimony"¹³² and (2) the testimony of the psychologist "constituted an improper comment on the victim's credibility, and served to unduly prejudice the defendant."¹³³ In discussing the proper procedure and standard in determining admissibility of this testimony, the court adopts *Daubert* as the proper interpretation of Louisiana Code of Evidence article 702.¹³⁴

B. "Certworthiness" of Foret

Why was writ granted in *Foret*? The primary reason was to discuss and guide the trial courts in considering the admission of testimony of a psychologist on the veracity of a victim of child sexual abuse. Two members of the court in *State v*. *Brossette*¹³⁵ had expressed grave doubts about this type of testimony. Writ was denied in *Brossette* because the defendant had failed to object to the presentation of this testimony. Justices Dennis and Hall, concurring in the denial, stated:

[T]he introduction of expert testimony as to the psychological characteristics of the victim or her testimony is fraught with serious res nova constitutional and evidentiary problems. While this type of evidence is absolutely not admissible for some purposes, but might be admissible for others, it should be allowed only after careful study and under strict control by the trial court.¹³⁶

In *Foret*, the trial judge allowed the expert to testify over the objections of the defendant both to the delayed disclosure of his report and to giving his opinion that the victim had been sexually abused.¹³⁷

Thus, the reasons for granting writ in *Daubert* and *Foret* are entirely different. In *Daubert*, the United States Supreme Court specifically wanted to address the issue of proper standards for admissibility of expert scientific testimony and settle the confusion apparent in the circuit and district courts. In *Foret*, the Louisiana Supreme Court wanted to address a specific type of borderline, problematic testimony and, in doing so, adopted *Daubert*.¹³⁸

138. Id. at 1123. The court did not consider any approaches being taken by the lower courts in admitting expert testimony and only reference one previous Louisiana Supreme Court decision.

^{131.} State v. Foret, 628 So. 2d 1116, 1118 (La. 1993).

^{132.} Id.

^{133.} Id. at 1131.

^{134.} Id. at 1123.

^{135. 599} So. 2d 1092 (La. 1992),

^{136.} Id. (Dennis, J. and Hall, J., concurring) (citations omitted).

^{137.} State v. Foret, 628 So. 2d 1116, 1121 n.3 (La. 1993).

C. The Supreme Court Opinion in Foret

In an opinion written by Justice Hall, the court unanimously reverses the court of appeal. Justice Lemmon, in a concurrence, indicates that he would reverse solely on the delay in disclosure and would not reach the question of standards and use of this testimony.¹³⁹ Justice Hall justifies deciding this issue by stating:

In an effort to guide trial courts in the future, we shall explore what commentators and other jurisdictions consider to be the proper, non-prejudicial use of such expert testimony. This necessarily requires us to set out the general guidelines for the admissibility of expert testimony, as well as setting forth guidelines for admission of this particular kind of expert testimony.¹⁴⁰

1. The Adoption of Daubert

Justice Hall correctly notes that the general rule controlling admissibility of expert testimony in Louisiana is Louisiana Code of Evidence article 702:

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.¹⁴¹

Justice Hall concludes, "As the Louisiana Code of Evidence provision on expert testimony is identical to the federal Rule, it follows that this court should carefully consider the *Daubert* decision that soundly interprets an identical provision in the federal law of evidence."¹⁴²

Justice Hall then analyzes the *Daubert* decision in some detail. He discusses the replacement of the *Frye* threshold of "general acceptance" with the new standard that scientific evidence must be reliable and relevant.¹⁴³ He also notes the requirement of a preliminary assessment by the trial court of this reliability and relevancy and the guidelines given to assess the reliability of expert scientific testimony. These guidelines, as stated in *Foret*, are

^{139.} Id. at 1131 (Lemmon, J., concurring). Justice Dennis also concurred with reasons, but his concurring opinion was unavailable at this writing.

^{140.} Id. at 1121.

^{141.} La. Code Evid. art. 702.

^{142.} State v. Foret, 628 So. 2d 1116, 1123 (La. 1993). This proposition is also supported by the official comments to the Louisiana Code of Evidence. "[E]specially where the language of the Louisiana Code is identical or virtually identical with that used by other states or in the federal rules, Louisiana courts now have available a body of persuasive authority which may be instructive in interpreting the Louisiana Code." La. Code. Evid. art. 102 cmt. a.

^{143.} Foret, 628 So. 2d at 1122.

"whether or not the technique had been subjected to peer review and/or publication, the 'known or potential rate of error', the existence of 'standards controlling the technique's operation', the technique's 'refutability' or, more simply put, testability, and, finally, an incorporation of the Frye general acceptance in the scientific community as only a factor in the analysis."144

Justice Hall also notes that the Daubert Court emphasizes the interaction of Rule 702 with other Federal Rules of Evidence, specifically Rule 403 as a "balancing test that will exclude probative evidence if outweighed by its potential for unfair prejudice."145

Justice Hall then gives a second justification for adopting Daubert. The Louisiana Supreme Court had previously disapproved of the Frye standard as a threshold for admissibility in State v. Catanese.¹⁴⁶ In that decision, Justice Dennis considered the admissibility of polygraph evidence in criminal trials. He discussed the criticism of the Frye standard and declined to adopt it for Louisiana.¹⁴⁷ The polygraph evidence was denied admissibility in the trial based on a balancing test: probative value is weighed against the reasons for exclusion.¹⁴⁸ The evidence, however, might be admitted in post-trial proceedings after the trial judge, in his discretion, determines that "the evidence is reliable and will aid in a decision."149

Justice Hall explains the similarity in the Daubert and Catanese decisions in refusing the Frye threshold and in giving the trial court discretion to use the testimony if found to be reliable and to pass the balancing test. Justice Hall then proceeds to adopt the Daubert requirement for reliability and the "observations" stated to determine reliability. He writes:

The above-noted similarity between the federal and Louisiana rules on the admission of expert testimony, coupled with similar guidelines for the admissibility of expert scientific testimony pronounced by this court in Catanese, persuade this court to adopt Daubert's requirement that expert scientific testimony must rise to a threshold level of reliability in order to be admissible under La.C.E. art. 702. As we find the Daubert court's "observations" on what will help to determine this threshold level of reliability to be an effective guide, we shall adopt these "observations", as well.¹⁵⁰

^{144.} Id. (quoting Daubert v. Merrell Dow Pharmaceuticals, Inc., 113 S. Ct. 2786, 2797 (1993)). 145. Id.

^{146.} 368 So. 2d 975, 980 (La. 1979).

^{147.} Id. at 978-86.

^{148.} Id. at 981.

^{149.} Id. at 983.

^{150.} State v. Foret, 628 So. 2d 1116, 1123 (La. 1993).

2. The Application of Rule 702 to This Testimony

Justice Hall deftly uses the *Daubert* framework to discuss the admissibility of the testimony of the psychologist that sexual abuse can be diagnosed using a psychological profile system known as Child Sexual Abuse Accommodation Syndrome ("CSAAS").¹⁵¹ His first observation is the lack of any evidentiary hearing held by the trial court to determine the admissibility of this evidence. This hearing was impossible since the report was disclosed the day of the trial.

Relying both on commentators and on cases from other jurisdictions, Justice Hall finds this testimony to be "of highly questionable scientific validity, and fails to unequivocally pass the *Daubert* threshold test of scientific reliability."¹⁵² He reaches this conclusion by analyzing the use of CSAAS as a diagnostic tool in terms of the *Daubert* factors. This use of CSAAS has been widely criticized and leads Justice Hall to conclude "the use of this technique for determination of the victim's truthfulness in his or her allegations of abuse is not one that, even after peer review, has been embraced by the scientific community."¹⁵³ Thus, this type of testimony, although subjected to peer review, fails to satisfy the "general acceptance" standard.

This type of testimony also fails the key factor in the *Daubert* analysis—testability. Justice Hall writes that this "untestability comes from its very nature as an opinion as to the causes of human behavior, and the fact that the methods for testing the results of psychoanalysis are rife with the potential for inaccuracy."¹⁵⁴

The last *Daubert* factor of known error rate is extracted from a clinical study that found "the factors relied upon by clinicians in their determinations were prevalent in 68% of the cases."¹⁵⁵ Justice Hall implies that a 32% margin of error is not sufficiently reliable for a criminal trial.

Having found this type of testimony questionable under Article 702 as interpreted using the *Daubert* analysis, Justice Hall states:

In any capacity, it is highly unlikely that it will be useful to a jury on the issue of a witness' credibility, especially as a tool for determining whether or not abuse actually occurred. Even if it were, the trial court made no such finding, and, by failing to exercise its "gatekeeping" role

^{151.} Id. at 1124. To maintain the focus of this Note on standards to admit expert testimony, a detailed discussion of CSAAS will not be included. For a review of this area, see Elizabeth V. Baker, *Psychological Expert Testimony on a Child's Veracity in Child Sexual Abuse Prosecutions*, 50 La. L. Rev. 1039 (1990).

^{152.} Foret, 628 So. 2d at 1127.

^{153.} Id. at 1125.

^{154.} Id. (citing Stephen J. Morse, Failed Explanations and Criminal Responsibility: Experts and the Unconscious, 68 Va. L. Rev. 971, 995 (1982)).

^{155.} Id. at 1126 (quoting Faller, Criteria for Judging the Credibility of Children's Statements About Their Sexual Abuse, 67 Child Welfare 389 (1988), as cited in John E.B. Myers et al., Expert Testimony in Child Sexual Abuse Litigation, 68 Neb. L. Rev. 1, 75-76 (1989)).

per *Daubert*, failed to satisfy what this court believes is a prudent and necessary standard for evaluation of expert testimony in criminal cases.¹⁵⁶

3. The Balancing Test of Article 403

The court next considers whether this testimony, assuming it is admissible under Article 702, will pass the balancing test of Article 403.¹⁵⁷ After discussing how other jurisdictions have decided the question of admissibility of this type of testimony to bolster the credibility of the witness, Justice Hall concludes:

This bolstering of credibility has the effect of unfairly prejudicing a criminal defendant, and, as such, the use of CSAAS-based testimony for the purpose of bolstering a witness' credibility creates a risk of prejudice that outweighs its questionable probative value. Given the near unanimity of other jurisdictions' disapproval of CSAAS-based testimony as a determinant of abuse, coupled with our observations of the risk of prejudice inherent in CSAAS, this court now concludes that such *opinion* testimony as a determinant of a victim/witness' credibility is not admissible.¹⁵⁸

This part of the opinion is especially troubling. Justice Hall fails to address the difference between Louisiana Code of Evidence articles 702 and 608 and to distinguish evidence used to corroborate testimony of a witness from evidence used to bolster the credibility of a witness. Louisiana Code of Evidence article 608 specifically addresses character evidence admissible to attack or support credibility. Article 608, unlike its counterpart Federal Rules of Evidence 608, does not allow opinion testimony to attack or support credibility of a witness—only evidence of general reputation may be admitted.¹⁵⁹ Thus, an expert's opinion as to the credibility of a witness would not be allowed in Louisiana. A prominent case cited by Justice Hall is *United States v. Azure*,¹⁶⁰ which discusses the admissibility of this type of testimony under Federal Rules of Evidence 608(a) and 702. The court in *Azure* held that a psychologist's opinion testimony "went beyond the limitation in Rule 608(a)(1) of only

^{156.} Id. at 1127.

^{157.} La. Code Evid. art. 403 states: "Although relevant, evidence may be excluded if its probative value is substantially outweighed by the danger of unfair prejudice, confusion of the issues, or misleading the jury, or by considerations of undue delay, or waste of time."

^{158.} State v. Foret, 628 So. 2d 1116, 1129 (La. 1993) (emphasis added).

^{159.} La. Code Evid. art. 608 states, in pertinent part: "A. Reputation evidence of character. The credibility of a witness may be attacked or supported by evidence in the form of general reputation only" Fed. R. Evid. 608 states, in pertinent part: "(a) Opinion and reputation evidence of character. The credibility of a witness may be attacked or supported by evidence in the form of opinion or reputation"

^{160. 801} F.2d 336 (8th Cir. 1986).

addressing character for truthfulness and addressed the specific believability and truthfulness of Wendy's story."¹⁶¹ Additionally, the testimony was not admissible under Rule 702 since opinion testimony on credibility is restricted to general character testimony on truthfulness. The *Azure* court did acknowledge that the psychologist might have aided the jury by generally testifying to medical evidence of behavioral characteristics of child abuse victims and whether it was consistent with her story of sexual abuse.¹⁶²

Justice Hall indicates that the psychologist's testimony might be admitted for similar limited purposes, such as to corroborate the other evidence tending to show the existence of psychological injury to the child victim. The psychologist could explain in general terms the behavioral characteristics of child abuse victims to help the jury understand why "superficially bizarre" reactions occur, such as delayed reporting or recantation.¹⁶³ Justice Hall then indicates that this testimony is "being offered to rebut attacks on the victim's credibility."¹⁶⁴ However, as stated earlier, Louisiana Code of Evidence article 608 does not allow opinion testimony regarding character for credibility to rebut or support the credibility of a witness.

Expert testimony of general observations could be admitted under Article 702 as helpful to the trier of fact to "understand the evidence or determine a fact in issue."¹⁶⁵ The evidence would be probative on the issue of whether the sexual abuse in fact occurred, much in the same way that a medical expert's opinion that a scar was the product of a knife would corroborate the victim's testimony that he was stabbed. If the defendant uses the victim's past acts or past statements to impeach her and to try to prove the abuse did not occur, this opinion by the expert on consistency of the victim's story with known characteristics of child abuse victims would help the jury in evaluating the victim's prior behavior.

D. Changes in Louisiana Evidence Law

Foret definitely changes the law in Louisiana. The trial judge will usually be required to conduct a preliminary hearing to decide admissibility of expert testimony by determining (1) qualification of the expert, (2) reliability of the testimony, (3) helpfulness of the testimony, and (4) prejudicial effect of admission. How does this compare with past Louisiana jurisprudence? Foret has no discussion of recent Louisiana jurisprudence which has dealt with standards of admitting expert testimony. The opinion cites only State v. Catanese, a case decided in 1979 before the promulgation of the Louisiana Code

^{161.} Id. at 341.

^{162.} Id. at 340.

^{163.} State v. Foret, 628 So. 2d 1116, 1130 (citing Wheat v. State, 527 A.2d 269, 273 (Del. 1987)).

^{164.} Id.

^{165.} La. Code. Evid. art. 702.

of Evidence in 1989. More recent decisions, including one by the Louisiana Supreme Court, applied other standards.¹⁶⁶

Prior to the adoption of the Louisiana Code of Evidence, the primary case on expert testimony was *State v*. *Wheeler*,¹⁶⁷ in which Justice Dennis set out two elements as prerequisite to using expert testimony:

(a) the subject of the inference must be so distinctly related to some science, profession, business or occupation as to be beyond the understanding of the average layman; and (b) the witness must have sufficient skill, knowledge or experience in that field or calling as to make it appear that his opinion or inference will probably aid the trier of fact in his search for truth.¹⁶⁸

Additionally, Justice Dennis discussed other variables to be considered: one, a preference for direct, concrete evidence, i.e. a direct statement over an inferential one; two, the purpose of the evidence and how close that purpose is to the main hub of the trial. This opinion stressed the need for "helpfulness" to the trier of fact and for evidence with a concrete basis, which is similar to requiring reliability.¹⁶⁹ The *Wheeler* analysis was applied in a civil context in *Schwamb v. Delta Air Lines, Inc.*,¹⁷⁰ which refused to allow opinion testimony on credibility of a witness.

After adoption of the Louisiana Code of Evidence, three Louisiana Courts of Appeal, the second, third and fourth, adopted the standards for admissibility of expert testimony as established by the United States Courts of Appeals for the Fifth Circuit in *Christophersen v. Allied-Signal Corp.*¹⁷¹ That court used four inquiries for determining the admissibility of expert testimony, the first three being threshold requirements:

(1) Whether the witness is qualified to express an expert opinion, Fed.R.Evid. 702;

(2) whether the facts upon which the expert relies are the same type as are relied upon by other experts in the field, Fed.R.Evid. 703;

(3) whether in reaching his conclusion the expert used a well-founded methodology, *Frye*; and

^{166.} See, e.g., State v. Wheeler, 416 So. 2d 78 (La. 1982); Adams v. Chevron, 589 So. 2d 1219 (La. App. 4th Cir. 1991), writ denied, 592 So. 2d 415 (1992); State v. Hill, 601 So. 2d 684 (La. App. 2d Cir.), writ denied, 608 So. 2d 192 (1992); Glankler v. Rapides Parish Sch. Bd., 610 So. 2d 1020 (App. 3d Cir. 1992), writ denied, 614 So. 2d 78 (La. 1993); Adams v. Chevron, 589 So. 2d 1219 (La. App. 4th Cir. 1991), writ denied, 592 So. 2d 415 (1992); Schwamb v. Delta Air Lines, Inc., 516 So. 2d 452 (La. App. 1st Cir. 1987), writ denied, 520 So. 2d 750 (1988).

^{167. 416} So. 2d 78 (La. 1982) (excluded a police officer's opinion on defendant's involvement in a drug transaction based on body posture of the participants while conversing).

^{168.} Id. at 80.

^{169.} Id. at 81.

^{170.} Schwamb, 516 So. 2d at 460 (excluded expert's opinion on the cause of the accident and on credibility of the defendant's witness).

^{171. 939} F.2d 1106, 1110 (5th Cir. 1991), cert. denied, 112 S. Ct. 1280 (1992).

(4) assuming the expert's testimony has passed Rules 702 and 703, and the *Frye* test, whether under Fed.R.Evid. 403 the testimony's potential for unfair prejudice substantially outweighs its probative value.¹⁷²

The first Louisiana court to adopt the Christophersen standard was the fourth circuit in Adams v. Chevron,¹⁷³ which also cited Article 702. The second circuit adopted the Adams and Christophersen reasoning in State v. Hill.¹⁷⁴ The third circuit followed Adams and Christophersen in Glankler v. Rapides Parish School Board.¹⁷⁵

These three circuit courts will now need to substitute the *Daubert* analysis as adopted in *Foret* for the *Frye* standard listed in the third requirement of the *Christophersen* analysis. The other requirements of *Christophersen* fit well within both the *Daubert* and *Foret* analysis.

IV. SUMMARY

What is the current procedure to admit or deny expert testimony? The procedure is similar for federal and state courts. First, the trial judge must actively play a role in determining the admissibility of the evidence under Article 104(A).¹⁷⁶ The proper standards to use are governed by Articles 702 and 403.¹⁷⁷ This determination may require an evidentiary hearing where inquiry is made into the qualifications of the expert, the reliability of his testimony, the helpfulness of the proposed testimony, and the prejudicial effect. The inquiry for reliability of expert scientific evidence includes at a minimum the four factors listed in *Daubert*: testability, peer review or publication, rate of error and known standards, and "general acceptance." If the testimony satisfies Article 702, then the judge must also consider Article 403 and balance the probative value of the evidence against the prejudicial effect.

There are a number of remaining questions. One of these is the interaction of Frye with the other three factors in the *Daubert* analysis. Of the four factors, the "general acceptance" standard of Frye is an easy way to admit scientific evidence that has been long recognized as reliable and admissible in court. When the evidence is outside "general acceptance" of the particular scientific community, then the other three factors must be considered. Of those three, testability is considered as a primary requirement. If the evidence is concerned

^{172.} Id. at 1110.

^{173. 589} So. 2d 1219, 1223 (La. App. 4th Cir. 1991), writ denied, 592 So. 2d 415 (1992) (admitted vessel captain's testimony concerning standards of good seamanship).

^{174. 601} So. 2d 684, 692 (La. App. 2d Cir.), writ denied, 608 So. 2d 192 (1992) (excluded the defendant's linguistic expert who wished to testify concerning his analysis of the interrogations or interviews, and testimony of the state's witnesses).

^{175. 610} So. 2d 1020, 1027 (La. App. 3d Cir. 1992), writ denied, 614 So. 2d 78 (1993) (admitted testimony of expert in the field of supervision of children in a playground setting).

^{176.} La. Code Evid. art. 104(A). See also Fed. R. Evid. 104(a).

^{177.} La. Code Evid. arts. 702, 403. See also Fed. R. Evid. 702, 403.

with a new scientific technique, then the rate of error and the existence of standards are important. In considering evidence using a scientific technique, for instance DNA profile data, the qualification of the expert and the methodology must be viewed together. Not only must the principles upon which the technique is based be reliable, but also the laboratory analysis based on this technique conducted by *this* expert for *this* case.

Another question concerns whether there are differences in civil and criminal trials, as exemplified by *Daubert* and *Foret*. There are differences in *Daubert* and *Foret* in handling borderline evidence. This may be the result of the type of expert scientific testimony at issue. In *Daubert*, the testimony is on traditional, basic scientific experiments, and Justice Blackmun favors admission. In *Foret*, the inadmissible testimony comes from experiments in the social sciences on prediction of human behavior—a field which deals with less predictable events.

The major difference is that *Daubert* is a civil trial and *Foret* is a criminal trial. Justice Blackmun in *Daubert* favors admission and initial consideration of the jury of "shaky" evidence. He believes the adversarial system is the best way to handle this evidence by "vigorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof."¹⁷⁸ He also cites with approval judges that direct a verdict based on sufficiency of evidence as a whole. On the contrary, Justice Hall in *Foret* would not admit this type of "borderline" evidence even though it might marginally pass Article 702 standards. He would exclude such testimony under Article 403 by finding the probative value substantially outweighed by the prejudicial effect, especially if the jury would most likely consider it as a prohibited "opinion" regarding the credibility of the witness, and not merely as marginally corroborative of the existence of a psychological condition.

Reaching different results in civil and criminal trials, based on the balance of the interests involved, seems inherently reasonable though there is no difference in the requirements as stated in either Article 702 or 403. In a civil trial, the standard of proof for either the plaintiff or defendant to meet is preponderance of the evidence. The participants are on equal grounds concerning resources and sympathy with the jury. The jury in a civil trial may have a more healthy skepticism of experts paid by the plaintiff or defendant to support their side of the argument. In considering the balance of Article 403, the prejudicial effect of "shaky" expert testimony would be equal whether presented by the plaintiff or defendant. On the other hand, in a criminal trial the standard for the prosecution to meet is proof beyond a reasonable doubt. Typically, the resources of the prosecution are much greater than that of the accused. Also, juries may be less skeptical of a state expert witness, believing them to present a fairer picture, and tend to give their testimony great weight. The prejudicial

178. Daubert v. Merrell Dow Pharmaceuticals, Inc., 113 S. Ct. 2786, 2798 (1993) (citing Rock v. Arkansas, 483 U.S. 44, 61, 107 S. Ct. 2704, 2714 (1987)).

effect against the defendant of expert testimony presented by the prosecution is very high, and thus this testimony should be very reliable before it could pass the balancing test of Article 403.

A difference also exists in the ability of a criminal or civil trial judge to handle marginal evidence that is admitted. In a civil case, often the expert testimony is the primary evidence of the plaintiff and defendant. In the Bendectin litigation, the trial judges often granted summary judgment or judgment n.o.v. due to insufficiency of the evidence. In a criminal case, only rarely would a conviction be reversed due to low probative value of the expert testimony. The "balancing" must occur before the evidence is submitted to the jury at the time the evidence is offered by the prosecution. But when offered by the defendant, a serious question arises concerning which policy should be followed. Should the court admit the evidence and allow the jury to decide its weight, or should the court make this determination by simply excluding the evidence? The balancing test under Article 403 may lead to admission, since the jury may view the expert testifying for the defendant with the same healthy skepticism as would be given experts in a civil trial. This is an issue that courts will increasingly face.

The *Daubert* decision and analysis is a reasonable answer to Learned Hand's question of how the law can best use expert scientific testimony.¹⁷⁹ The analysis easily admits scientific evidence based on general acceptance but will also admit testimony whose reliability can be shown by other factors. The federal courts and the Louisiana state courts, after *Foret*, now have available a workable framework on which to base a consideration of admissibility of expert scientific testimony.

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179. Hand, supra note 1.

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