

JURY EVALUATION OF EXPERT TESTIMONY UNDER THE FEDERAL RULES

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ABSTRACT

“The purpose of expert testimony is to communicate to this body of ordinary persons the wisdom and understanding necessary for the triers to exercise sound judgment in determining the issues in controversy. . . . [T]he examination should be conducted in such manner that a juror should be able to say, ‘My conclusion is in accord with the opinion of the expert, not because he has expressed the opinion, but because he made me understand the facts in such a way that my opinion is the same as his.’”¹

– Mason Ladd

“[T]he prosecutor could . . . substitute experts for all kinds of people making out-of-court statements. . . . [T]he State could sneak it in through the back. What a neat trick – but really, what a way to run a criminal justice system. No wonder five Justices reject it.”²

– Justice Kagan

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1. Mason Ladd, *Expert Testimony*, 5 VAND. L. REV. 414, 428 (1952). Mason Ladd served as dean of the Iowa College of Law from 1939 to 1966 and is best known for his scholarship on evidence. See generally Ronald L. Carlson, *Mason Ladd – In Memoriam*, 66 IOWA L. REV. 685 (1981).

2. *Williams v. Illinois*, 132 S. Ct. 2221, 2272 (2012) (Kagan, J., dissenting).

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INTRODUCTION

In this article, I present a practical critique of the civil jury system,³ specifically the theory and practice. I propose to diagnose inherent problems in the expert witness Rules 702-705 of the Federal Rules of Evidence. This article will address the unintended and un-

3. While some criminal case issues are included, the emphasis will be on the often criticized civil justice system. The reflections and conclusions are presented from the experience and perspective of a trial judge. For an excellent, detailed description of these same problems and issues in the criminal trial context see Julie A. Seaman, *Triangulating Testimonial Hearsay: The Constitutional Boundaries of Expert Opinion Testimony*, 96 GEO. L.J. 827 (2008).

anticipated consequences of the expert witness revolution brought about by the Federal Rules of Evidence.⁴

I will explain why the *Daubert* decision and the amendments to the Federal Rules of Evidence have not addressed these problems, and finally, propose practical solutions to restore the jury to its proper fact-finding role in the American system of justice.

A. *The Problem*

The American Justice System is in crisis and needs fundamental change. Conservatives claim the problem is the irrationality of jurors.⁵ The Left claims an inherent racist and sexist bias.⁶ The insurance industry claims that contingent fees, ambulance-chasing lawyers, and liberal class action rules have created an overly litigious society.⁷ The Intelligentsia believes that model uniform codes and jury modernization, through note taking, juror questioning, and written instructions, will cure all ills.⁸ The public cannot understand why “justice” is so slow.⁹ Big business resents the interference in the conduct of its private affairs demonstrated by irrational, unpredictable, and excessive jury verdicts awarded to litigious claimants incited to pursue frivolous lawsuits by greedy lawyers.¹⁰ All agree there is something fundamentally wrong.

4. See Michael H. Graham, *Expert Witness Testimony and the Federal Rules of Evidence: Insuring Adequate Assurance of Trustworthiness*, 1986 U. ILL. L. REV. 43, 43 (1986). “Ten years after the revolution in expert witness testimony, the legal community has not yet fully appreciated the true impact of the new approach and attitude of the Federal Rules of Evidence on trial practice.” *Id.*

5. See generally *Punitive Damages Reform*, AM. TORT REFORM ASS’N, <http://www.atra.org/issues/punitive-damages-reform> (last visited Apr. 15, 2015) (discussing the unpredictability and inconsistency of punitive damages due to juror discretion).

6. See generally *Reprimand Only for Politically Biased, Racist, Sexist Federal Judge*, LAMBERTON LAW FIRM, LLC (Jan. 24, 2014), <http://www.lambertonlaw.com/reprimand-only-for-politically-biased-racist-sexist-federal-judge/> (reporting racist and sexist emails sent by a United States District Court judge).

7. See generally George S. McCall, *Jury Bias and the Corporate Client: How to Personalize the Impersonal*, KERN & WOOLEY, LLP (July 21, 2005), <http://www.thefederation.org/documents/18%20-%20McCall.doc> (discussing the difficulties of defending a corporate client in the wake of an increasingly litigious society).

8. See generally, AM. JURY PROJECT, ABA, *PRINCIPLES FOR JURIES AND JURY TRIALS* (2005), available at <http://www.americanbar.org/content/dam/aba/migrated/juryprojectstandards/principles.authcheckdam.pdf> (detailing the American Bar Association’s key principles to modernize the jury system).

9. See, e.g., *Why Does the Court System Move so Slow?*, KING & GREEN (Nov. 26, 2013), <http://www.kingandgreen.com/why-does-the-court-system-move-so-slow/>.

10. See generally McCall, *supra* note 7.

Although the debate surrounds lawyers, litigants, and jurors, the courtroom centers around the judge, and the judge conducts the trial in accord with the Rules of Evidence.¹¹ The courtroom itself is architecturally and organizationally designed with a judicial centerpiece. The presiding judge sits centrally and elevated in the courtroom and controls the environment, the schedule, the content and manner of presentation, the instruction to the jury, and the quality of the result. The presiding judge wields virtually dictatorial power during trial. Appellate and judicial misconduct reviews are so distant or restricted to aberrant individual behavior that they provide only general guidance on specific trial conduct.¹²

The collective behavior of the trial judiciary determines the conduct of trial and defines the ethics of the bar. The judge defines the logic and cohesiveness of the trial, the experience of jurors, and ultimately public acceptance of the entire system of justice. The judicial function is, in turn, controlled by substantive law and, particularly in the courtroom, by the Rules of Evidence. Notwithstanding highly publicized, personalized attacks on specific judicial decisions,¹³ the Rules of Evidence have surprisingly avoided critical scrutiny, despite their central role. The revolutionary expert witness provisions of the Federal Rules of Evidence adopted in 1975,¹⁴ and with variations mimicked in virtually every state, excised from the fact-finder jury critical tools necessary to determine truth. To make these rules work, appellate courts have created an incomprehen-

11. Of course judges must follow the clear requirements of the applicable Rules of Evidence. For a general statement of limitations on judicial discretion, see *Rochin v. California*, 342 U.S. 165, 170-74 (1952).

12. See *Bucchiere v. New England Tel. & Tel. Co.*, 488 N.E.2d 1, 1-2 (Mass. 1986). The appellate court looks to reverse decisions based on "whimsy, caprice, or arbitrary or idiosyncratic notions." *Id.* at 3. The trial court is given broad discretion in decision making. The abuse of discretion standard of review is not appellate court disagreement with the decision. *Id.*; see also FED. R. EVID. 611; *Kumho Tire Co., v. Carmichael*, 526 U.S. 137, 153-58 (1999).

13. See Meghan K. Jacobson, *Assault on the Judiciary: Judicial Response to Criticism Post-Schiavo*, 61 U. MIAMI L. REV. 931, 952-53 (2007) ("[T]he 'post-Schiavo crisis' may be a rare circumstance in which the court can and should respond to unjust criticism and allegations of impropriety . . ."); Adam Liptak, *Schiavo Lesson on Judiciary Trump Card*, N.Y. TIMES (Mar. 25, 2005), http://www.nytimes.com/2005/03/24/national/24legal.html?_r=0 (regarding the "extraordinary" efforts of the United States Congress, the federal courts, and the governor of Florida to block the state judge's order to remove Terry Schiavo's feeding tube); see also Jan Hoffman, *Judging Justice: Federal Judge Overturns Murder Verdict, Fueling Feud on Judicial Power*, N.Y. TIMES (Dec. 27, 1997), <http://www.nytimes.com/1997/12/27/us/judging-justice-special-report-federal-judge-overturns-murder-verdict-fueling.html>.

14. Federal Rules of Evidence 702, 703, and 705 were adopted on January 2, 1975. See An Act to Establish Rules of Evidence for Certain Courts and Proceedings, Pub. L. No. 93-595, 88 Stat. 1926 (1975) (establishing the Federal Rules of Evidence).

ble, unworkable instruction to the jury. When experts recount the facts on which they base their opinion, the jury is told that this “basis” evidence cannot be accepted as truth. This fictional construct has recently been recognized as illogical and unworkable by five Justices of the United States Supreme Court.¹⁵

All participants of a lawsuit have distinct roles. The advocate’s role is victory within limits imposed by ethics and law.¹⁶ Each advocate’s job is to present evidence that supports her verdict in the most compelling fashion. The court’s job is to determine the applicable law, to keep the trial fair and within proper evidentiary bounds, and to accurately instruct the jury on the law to be applied. Jurors are always told their role is to listen, to evaluate the evidence, to find the facts based solely on the evidence as presented in court, and to apply the law as given to them by the judge to the facts as they find them in order to determine whether the appropriate standards of proof have been met by the party bearing the burden of persuasion. This jury function is a sophisticated activity that is the result of centuries of highly contested jurisprudential warfare.¹⁷

With the exception of preliminary findings of fact required for evidentiary rulings, it is not the judge’s role to make factual determinations.¹⁸ It is not the role of the jury to determine what is or should

15. See *Williams v. Illinois*, 132 S. Ct. 2221, 2265 (2012) (Kagan, J., dissenting). The charge that “basis evidence” if offered into evidence is not “for the truth,” as has been recommended by appellate courts in every circuit, has been described as “dubious,” “incomprehensible,” a pretense, “futile,” and “meaningless.” Daniel D. Blinka, “*Practical Inconvenience*” or *Conceptual Confusion: The Common-Law Genesis of Federal Rule of Evidence 703*, 20 AM. J. TRIAL ADVOC. 467, 469, 472, 474, 553 (1997).

16. It is impermissible for an attorney to knowingly present perjured testimony. See MODEL RULES OF PROF’L CONDUCT R. 3.3(a)(3) (2013) (“A lawyer shall not knowingly . . . offer evidence that the lawyer knows to be false.”).

17. Hon. Patricia E. Higginbotham, *Foreword* to CHARROW & BERNSTEIN, *SCIENTIFIC EVIDENCE IN THE COURTROOM: ADMISSIBILITY AND STATISTICAL SIGNIFICANCE AFTER DAUBERT*, at i (1994).

The persistence of these tensions reflects the reality that the admissibility of expert testimony lies athwart a long restless legal-fault line—the respective roles of jury and judge. . . . The rules of evidence rest upon this division of function and none has been more elusive than the definition of the roles of judge and jury concerning expert testimony.

Id.

18. Cf. *Blakely v. Washington*, 542 U.S. 296, 313 (2004).

Ultimately, our decision cannot turn on whether or to what degree trial by jury impairs the efficiency or fairness of criminal justice. One can certainly argue that both these values would be better served by leaving justice entirely in the hands of professionals; many nations of the world, particularly those following civil-law traditions, take just that course. There is not one shred of doubt, however, about the Framers’ paradigm for criminal jus-

be the law. Thus, the jury system, in theory, consists of competing attorneys presenting the evidence most favorable to their side, after which the jury determines the true facts concerning the claims presented. Into this clean clear-cut division of responsibilities enters the expert witness. Expert opinion testimony is needed to help the jury evaluate evidence on questions beyond common knowledge.¹⁹ A young man who injures his back in an industrial accident cannot testify to whether the injury is permanent, will eventually heal perfectly, or will deteriorate over the rest of his life, requiring multiple surgical interventions. Likewise, jury members cannot determine whether an injury is permanent from their own experience and common sense. Expert opinion as to the likelihood of future events or interpretation of technical past events is essential to a rational decision. The role of the expert is to apply specialized knowledge to permissible factual findings by the jury.²⁰ This article addresses what the role of the expert witness has become under the Federal Rules of Evidence and who the twenty-first century expert actually is.

B. The Oath-Takers; Compurgation

In 1215, when the Catholic Church refused to continue to officiate at trial by ordeal and therefore negated the theory that God's will would determine trial results, compurgation—or oath taking—became a predominant method of dispute resolution. Parties in conflict assembled respectable people of the community to “testify” under oath to the character of the individuals involved. Only litigants of upstanding character could find others willing to risk eternal damnation by swearing such an oath. The litigant who brought forth the most impressive number of oath takers in support of the righteousness of his cause prevailed. The personal characteristics of those who could be summoned determined truth.²¹ Only as oath-taking procedures deteriorated, did fact finding by jury predominate.

tice: not the civil-law ideal of administrative perfection, but the common-law ideal of limited state power accomplished by strict division of authority between judge and jury.

Id.

19. See Ladd, *supra* note 1, at 418–19.

20. See Hinton v. Alabama 134 S. Ct. 1081, 1087 (2014).

21. See H. Campbell Black, *Antiquities of the Law of Evidence – Compurgation*, 27 AM. L. REV. 498, 501–02 (1893).

Centuries later, “oath-takers” have returned to a determinative position in the courtroom. Today’s oath-takers are the well-paid, highly-credentialed denizens of the courtroom: the expert witnesses. The Federal Rules of Evidence have sadly made these credentialed high priests of courtroom science determinative decision-makers. The essential role of the jury as fact-finder has been seriously compromised. The return of the oath-takers was an unforeseen, unfortunate consequence of the revolution in expert witness testimony effected by the Federal Rules of Evidence adopted in 1975.

C. Changes

The experience of thirty-five years under the Federal Rules of Evidence in the crucible of an unforeseeable technological revolution has revealed problems, the extent of which could never have been anticipated. The fruits of this revolution are now revealed. The use of expert witnesses has expanded exponentially.²² Experts testify in virtually every case on every imaginable subject.²³ The exponential growth of science and technology has produced a heretofore unimaginable population of scientific fields which appear in court and a concomitant growth in forensic sciences.²⁴ The modern courtroom’s “scientific” approach can be applied to almost any subject.²⁵ Jack B. Weinstein, Chief Judge, United States District Court for the Eastern District of New York said, “Hardly a case of importance is tried today in the federal courts without the involvement of a number of

22. Surveys of judges and attorneys reveal that 92% of trials involved plaintiff expert testimony and 79% involved defense expert testimony. The mean number of experts in 1998 was 4.31 per trial. One-third of the attorneys polled acknowledged hiring experts who did not testify at trial. Carol Krafska et al., *Judge and Attorney Experiences, Practices, and Concerns Regarding Expert Testimony in Federal Civil Trials*, 8 PSYCHOL. PUB. POL’Y & L. 309, 318–19, 325 (2002).

23. See Susan Haack, *What’s Wrong With Litigation-Driven Science? An Essay in Legal Epistemology*, 38 SETON HALL L. REV. 1053, 1054 (2008).

24. See *id.*

25. See *United States v. Collins*, 395 F. Supp. 629, 636 (M.D. Pa. 1975) (applying Rule 702 as a threshold competency test, where proffered expert testimony is held admissible so long as the subject matter is “so distinctively related to some science, profession, business or occupation as to be beyond the ken of the average layman”). For a critical approach to the expansion of Rule 702 as a “let it all in” standard of admissible expert testimony, see PETER W. HUBER, *GALILEO’S REVENGE: JUNK SCIENCE IN THE COURTROOM* 24–35 (1991) (noting that the expansion of admissible testimony has bred a catalog of every conceivable error by pairing “serious sciences” such as chemistry or pharmacology with “junk science” such as alchemy); see also PAUL C. GIANNELLI & EDWARD J. IMWINKELRIED, *SCIENTIFIC EVIDENCE* 1–38 (2d ed. 1993); Edward J. Imwinkelried, *The Standard for Admitting Scientific Evidence: A Critique from the Perspective of Juror Psychology*, 100 MIL. L. REV. 99, 101–02 (1983). But see Kenneth J. Chesebro, *Galileo’s Retort: Peter Huber’s Junk Scholarship*, 42 AM. U. L. REV. 1637, 1641–44 (1993).

expert witnesses.”²⁶ The explosion of expert witnesses flooding the courts with purchased testimony has transformed the courtroom from a forum for factual findings into a battle of experts in which performance, persuasiveness, and demeanor have become more important than knowledge or application of specialized knowledge to case-specific facts.²⁷ Because of the latitude given to experts to inject otherwise impermissible hearsay and other material into a case, the time-tested tool for revealing truth, cross-examination, has been emasculated by practical considerations.²⁸

I. THE PREREQUISITE FOR THE ADMISSION OF ANY EVIDENCE:
DIRECT KNOWLEDGE OR AUTHENTICATION

The essence of fact-based trials is the evaluation of testimony presented by witnesses who personally know something relevant to the issues in dispute. Under common law and Federal Rule of Evidence 401, relevancy is defined in part as evidence that tends to “make a fact more or less probable than it would be without the evidence.”²⁹ A witness demonstrates competency through first-hand personal experience. Federal Rule of Evidence 602 says: “A witness may testify to a matter only if evidence is introduced sufficient to support a finding that the witness has personal knowledge of the matter. Evidence to prove personal knowledge may consist of the witness’s own testimony.”³⁰ Likewise, analogous competency is required for

26. Jack B. Weinstein, *Improving Expert Testimony*, 20 U. RICH. L. REV. 473, 473 (1986); see also MARC GALANTER & ANGELA FROZENA, POUND CIVIL JUSTICE INST., *THE CONTINUING DECLINE OF CIVIL TRIALS IN AMERICAN COURTS* 7 (2011), available at <http://www.poundinstitute.org/sites/default/files/docs/2011%20judges%20forum/2011%20Forum%20Galanter-Frozena%20Paper.pdf> (observing that in 2009, 3,164 federal civil cases went to trial).

27. See Douglas R. Richmond, *Regulating Expert Testimony*, 62 MO. L. REV. 485, 487 (1997).

Expert testimony often becomes a point of contention in cases in which an expert witness is alleged to be a ‘professional expert.’ Professional experts usually are compelling witnesses whose primary function is persuading the jury; the expert’s demeanor, personality and communications skills are far more important than the subject of the expert’s testimony. Professional expert witnesses freely change their theories and qualifications to suit their immediate employers.

Id. “‘If I got myself an impartial witness, I’d think I was wasting my money.’” Michael Specter, *Diagnosis or Verdict? Psychiatrists on the Witness Stand*, WASH. POST, July 28, 1987, at H10 (quoting attorney Melvin Belli).

28. See Richmond, *supra* note 27, at 517.

29. FED. R. EVID. 401(a).

30. FED. R. EVID. 602. Of course, this is the threshold for admissibility, different from credence. Credibility is always in question even when the substance of the testimony is not contested by other witnesses. No one takes the stand entitled to belief.

the use of any documentary evidence. Federal Rule of Evidence 901, Authenticating or Identifying Evidence, states: "To satisfy the requirement of authenticating or identifying an item of evidence, the proponent must produce evidence sufficient to support a finding that the item is what the proponent claims it is."³¹ Of course reality, truthfulness, and accuracy are always for the jury to decide.³²

In contrast, the qualifications for expert witness testimony as originally adopted by Federal Rule 702 required only "specialized knowledge" which would "assist" the jury in understanding evidence.³³ By amendment in 2000, this standard was restricted to experts having "specialized knowledge" properly applying a reliable methodology to matters of record.³⁴ The rule permits an expert witness to rely upon extra-evidentiary material, which may include inadmissible material after determining the facts herself.³⁵ There is no requirement that those extra-evidentiary facts ever be independently presented in evidence by personal knowledge or authenticated evidence.³⁶ By divorcing permissible expert opinion from facts presented to the jury, the Federal Rules of Evidence transformed the trial and diluted the role of the citizen jury fact-finders.

II. THE BATTLE ABOUT EXPERTS: THE CREDIBILITY OF PROPERLY ADMITTED EVIDENCE IS ENTIRELY THE PROVINCE OF THE JURY

A. Early Expert Testimony

Expert witnesses have testified to technical opinions for centuries. In thirteenth-century London, physicians testified to the medical value of wolf flesh and surgeons to the severity of wounds.³⁷ Grammarians testified about the meanings of Latin words in legal

31. FED. R. EVID. 901(a).

32. Unfortunately, witnesses lie under oath and falsified documents have been authenticated and admitted into evidence, but these are questions of credibility for the jury to decide and not admissibility for the judge to decide.

33. See Act to Establish Rules of Evidence for Certain Courts and Proceedings, Pub. L. No. 93-595, R. 702, 88 Stat. 1926, 1937 (1975).

34. FED. R. EVID. 702 & advisory committee's note.

35. FED. R. EVID. 703 & advisory committee's note.

36. *Id.*

37. TAL GOLAN, *LAWS OF MEN AND LAWS OF NATURE* 20 (2004).

documents.³⁸ By the eighteenth century, expert witnesses had become commonplace.³⁹

There is also nothing new about frustrations caused by expert testimony.⁴⁰ For decades, debate centered on whether expert testimony should be permitted at all. The argument was made that since expert testimony was only permitted when the jury needed specialized interpretation, juries could not understand the testimony. The most profound thinker on evidence rules in the American system of justice was John Henry Wigmore. Wigmore denounced the exclusion of expert testimony, making his opinion on admissibility very clear:

The inexpediency of applying the present principle [that knowledge must involve rational inferences from adequate data] in any but rare instances is the more apparent when a court assumes to intrude into the technical domain of the engineer, the physician, and other scientific professional men, and to deny the possibilities of knowledge therein, by refusing to listen to that which appears, to the lay understanding of the tribunal, as an incredible assertion or an unlikely inference. Sometimes the exclusion has rested, not wholly on the impossibility of knowing the matter, nor yet wholly on the insufficiency of the particular witness' data of inference, but on mixed grounds, amounting to this, that the subject is one in which certain and accurate results are difficult to reach and upon which most persons' opinions will be merely notional and conjectural, so that it is not worth while to listen to testimony at all. In other words, the court claims for the jury the exclusive privilege of guessing.

The whole story is of the past, unpractical, and ill founded, and is obnoxious to the modern principle of receiving whatever light can be thrown upon the issue by competent persons and then leaving their credit to the jury.⁴¹

Expert opinion evidence became ingrained into the courtroom in the twentieth century but only within strict common law limits pro-

38. *Id.*; Weinstein, *supra* note 26, at 474.

39. Learned Hand, *Historical and Practical Considerations Regarding Expert Testimony*, 15 HARV. L. REV. 40, 47 (1901); *see also* Weinstein, *supra* note 26, at 474.

40. *See* GOLAN, *supra* note 37, at 20, 52–53.

41. 2 JOHN H. WIGMORE, EVIDENCE IN TRIALS AT COMMON LAW § 662(c), at 904–05 (James H. Chadbourn ed., 1979).

tecting jury fact-finding, and those who sold their knowledge for courtroom testimony were generally regarded negatively.

B. The Common Law

Before the codification of the Federal Rules of Evidence in 1975, evidentiary concepts developed by common law decision. After expert testimony became uniformly accepted, the common law required a clear delineation between the jury's fact-finder role, and expert opinion testimony needed to assist jury decision making. The vehicle that maintained the clear distinction between expert opinion testimony and jury fact finding was the hypothetical question—the solution to the original objections to expert testimony.

The common law required facts to be independently and properly presented to the jury and tested in the crucible of cross-examination. Expert witnesses were required to testify in response to a hypothetical question that asked them to assume the accuracy of specific facts that had been previously presented to the jury. Thus, before experts could offer opinion evidence, their case-specific factual assumptions were explicitly revealed. Those case-specific facts had to be independently presented and proven to the jury by witnesses who had actual knowledge of the events and documents that met the evidentiary authentication requirements. Juries were explicitly instructed to determine the facts, and of course, if an expert assumed as fact something that the jury found not to be accurate, to disregard that expert's opinion.⁴²

42. See STANDARDIZED CIVIL JURY INSTRUCTIONS OF PENNSYLVANIA, § 5.31–.32 (1971).

In general, the opinion of an expert has value only when you accept the facts upon which it is based. . . . If you find that any material fact assumed in a particular hypothetical question has not been established by the evidence, you should disregard the opinion of the expert given in response to that question. By material fact, we mean one which was important to the expert in forming his opinion. Similarly, if the expert has made it clear that his opinion is based on the assumption that a particular fact did not exist and, from the evidence you find that it did exist and that it was material, you should give no weight to the opinion so expressed.

Id.; see also CALIFORNIA CIVIL JURY INSTRUCTIONS (BAJI) § 2.40 (2014) (“An opinion is only as good as the facts and reasons on which it is based. If you find that any such fact has not been proved, or has been disproved, you must consider that in determining the value of the opinions.”); KEVIN A. SNIDER, TENNESSEE PATTERN JURY INSTRUCTIONS § 2.30(3) (2006), available at <http://federalevidence.com/pdf/JuryInst/TN.CivJL.pdf> (“You should determine the weight that should be given to each expert’s opinion You should consider: . . . 3. The facts relied upon by the witness[es] to support the opinion”). Also consider New Hampshire’s Jury Instructions:

You may reject an expert’s opinion if you decide that the facts are different from the facts that formed the basis of his/her opinion, the expert’s opinion is based upon

Wigmore explains in his classic 1904 evidence text why the hypothetical question was essential to a rational jury fact-finding process and why it is a logical necessity to explicitly delineate the case-specific factual basis for every opinion offered:

[If] a witness is put forward to testify to the conclusion [of a matter in the case], the premises considered by him must be expressly stated, as the basis of his conclusion; otherwise, since his conclusion rests for its validity upon a consideration of the premises, if those premises are not made to accompany the conclusion, the tribunal might be accepting a conclusion for which the witness had considered premises found by the tribunal not to be true.⁴³

Wigmore explained in detail the logical necessity for the expert to explicitly delineate the factual basis of the opinion and the need for these facts to be independently proven. The logic is inescapable in a rational system of justice:

The key to the situation, in short, is that there may be two distinct subjects of testimony—premises, and inferences or conclusions; that the latter involves necessarily a consideration of the former; and that the tribunal must be furnished with the means of rejecting the [conclusion] if upon consultation they determine to reject the [premise].⁴⁴

This logical distinction was fulfilled by the hypothetical question, an evidentiary tool that allowed counsel to question an expert witness by posing permissible factual findings as a hypothesis. The premise of every expert's testimony had to be found in evidence presented to the jury. The "inferences or conclusions" were the opinions of the expert applying her knowledge—her expertise. Thus, an expert witness was comparable to a factual witness; she had to state the bases for her opinion before being suitable to testify.⁴⁵ The jury learned the facts necessary for the opinion and could accept or reject the opinion based upon: (1) an evaluation of the cre-

misinformation, he/she lacks sufficient information to form a reliable opinion, or he/she lacks the qualifications to render a reliable opinion.

DANIEL C. POPE, NEW HAMPSHIRE CIVIL JURY INSTRUCTIONS § 4.3 (2012).

43. See WIGMORE, *supra* note 41, § 672, at 933–34 (emphasis omitted).

44. *Id.* at 934. A corollary of the need for the expert to delineate the assumed facts is that the hypothetical could not be based upon all the testimony in the case. There is always a question of credibility as to every witness.

45. See *id.* § 562, at 759 ("An expert witness, like any other witness, may be asked on the direct examination, or may be required, to state the *grounds of his opinion . . .*").

dentials of the expert and the reasoning of the expert; (2) the standard credibility evaluation of the expert's testimony; and most importantly, (3) the validity of the facts grounding the opinion. The jury ultimately compared its factual findings to the expert's assumptions.

C. Types of Expert Testimony

Expert witnesses may fall into one of three categories: (1) the participating expert; (2) the original knowledge expert; and (3) the assumption expert.⁴⁶ When questioning the assumption expert, a hypothetical question was required because that individual had no firsthand knowledge.⁴⁷ Without expressly revealing the expert's factual assumptions, the assumption fails to satisfy the first requirement of any witness – factual authentication, the explanation of why the witness has anything relevant to say. Likewise, that first requirement has not been met if the factual scenario revealed in the assumptions had not been independently proven. Without expressly revealing the case-specific factual assumptions the expert has made, the jury cannot evaluate the factual basis of the opinion.

1. The participating expert

An expert may testify from personal, experiential knowledge.⁴⁸ Examples of witnesses who are testifying at least in part from firsthand knowledge include: (1) the treating physician testifying to diagnosis and causation; (2) the elevator repairman called to a scene of a malfunctioning elevator offering her expert opinion that after making repairs, the elevator was in proper working order; (3) the treating physician testifying that based on the x-rays she saw in the emergency room before and after setting a fracture, the bones were perfectly aligned; (4) the Metroliner engineer testifying from 30 years of experience that her train could not possibly stop before striking the children on the tracks, and therefore, nothing she could have done would have avoided their deaths; (5) the medical examiner testifying as to cause of death based upon the autopsy she performed; and (6) the airplane pilot testifying that the readings she

46. *Cf. id.* § 672, at 932 (distinguishing the multiple ways testimony regarding certain facts of a case may be supplied).

47. *See id.* at 933–34.

48. FED. R. EVID. 703.

made and the plane recording just prior to her decision required an emergency landing in the middle of the Hudson River.

These participating expert witnesses have experiential expert knowledge. It is their expertise as a doctor, pilot, or engineer that involved them in the situation in the first place. The father who brings his child to the emergency room and the traveler who boards that train or plane relies upon the expertise of the physician, engineer, or pilot, entrusting their lives to her expert decision making.

2. The original knowledge expert

Even expert witnesses who are retained exclusively for litigation purposes can become original knowledge experts testifying from personal knowledge. If permanent injuries are claimed in a personal injury case, a physician for the defense routinely examines the plaintiff. That examining physician then testifies on the basis of personal knowledge, for example, her findings from a physical examination performed. That examining physician may also rely on the same medical records that any treating physician would rely on if the plaintiff appeared seeking treatment or a second opinion as to whether a condition was permanent or treatable. Original knowledge experts may also testify whenever the claim is that the improper design of a mass-produced product caused injury. The claim that every product contained the same injury-causing defect allows an expert to draw conclusions from any mass-produced exemplar of that design. The expert is examining a clone of the thing, which caused the injury (as opposed to the actual product which injured the plaintiff), and thus, opinion testimony comes from original knowledge.

3. The assumption expert

The two types of experts described above are different in kind from the assumption expert because they have direct knowledge. The assumption expert is hired to present litigation opinion evidence concerning facts about which she has no direct knowledge. The assumption expert is provided with documentation and asked to formulate and express opinions. Those opinions are based on assumed facts, whether the assumptions are revealed to or hidden from the jury. This hypothetical expert can neither meet the Rule 602 requirements of personal knowledge nor testify that the Rule 901 authentication requirements have been met for any of the docu-

ments the witness reviews. Even where the opinion testimony is based on an accepted common set of records, the witness assumes the accuracy or inaccuracy of specific entries in those records or interprets ambiguous notes. In fact, the offered opinion may be essentially grounded in an assumption about the accuracy or inaccuracy of documentary or testimonial evidence reviewed.⁴⁹ These assumptions distinguish the hypothetical expert from the expert testifying from personal, factual knowledge. These witnesses have to be examined by use of a hypothetical question asking the expert to assume the accuracy and truth of certain facts and present a conclusory opinion.

Wigmore uses the example of the determination of the cause of death:

[I]t is obvious that the circumstance on which [opinion testimony] rests . . . must be supplied, *as fact in the case*, by testimony. This may be done in one of two ways,—either (1) by the testimony of the physician himself, based on a personal examination of the body, . . . or (2) by the testimony of someone else who has made such a personal examination. But if the latter method is chosen—and this is the important circumstance—the fact to be considered by the physician *must be placed before him as a hypothesis only*; it may be assumed for the time being, but must afterwards be supplied by the testimony of another person.⁵⁰

If presented by the hypothetical expert, the accuracy of the observations recorded by the examining physician must be assumed. The logical basis for expert testimony based upon a hypothetical question is impeccable:

[I]f the single question were asked, “What in your opinion was the mode of this man’s death?,” it would be impossible for the tribunal to tell whether to accept the witness’ conclusion or not; since, if the tribunal were to find that there had been no congestion of the windpipe, it would be unable to know whether the physician’s conclusion had been based on a consideration of that circumstance alone or on a con-

49. One malpractice case before me turned on what an incomprehensible scribble in a hospital record actually said. The author was not called to testify, presumably because he or she could not be located. Both the plaintiff’s and defense’s experts claimed that they could read the note. However, they read the note entirely differently from each other.

50. WIGMORE, *supra* note 41, § 672, at 932–33.

sideration of some other circumstance alone or of both.⁵¹

Assuming the accuracy of certain facts, the hypothetical question is the logical means for giving an opinion without personal knowledge of the factual prerequisites underlying the opinion. This solution affirms the jury's duty as the fact-finder, merely assisted by expert opinion upon specific factual assumptions.

Thus, under common law, there was no logical disconnect between expert testimony and the jury's fact-finding responsibility. The hypothetical question satisfied the logical gap between jury's fact-finding authority and expert opinion based upon one version of contested facts. For the jury to evaluate the factual basis, the opinion evidence had to be grounded in facts independently proven and specifically articulated. The greatest thinkers about evidence uniformly agree on the logical necessity of the hypothetical question system. McCormick, writing in 1954, said that "[t]he hypothetical question is an ingenious and logical device for enabling the jury to apply the expert's scientific knowledge to the facts of the case."⁵² He further explained that "[t]he hypothetical question allows a jury to directly compare the facts as they find them to be with the assumptions on which expert opinion is based."⁵³ McCormick also affirmed that facts assumed in hypothetical questions must be supported by evidence in the case.⁵⁴

Irving Younger explains the hypothetical thus:

And just briefly, the analytics of it go this way, since ultimately the opinion goes to the jury because it will help them or be necessary to them, depending upon which rule you follow, the opinion must rest exclusively upon the evidence in the case, because it's the evidence in the case that the jury is trying to understand. If the opinion of the expert goes beyond the evidence in the case, the opinion is immaterial. It has nothing to do with the jury's work.⁵⁵

The jury as fact-finder must be presented with factual evidence that gives them the ability to determine the accuracy or inaccuracy of the assumptions made by the expert witness.

51. *Id.* at 933.

52. CHARLES T. MCCORMICK, HANDBOOK OF THE LAW OF EVIDENCE § 16, at 33 (1954).

53. *Id.* § 60, at 137-39.

54. *Id.*

55. Irving Younger, *Expert Witnesses*, 48 INS. COUNS. J. 267, 278 (1981).

Mason Ladd, writing in the *Vanderbilt Law Review*, said that “[t]he use of hypothetical questions is indispensable under the present system if super-experts [hypothetical experts] are to contribute their opinions involving highly scientific matters upon factual situations of which they have no personal knowledge.”⁵⁶ Additionally, Ladd noted “[t]he opinions expressed, if founded upon carefully presented factual data, enable the triers of fact to understand and apply them rather than be forced to accept or reject [experts’ opinions] on their determination of the reliability of the expert only.”⁵⁷

The hypothetical question is designed to allow the jury, the finder of fact, to evaluate the expert opinion offered. Since the jury is the finder of fact and it must apply the law based on the facts as it finds them, the hypothetical question requires the expert to explicitly identify the facts in forming her opinion. Clearly, the jury should appropriately reject any opinion grounded in facts different from the facts found by the jury. Usually the factual basis of divergent expert opinion is different. Judge Learned Hand, in a famous piece from *Harvard Law Review*, related:

May I not say a word here for the much abused hypothetical question? As a mode of literature it is, no doubt, not to be commended, but I confess it seems to me sometimes by no means so bad a method of ascertaining the truth as physicians and other experts insist. The necessity which they constantly, I might almost say persistently, disregard, is of the constitutional function of the jury as the final arbiters of the fact. . . . Yet there can be not the slightest question that except in so far as their conclusions are based on the facts proved they are improper, and that the only way of ascertaining upon what facts they are basing their judgment is to lay before them in detail what are those assumed facts. To permit them to give a general opinion is no less than to make them judges not only of the matters in which they are skilled as general propositions, but of the truth of the facts to which these propositions are applicable, as to which they are in no sense more competent to decide than laymen. I have personally, however, found it altogether impossible to convince many gentlemen of this very obvious necessity.⁵⁸

56. Ladd, *supra* note 1, at 425.

57. *Id.* at 422.

58. Hand, *supra* note 39, at 53 n.2.

The modern evidence expert, Judge Jack B. Weinstein agrees: "The required practice of basing expert opinions on hypothetical fact patterns was theoretically impeccable. It gave the courts access to the expert's general knowledge and evidential hypothesis, but allowed the jury to make the findings of fact predicate to conclusions in the expert line of proof."⁵⁹

Wigmore believed that the trial judge had the "gatekeeper's" function of ruling on whether to allow expert witness testimony after considering the facts in evidence on which the expert bases his opinion. A corollary to the requirement of a hypothetical question, which explicitly reveals factual assumptions, is the near-universal preclusion of a question asking for an opinion "upon all the testimony in the case."⁶⁰ This was not allowed because that question obscured, rather than clarified, the factual assumptions. In 1890, the Court of Appeals of New York explained that this was so because:

[I]t would then be impossible for the jury to determine the facts upon which the witness bases his opinion, and whether such facts were proved or not. . . . When specific facts, either proved or assumed to have been proved, are embraced in the question, the jury are enabled to determine whether the answer to such question is based upon facts which have been proved in the case or not.⁶¹

The new Federal Rules effectively abolished the hypothetical question.⁶² The Federal Rules allow the expert to base opinion on an individual evaluation of the evidence in the case.⁶³ The Federal Rules allow the expert to base opinion on privately analyzed "facts" which have never been presented to the jury by witnesses with personal knowledge. The Federal Rules have illogically obscured the jury fact-finding role and created an evidentiary framework that has always been, and was recently declared by five of nine Supreme Court Justices to be, nonsense.⁶⁴ How could this have occurred?

59. Weinstein, *supra* note 26, at 475.

60. WIGMORE, *supra* note 41, § 681(1)(a), at 942.

61. *People v. McElvaine*, 24 N.E. 465, 467 (N.Y. 1890).

62. See FED. R. EVID. 705. While the rule gave lip service to the hypothetical question, the reality is the hypothetical question has been eliminated. Lawyers have effectively forgotten how to ask a hypothetical question, and it is not taught in trial advocacy classes in law school.

63. FED. R. EVID. 703.

64. *Williams v. Illinois*, 132 S. Ct. 2221, 2265, 2269 (2012) (Kagan, J., dissenting).

D. Criticism of the Hypothetical Question

The hypothetical question brought its own difficulties. In practice, the hypothetical was abused. It was criticized as allowing lawyers to testify and permitting closing argument in the middle of trial.⁶⁵ The hypothetical question became burdensome in courtroom use.⁶⁶ Some were so long and confusing that they failed to assist the jury.⁶⁷ Abusive questions lasted hours and contained thousands of words.⁶⁸ One hypothetical question was reported to be 20,000 words.⁶⁹ One question took nearly an entire day and was asked to each of six different experts.⁷⁰ Questions sometimes incorporated incorrect facts or unnecessary facts.⁷¹ The judiciary of that time had no ability to control this nonsense.

Hypothetical questions were not judicially examined before being asked and, unbelievably, had sometimes not even been previously shared with the expert. The uncoordinated hypothetical question exasperated expert witnesses who felt like the lawyers were “trying to make a medical key fit a legal key-hole.”⁷² The hypothetical question became the whipping boy for everything wrong with American justice. The solution to all the ills of litigation became encapsulated into the battle cry to eliminate the hypothetical.

So bitter was the criticism, that twenty years after publication of his treatise explaining the logical necessity of the hypothetical question, Wigmore himself concluded that “logical necessity” had to be “sacrificed” and the hypothetical question “extirpat[ed]”: “It is a strange irony that the hypothetical question, which is one of the few truly scientific features of the rules of evidence, should have become that feature which does most to disgust men of science with the law of evidence.”⁷³ Wigmore’s conclusion was that the hypothetical

65. See Jennifer L. Mnookin, *Idealizing Science and Demonizing Experts: An Intellectual History of Expert Evidence*, 52 VILL. L. REV. 763, 780–81 (2007).

66. *Id.*; see also Ladd, *supra* note 1, at 426–27.

67. See WIGMORE, *supra* note 41, § 686, at 962; Mnookin, *supra* note 65, at 780–81; Hubert D. Smith, *Coöperation Between Law and Science in Scientific Proof*, 19 TEX. L. REV. 414, 421 n.12 (1941).

68. Mnookin, *supra* note 65, at 780–81. One must consider the possibility that counsel intentionally created convoluted and absurdly long hypothetical questions to preclude the jury from making a logical comparison.

69. The answer as recorded to one such obviously nonsensical presentation containing 20,000 words was “I don’t know.” Smith, *supra* note 67, at 421 n.12.

70. *Long Hypothetical Questions*, 5 The Ohio L. Rep. 3, 45 (1907).

71. See Mnookin, *supra* note 65, at 780–81.

72. Smith, *supra* note 67, at 423.

73. WIGMORE, *supra* note 41, § 686, at 962.

question must go as a requirement for expert opinion testimony to be admitted in court:

Its abuses have become so obstructive and nauseous that no remedy short of extirpation will suffice. It is logical necessity, but a practical incubus; and here logic must be sacrificed. . . .

No partial limitation of its use seems feasible, by specific rules. Logically, there is no place to stop short; practically, any specific limitations would be more or less arbitrary, and would thus tend to become mere quibbles. . . .

The foregoing proposals, be it understood, represent a mere practical rule of thumb. They do violence to theoretical logic. But in practice they would produce less actual misleading of the jury than the present complex preciosities.⁷⁴

Wigmore reluctantly, but clearly, expressed a desire to abandon the only truly scientific part of the jury trial process.

The 1975 Federal Expert Rules are the fruit of this conclusion. But when legal thought embraced a technocratic philosophy, which allowed experts to analyze information outside the courtroom and determine admissibility for use and credibility under “liberalized” rules of expert evidence, the deterioration of jury “fact-finding” became inevitable. After 35 years of experience with the new Rules, we see that the loss of logic has transmogrified a fact-finding system into an illogical oath-swearing battle of experts. As the bench and bar exclusively used the approach of allowing experts to freely testify, both the bench and bar have forgotten the illogic of the system. Federal Rules of Evidence 702, 703, and 705 were meant to be a fix, but have instead had the unforeseen, non-sanguine result of elevating the expert to an unwarranted position of authority and creating an industry of professional witnesses—modern oath-takers.

E. Expert Testimony Under the Federal Rules of Evidence: The Revolution of July 1, 1975

The codified Federal Rules of Evidence created a revolution in expert testimony.

Enactment of the Federal Rules of Evidence in 1975 brought about a profound change in the common law approach to

74. *Id.* at 962–63.

expert witness testimony An even more significant change under the Federal Rules of Evidence allowed the expert witness to rely upon facts, data, or opinions . . . regardless of whether such information was admitted or admissible in evidence. . . .⁷⁵

Neither the academic and judicial codifiers nor congressional adopters anticipated or even acknowledged the revolutionary nature of the changes proposed. The notes say: "The Advisory Committee is especially proud of the rules dealing with expert testimony. This area had become encrusted with a heavy and suffocating layer of technicalities wholly inconsistent with the simple facts of life and insulting to the intelligence of American [J]urors."⁷⁶ Despite the breadth of this condemnation, the substance of the criticism was actually limited to, "the universally abused hypothetical question, read in droning voice and at painful length to the expert."⁷⁷ The comment says: "The purpose of these [later] provisions is the elimination, or at least the reduction of instances, of objectionable features of the hypothetical question."⁷⁸

Although totally overturning the logical cornerstone of expert testimony, the expert testimony provisions were adopted without significant controversy or discussion.⁷⁹ The adopters clearly expect "neutral" experts offering honest opinions.⁸⁰

III. HOW THE REVOLUTION OCCURRED: THE 1938 MODEL CODE

Pressure for a unified codification of common law rules of practice, pleading, and procedure led to the Federal Rules of Civil Procedure of 1938.⁸¹ As part of this general codification movement, the American Law Institute ("ALI") appointed a committee to develop comprehensive evidentiary rules. This committee included Judge

75. Graham, *supra* note 4, at 43.

76. *Rules of Evidence: Hearings Before the Spec. Subcomm. on Reform of Fed. Criminal Laws of the Comm. on the Judiciary H.R., 93d Cong. 88 (1973)* (statement of Albert E. Jenner, Jr., Chairman), in *THE FEDERAL RULES OF EVIDENCE: LEGISLATIVE HISTORY AND RELATED DOCUMENTS 88* (James F. Bailey III & Oscar M. Trelles II eds., 1980).

77. *Id.*

78. *Id.* at 96 (statement of Edward W. Cleary).

79. *See id.* at 99 (discussing senate's passing of bill without amendment).

80. *See THE FOUNDATION OF THE AM. COLL. OF TRIAL LAWYERS, RECOMMENDATION AND STUDY RELATING TO THE ADVISORY COMMITTEE'S PRELIMINARY DRAFT OF THE PROPOSED FEDERAL RULES OF EVIDENCE: PROJECT OF A COMMITTEE OF NEW YORK TRIAL LAWYERS 66 (1970).*

81. *Cf. Jack B. Weinstein, After Fifty Years of the Federal Rules of Civil Procedure: Are the Barriers to Justice Being Raised?*, 137 U. PA. L. REV. 1901, 1910-11 (1989).

Learned Hand and Charles T. McCormick. Also participating was Mason Ladd, who would be involved in every evidence code from this ALI committee through final enactment of the Federal Rules of Evidence in 1975.⁸² The guiding principle concerning expert testimony was Wigmore's conclusion that "extirpation" was the only solution to hypothetical question abuse.⁸³

Wigmore was called "Chief Consultant" to the ALI project. The committee reporter, Harvard Law Professor Edmund M. Morgan, explained the process by which the committee received Wigmore's opinion. The Reporter, Mr. Morgan, before distributing a Draft to his Advisers, sent a preliminary copy to Mr. Wigmore, who returned it to Mr. Morgan with his criticisms and suggestions.⁸⁴ Normally, Mr. Morgan incorporated many of these suggestions into the Draft submitted to his Advisers.⁸⁵ Those not incorporated into the Draft were submitted to a meeting of the group for discussion in connection with their consideration of the Draft. In each instance, the group passed on the question of whether Mr. Wigmore's suggestion should be adopted.⁸⁶ The resulting Model Code of Evidence effectively codified Wigmore's thought on the hypothetical question.⁸⁷ Although never adopted by any state, the ALI model code was studied in law schools and became the foundation of future attempts at codification.⁸⁸

A. *The Uniform Rules of Evidence: 1949*

In 1942, the National Conference of Commissioners on Uniform State Laws ("NCUSL") appointed a special committee to develop uniform rules of evidence based on the Model Code.⁸⁹ This committee included Model Code veterans: Learned Hand, Edmund Mor-

82. After being a member of the ALI committee, Ladd was on the advisory committee of the NCCUSL that drafted the Uniform Rules of Evidence. He served as an adviser to the feasibility study on Federal Rules of Evidence and as a consultant to the Advisory Committee on Rules of Evidence that ultimately published the Federal Rules of Evidence.

83. WIGMORE, *supra* note 41, § 686, at 962.

84. Cf. Edmund M. Morgan, *Foreword* to AMERICAN LAW INSTITUTE, MODEL CODE OF EVIDENCE 12-13 (1942).

85. *Id.*

86. *Id.*

87. *See id.* at 210-13.

88. Eleanor Swift, *One Hundred Years of Evidence Law Reform: Thayer's Triumph*, 88 CALIF. L. REV. 2437, 2439 (2000).

89. NAT'L CONF. OF COMM'RS ON UNIF. STATE LAWS, HANDBOOK OF THE NATIONAL CONFERENCE OF COMMISSIONERS ON UNIFORM STATE LAWS, AND PROCEEDINGS OF THE ANNUAL CONFERENCE MEETING IN ITS SIXTY-SECOND YEAR 68-69 (1953).

gan, Mason Ladd, and Charles T. McCormick.⁹⁰ Also on the Committee were Judge Joe Ewing Estes and Albert E. Jenner, Jr., who later became part of the advisory committee for the Federal Rules of Evidence. Professor Morgan fulfilled Wigmore's role.⁹¹

The NCUSL published a final draft of the Uniform Rules of Evidence in 1953.⁹² These Rules were adopted only in Iowa and in part by California and New Jersey.⁹³

B. Advisory Committee on Rules of Evidence

In 1965 Chief Justice Earl Warren appointed an Advisory Committee on Rules of Evidence to draft a Federal code.⁹⁴ The members appointed included Judge Joe Estes, Judge Jack B. Weinstein, Albert E. Jenner, and Mason Ladd. In 1968, the Advisory Committee published its draft of the Federal Rules of Evidence. After bench and bar commented, a revised draft was submitted to the Judicial Conference. After rounds of drafts and comments, the Supreme Court submitted the Judicial Conference approved draft to Congress in 1972. Throughout these revisions, no changes were made to the Article VII section pertaining to expert testimony.

C. The Adoption Process

The House of Representatives and the Senate held hearings. Although the rules went through drafts in Congress, the expert witness provisions were never changed and virtually never debated. Despite the revolutionary changes from the common law, Article VII remained as originally submitted to Congress. Signed into law by President Gerald Ford on January 2, 1975, effective July 1, 1975, the original revolutionary changes, as proposed by Wigmore decades earlier, were adopted.⁹⁵

90. *Id.* at 162.

91. *Id.*

92. *Id.* at 164–215.

93. *Rules of Evidence: Hearings Before The Special Subcomm. on Reform of Fed. Criminal Laws of the Comm. on the Judiciary H.R.*, 93d Cong. 11, 517 (1973) (statement of Albert E. Jenner, Jr., Chairman).

94. See NAT'L CONFERENCE OF COMM'RS ON UNIF. STATE LAWS, HANDBOOK OF THE NATIONAL CONFERENCE OF COMMISSIONERS ON UNIFORM STATE LAWS, AND PROCEEDINGS OF THE ANNUAL CONFERENCE MEETING IN ITS SEVENTY-FOURTH YEAR 22 (1965); 36 F.R.D. 119, 119 (1965).

95. Act of Jan. 2, 1975, Pub. L. No. 93–595, 88 Stat. 1926 (effective July 1, 1975).

D. What Exactly Did This Revolution Do?

The Federal Rules of Evidence enacted by Congress in 1975 made dramatic changes to the common law, altering the fundamental nature of expert testimony evidence.⁹⁶ The Federal Rules, for the first time, permitted the expert to offer opinions based upon undisclosed evidence “of record” and to assume the truth of factual material never presented to the jury—possibly even inadmissible in evidence.⁹⁷ The rules do not require the expert to explain the case specific facts on which the opinion is based. Presentation of the underlying factual basis was deferred to opposing counsel’s strategic decisions on cross-examination.⁹⁸ Presentation of direct evidence by witnesses who actually know relevant facts became optional.⁹⁹

The most dramatic changes were incorporated into the new Rules 703 and 705.¹⁰⁰ Rule 703 addresses permissible bases for expert opinion. Originally it read:

96. The problems outlined in this paper were anticipated by some. The Congressional Record contains a prescient analysis from the Colorado Bar:

The hypothetical question has long been a subject of controversy and your committee favors its demise. However, it strongly felt that the proposed rules go too far in this direction of liberalizing the requirements for the admission of expert testimony. The proposed rules require no foundation to be admitted on which the expert based his opinion. Your Committee feels that it is absolutely essential that a foundation be required before an expert opinion be admitted. Otherwise, once any expert has been qualified as such he could offer his opinion on any matter with no reasons to support that opinion. For example, one can envision the following dialogue immediately after the expert has been qualified as an orthopedic surgeon:

“Q. Doctor, do you have an opinion based upon a reasonable degree of medical certainty as to the extent of permanent disability suffered by the plaintiff as a result of this automobile accident?

A. Yes.

Q. What is your opinion?

A. She is totally permanently disabled.

Q. Thank you, doctor that is all.”

3 THE FEDERAL RULES OF EVIDENCE: LEGISLATIVE HISTORIES AND RELATED DOCUMENTS 354 (James F. Bailey, III & Oscar M. Trelles, II eds. 1980); *Rules of Evidence: Hearings Before The Subcomm. on Reform of Federal Criminal Laws of The Comm. on The Judiciary H.R.*, 93d Cong. 356 (1973) (statement of Francis W. Jamison, Chairman).

97. Act of Jan. 2, 1975, 88 Stat. at 1937.

98. FED. R. EVID. 705. “Unless the court orders otherwise, an expert may state an opinion—and give the reasons for it—without first testifying to the underlying facts or data. But the expert may be required to disclose those facts or data on cross-examination.” *Id.*

99. *Id.*

100. Judge, professor, and evidence textbook author Irving Younger remarked, “I regard this particular portion of the federal rules as the single most radical thing in the entire codification, and the *wrongest* thing in the codification.” Irving Younger, *A Practical Approach to the Use of Expert Testimony*, 31 CLEV. ST. L. REV. 1, 23 (1982).

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.¹⁰¹

Rule 705 originally read: "The expert may testify in terms of opinion or inference and give reasons therefor [sic] without prior disclosure of the underlying facts or data, unless the court requires otherwise. The expert may in any event be required to disclose the underlying facts or data on cross-examination."¹⁰²

Rules 703 and 705 permit an expert to rely upon facts never presented and even inadmissible evidence, allowing her personal interpretation of the facts to prevail.¹⁰³ The codifiers believed that the great advance of Rule 703 was the elimination of the hated hypothetical question:

Most important is that under Rule 703 an expert is no longer required to state the factual premise of his opinion on direct examination, thus eliminating the excruciatingly long hypothetical question, which served primarily as a pitfall for the attorney posing it and a source of boredom for the trier of fact listening to it.¹⁰⁴

The second sentence of Rule 703 initially left unclear whether inadmissible facts or data relied upon by the experts could be revealed

101. Act of Jan. 2, 1975, 88 Stat. at 1937.

102. *Id.* at 1938.

103. This provision remains even in the amended forms of the rule. Although, it is theoretically the judge who decides whether information is the type "reasonably relied upon" in fact because the judge must make findings of fact on questions of admissibility. See FED. R. EVID. 703 advisory committee's note. See FED. R. EVID. 105 for a description of a court's duty to limit the scope of evidence. The Judge may likely determine his view by the expedient of asking the expert if other experts in the field reasonably rely on this hearsay. See Douglas R. Richmond, *Regulating Expert Testimony*, 62 MO. L. REV. 487, 513-14 (1997). Effectively, even when enforced by the judiciary, the Rules allow the expert to dictate what is evidentiary. *Id.* This article will not directly address the multitude of problems when the expert's field is of the forensic variety beyond saying that allowing forensic experts to testify to anything customarily relied upon in the forensic field is allowing the advocate-expert to define their own science as anything helpful in getting a court to accept their testimony.

104. *Rules of Evidence: Hearings Before the Special Subcomm. on Reform of Fed. Criminal Laws of the Comm. on the Judiciary H.R.*, 93d Cong. 438 (1973) (statement of Albert E. Jenner, Jr., Chairman), in *THE FEDERAL RULES OF EVIDENCE LEGISLATIVE HISTORY AND RELATED DOCUMENTS* 88 (James F. Bailey & Oscar M. Trelles eds., 1980).

to the jury. After twenty-five years of contradictory decisions,¹⁰⁵ followed by scholarly criticism,¹⁰⁶ the inadmissibility problem was recognized, although not resolved, when Rule 703 was clarified by amendment in 2000:

Rule 703 has been amended to emphasize that when an expert reasonably relies on inadmissible information to form an opinion or inference, the underlying information is not admissible simply because the opinion or inference is admitted. . . . When information is reasonably relied upon by an expert and yet is admissible only for the purpose of assisting the jury in evaluating an expert's opinion, a trial court applying this Rule must consider the information's probative value in assisting the jury to weigh the expert's opinion on the one hand, and the risk of prejudice resulting from the jury's potential misuse of the information for substantive purposes on the other. The information may be disclosed to the jury, upon objection, only if the trial court finds that the probative value of the information in assisting the jury to evaluate the expert's opinion substantially outweighs its prejudicial effect.¹⁰⁷

The 2000 amendment acknowledged the problem of reliance upon inadmissible evidence but failed to correct the transformative flaw of presenting possibly dispositive opinion evidence based on partially or entirely hidden bases. Therefore, the jury cannot possibly evaluate these bases. Indeed, the amendment institutionalized hiding the factual basis of evidence.¹⁰⁸

Rules 703 and 705 empower the expert to hide personal credibility judgments, to quietly draw conclusions, to individually decide what is proper evidence, and worst of all, to offer opinions without even telling the jury the facts assumed. The expert is permitted to review depositions or unsubstantiated hearsay in reports and *sub silentio* determine which of the conflicting evidence she accepts as accurate. An accident reconstructionist can choose to accept an anonymous

105. Compare *United States v. Rollins*, 862 F.2d 1282 (7th Cir. 1988), with *United States v. 0.59 Acres of Land*, 109 F.3d 1493 (9th Cir. 1997).

106. Ronald Carlson, *Policing the Basis of Modern Expert Testimony*, 39 VAND. L. REV. 577, 578 (1986); Paul R. Rice, *Inadmissible Evidence as a Basis for Expert Testimony: A Response to Professor Carlson*, 40 VAND. L. REV. 583, 583 (1987).

107. FED. R. EVID. 703 advisory committee's note on 2000 amendment. This amendment clearly eliminates any concept that Rule 703 constitutes an unwritten hearsay exception.

108. Comparable to having an eyewitness identify a perpetrator without being required to testify to anything the witness actually saw.

witness's statement contained in a police report and discount sworn deposition descriptions. A physician dealing with a comatose patient who survives six months before expiring can accept nurses' notes about lack of consciousness and reject others, which imply conscious recognition.¹⁰⁹ Rule 703 opens the courtroom to questionable "forensic" science whose entire existence is owed to litigation. These kinds of "sciences" have resulted in systematic injustice.¹¹⁰

The expert can review any materials she thinks appropriate. The expert witness can decide what is to be considered and what ignored, and is even empowered to ignore rules of evidence developed over centuries.¹¹¹ With the advent of these rules, the case-specific factual basis of the opinion does not ever have to be proven to the jury, nor even revealed by the expert witness.¹¹²

The justification for this exaltation of the expert was the thinking that what is utilized for "real life" decisions must be admissible in court.¹¹³ Expert medical opinion is admissible despite grounding in inadmissible hearsay because in real life such information is relied upon for "life and death decisions."¹¹⁴ As explained in the Note to Rule 703, "the rule is designed to broaden the basis for expert opinions beyond that current in many jurisdictions and to bring the judicial practice into line with the practice of the experts themselves when not in court."¹¹⁵ While this is consistent with the liberal admissibility approach generally taken by the Federal Rules, it has resulted in such dramatic power being given to the experts that it has created the unanticipated consequence of a class of professional experts

109. Trial presided over by Judge Bernstein in which defense experts ignored nurse's note indicating conscious recognition in a patient the physicians believed to be comatose. See Seymour Cominsky v. Holy Redeemer Health System, No. 3625, 2002 WL 34103003 (Ct. Com. Pl. Pa. Sept. 6, 2002).

110. See Specter, *supra* note 27, at H10; see also Julie A. Seaman, *Triangulating Testimonial Hearsay: The Constitutional Boundaries of Expert Opinion Testimony*, 96 GEO. L.J. 827, 876-77 (2008). With forensic experts there is often no out-of-court field for things to be customary in. Thus a forensic expert self-defines what may be customarily relied upon.

111. The Rules of Evidence are not artificial constructs. Evidentiary rules have developed over centuries of jurisprudence with the intent, as codified in the Federal Rule of Evidence 102, "to administer every proceeding fairly . . . to the end of ascertaining truth and securing a just determination." FED. R. EVID. 102. These goals are not shared by the highly paid professional expert witness advocates.

112. FED. R. EVID. 705. "Unless the court orders otherwise, an expert may state an opinion — and give the reasons for it — without first testifying to the underlying facts or data. But the expert may be required to disclose those facts or data on cross-examination." *Id.*

113. Fed. R. Evid. 703 advisory committee's notes on 1972 proposed rules.

114. *Id.*

115. *Id.*

who view themselves as courtroom advocates and has transformed “fact-finding” in court, contributing to the explosion of litigation itself. The Rules’ solution, designed to “breathe free air into courtroom proceedings,” and free the courtroom from the “stifling” effect of the hypothetical question, under the guise of liberation, in fact elevated the expert witnesses to unequalled prominence, resulting in the proliferation of professional expert witnesses.

IV. THE UNANTICIPATED, UBIQUITOUS PROFESSIONAL EXPERT

The codifiers believed that their reforms would produce legitimate, honest, truth-seeking experts who would bring sensible, specialized knowledge into the courtroom to help the jury make factual findings. The drafters of the Federal Rules and their intellectual forbearers believed the courtroom would fill with honest experts engaged in the balanced presentation of their professional knowledge applied to the known facts. The theory is that experts are necessary to interpret evidence for the jury and have been brought to the courtroom to provide technical information useful in jury decision-making.¹¹⁶

However, only the jurors actually believe this. The professionals, the lawyers, and judges believe that experts are hired to advocate.¹¹⁷ The early criticism that lay jurors cannot evaluate an expert’s science remains the prevalent professional perspective.

Inquiry and investigation to learn truth is the professional business of scientists, historians, and academics. True inquiry intends to learn and discover answers irrespective of any desired or presupposed conclusion. Advocacy, the professional business of lobbyists and attorneys, is the legitimate marshalling of opinion to persuade an audience of the truth of preordained propositions. The new Federal Rules’ “solution” to the problem of the hypothetical question

116. The Federal Rules instruct that “[i]n order to ‘assist the trier of fact,’ the expert testimony must go beyond what the trier of fact would have known and understood even without the expert.” Jennifer L. Mnookin, *Expert Evidence, Partisanship, and Epistemic Competence*, 73 BROOK. L. REV. 1009, 1012 n.8 (2008).

117. PATRICK E. HIGGINBOTHAM, *Commentary to MOORE’S FEDERAL PRACTICE PROPOSED AMENDMENTS TO CIVIL RULES 26 AND 56 § 1.01*, at 5, 7 (2008)

This central role of experts is attended by a change in their relationship to the lawyers retaining them. . . . [T]he expert is now seen as a part of the party’s camp and seldom as an independent professional offering detached objective opinions of science. In short, experts are today often advocates of a cause of the retaining party. . . . [T]he proposed rule amendments accept that the expert witness today is an advocate for the party who hires him; that he is part of the lawyer team.

Id.

exquisitely exacerbates the “battle of experts” in which opposing sides provide professional expert witnesses, advocates with credentials who support their employers’ positions while eliminating the only true equalizing factor: the facts sworn to by witnesses with actual knowledge.¹¹⁸ The result is the presentation of conflicting expert testimony that requires the jury to decide which expert to believe without the benefit of case-specific facts to perform the fact-finding mission they are solemnly told is the purpose for which they were selected. In the absence of independent factual proof and lacking any clear explication of the expert’s factual assumptions, the jury is forced to rely on credentials, the expert’s courtroom manner, and her style of testimony. This “battle of the experts” yields inconsistent and unreliable results, and encourages expert bias. Jury confusion about fact-finding is compounded by logically incomprehensible instructions from the judge who tells them that the “facts” which they heard only from the mouths of experts were not to be considered for their truth, but somehow would help the jury evaluate the expert opinion.¹¹⁹ A jury can best assess the value of an expert witness’s testimony by an analysis of the application of expertise to the facts. In the absence of factual presentations, juries are forced to rely on proxy criteria.¹²⁰ Because there will not be a factual analysis, litigators select experts for how the jury will use proxy criteria in evaluating their testimony. Counsel seeks out those experts most capable of “performing” their role in the most credible manner.¹²¹ This pervades courtrooms across the country.

118. See *Stoleson v. United States*, 708 F.2d 1217, 1222 (7th Cir. 1983) (“[T]here is not much difficulty in finding a medical expert witness to testify to virtually any theory of medical causation short of the fantastic.”); *Johnston v. United States*, 597 F. Supp. 374, 415 (D. Kan. 1984) (“This Court is disappointed with the apparent fact that these so-called experts can take such license from the witness stand; these witnesses say and conclude, things which, in the Court’s view, they would not dare report in a peer-reviewed format. It has been as if no one else is listening.”); see also Neil Vidmar & Shari Seidman Diamond, *Juries and Expert Evidence*, 66 BROOK. L. REV. 1121, 1133 (2001); Barry M. Epstein & Marc S. Klein, *The Use and Abuse of Expert Testimony in Product Liability Actions*, 7 SETON HALL L. REV. 656, 657 (1987).

119. Paul C. Giannelli, *Confrontation, Experts, and Rule 703*, 20 J.L. & POL’Y 443, 447 (2012) (“Meaningful ‘confrontation’ of an in-court expert without adequate discovery is often an insurmountable task.”). Of course, this problem is exacerbated when the resources of the opposing sides are not commensurate, as is frequently the case in criminal cases and many domestic relations matters.

120. Mnookin, *supra* note 116, at 1013.

121. *Roback v. V.I.P. Transp., Inc.*, No. 91C5902, 1994 WL 548197, at *4 (N.D. Ill. 1994) (“Indeed, having viewed and heard his [expert] testimony, the court believes Olson was hired to be nothing more than a pleasant looking, white-haired, hired advocate whose purpose is to confuse the issues.”); see also Maureen E. Lane, *Twelve Carefully Selected Not So Angry Men: Are*

The empowerment of experts created by the Federal Rules was not the only driving force but helped create a vast cadre of professional experts who sell not their knowledge, education, and professional experience, but their courtroom experience and expertise in advocacy. The Rules have empowered and enriched credentialed witnesses skilled in courtroom demeanor and biased advocacy.¹²²

Any use of expert witnesses paid by a party raises concerns of partisanship, competency, and honesty. Because experts are partisan witnesses paid by a party, there is an inevitable danger of bias. When an expert witness testifies exclusively for one side, one industry, or one company, the temptations of explicit bias became grossly magnified. An expert who advertises her services extensively in legal journals and makes a significant percentage of a high income exclusively from litigation activities becomes dogmatically biased. As the expert repetitively prepares for the hiring party, she loses objectivity, and if not intentionally or ideologically, unconsciously slants testimony.¹²³ One expert, who had testified in 75 cases, exclusively testifies for health care practitioners:

Jury Consultants Destroying the American Legal System?, 32 SUFFOLK U. L. REV. 463, 474–76 (1999) (concerning the rise of jury selection experts).

122. Michelle Morgan Ketchum, Comment, *Experts: Witnesses for the Prosecution? Establishing an Expert Witness's Bias Through the Discovery and Admission of Financial Records*, 63 UMKC L. REV. 133, 157 (1994); see also *Indianapolis Colts, Inc. v. Metro. Balt. Football Club Ltd. P'ship.*, 34 F.3d 410, 415 (7th Cir. 1994) (“The battle of experts that ensues is frequently unedifying. . . . Many experts are willing for a generous (and sometimes for a modest) fee to bend their science in the direction from which their fee is coming. The constraints that the market in consultant services for lawyers places on this sort of behavior are weak, as shown by the fact that both experts in this case were hired and, we have no doubt, generously remunerated even though both have been criticized in previous judicial opinions.”); *In re Air Crash Disaster at New Orleans*, 795 F.2d 1230, 1234 (5th Cir. 1986) (“[T]he professional expert is now commonplace. That a person spends substantially all of his time consulting with attorneys and testifying is not a disqualification. But experts whose opinions are available to the highest bidder have no place testifying in a court of law, before a jury. . . .”).

123. Mnookin, *supra* note 116, at 1010–11.

The confluence of adversarialism with the need for expert information has also permitted the creation of a class of “professional” expert witnesses, those for whom expert witnessing is no longer a sideline, a once-in-a-while add-on to their primary work as a physician, economist, epidemiologist, statistician, or whatnot, but rather is now a significant, or even primary, source of their earnings. This group, obviously, has an especially strong interest in maintaining its marketability by being a “team player,” and telling potential employers (that is, parties) what they want to hear. The marketplace for experts cannot, therefore, be trusted to produce reliable information.

Id. at 1011–12.

[A]s the expert prepares for and becomes enmeshed in the case, he will increasingly, if unconsciously, side with the party that hired him, lose some degree of objectivity, and slant his testimony in that party's favor. The more dramatic version of the same fear is that some unscrupulous experts will literally offer themselves for hire,

Q. Have you ever offered testimony against a health care practitioner in Pennsylvania?

A. No.

Q. Is that because you view it as bad for business?

A. Yes.

Q. So my question to you, ma'am, is if one of your female patients is injured at the hands of a medical mal practitioner, you're not going to come into court and testify on her behalf because of your business relationships; is that correct?

A. Yes.¹²⁴

Credentialed courtroom advocates who have been in more courtrooms across the country than all counsel in the case combined have made, and will continue to amass, fortunes. The extraordinary payments available to expert witnesses have created an industry of paid mercenary "hired guns."¹²⁵ Extreme financial incentives exist to adopt the role of advocacy rather than the role of inquiry. The system abhors the honest inquiring scientist and enriches the ideological advocate with glib answers and a penchant for intransigency. She who will be most persuasive to non-expert jurors will be hired. The experienced professional witness is well-aware that the rules permit leaps over inconvenient facts, leaps which need never be revealed, and is proficient at blatant advocacy when answering cross-examination questions.

In a class action trial against Kia Motors alleging that Kia's vehicles suffered from defective brakes because they needed to be replaced every 5,000 miles, a defense expert with forty-one years of experience in the automotive industry, who estimated he had testi-

selling their opinions and their credentials to anyone who meets their price.

Id. at 1010-11; see also Samuel R. Gross, *Expert Evidence*, 1991 WIS. L. REV. 1113, 1132 (1991) (finding that professional partisanship becomes a problem when experts become repeat performers whose inclinations are known and who are hired because of the testimony they give).

124. *ImSchweiler v. Weizer*, Court of Common Pleas, Schuylkill County No. S-218-2010; testimony presented May 15, 2013.

125. *Ketchum*, *supra* note 122, at 157; see also David E. Bernstein, *Expert Witnesses, Adversarial Bias, and the (Partial) Failure of the Daubert Revolution*, 93 IOWA L. REV. 451, 453-55, 454 n.13 (2008) (stating hired guns are widely recognized as a serious problem); Anthony Champagne, Daniel Shuman, & Elizabeth Whitaker, *An Empirical Examination of the Use of Expert Witnesses in the Court*, 31 JURIMETRICS J. 375, 376 (1991) ("Some claim that expert witnesses are simply well-paid prostitutes who sell their testimony to the highest bidder."); Weinstein, *supra* note 26, at 482 ("An expert can be found to testify to the truth of almost any factual theory . . .").

fied in sixty-four trials, admitted that he had never testified for a consumer against an automobile company. His testimony was:

Q. I think you said today that as far as you are concerned, brake components can never be defective for reasons of wear, vibration or noise.

A. Those things alone, that's correct.

Q. Did you say, sir in your report that even if brake components needed to be replaced every 3,000 miles that is not evidence of a defective condition?

A. That's correct. I believe I said pads.

Q. And therefore, even if within the 36,000 mile warranty period the customer had to replace pads 12 times at his own or her own expense, you wouldn't find that to be a defective condition either; is that correct?

A. That's correct.

Q. Even if the vibration was so terrible that your arms shook when you tried to brake, you wouldn't find that to be defective either is that correct?

A. That's correct.

Q. And even if the brakes squealed like crazy every time you drove the car, every single time, you don't find that to be defective either, do you?

A. That's correct.

Q. Not ever; right?

A. That's correct."¹²⁶

The expert witnesses employed by one expert witness organization paid its experts "performance bonuses" based upon their success as testifiers. The performance review of Dr. Catherine Corrigan, allowed into evidence at trial, said, "[t]he high level of growth in revenue and return in the biomechanics practice is directly related to Catherine's success as a testifier" This professional witness has testified in over 150 trials.¹²⁷ In a decade, Ford Motor Company paid her employer in excess of \$83,000,000.

126. Transcript Record, *Bassett v. Kia Motors*, 143 F. Supp. 2d 503 (E.D. Pa. 2001). January Term 2001 (No. 2190) Testimony of Bruce Bowman May 24, 2005 p. 96-97.

127. Transcript of Record, *Anthony v. Ford Motor Company*, (2005). Trial testimony of Dr. Corrigan, Exponent principal and expert in the case of Dina K. and Gary L. *Anthony v. Ford*

Expert witnesses in mass tort litigation are particularly expensive and experienced. In one mass tort deposition, a defense expert testified he earned in excess of \$100,000 a year and over 1.5 million dollars over a decade in Risperdal cases alone. That same expert testified to earning over \$500,000 in 2005 and \$375,000 in 2006 in Vioxx and other mass tort litigation. Of course, incredible fees are not limited to defense witnesses. One plaintiff's expert earned 90 percent of his income in Prempro litigation. In 2006 and 2007, that averaged \$550,000. A different expert earned \$260,000 in hormone replacement litigation in one year and had billed \$42,000 for one case before that case went to trial.¹²⁸ Fees of \$10,000 a day for trial testimony have become routine in medical malpractice cases. One expert has billed at a rate of \$2300 an hour.¹²⁹

The ability of such professional experts to avoid answering clear direct questions is exemplified in the following testimony:

Q. Now, do you consider yourself a professional expert witness, Doctor?

A. I don't even know what that word means, what those words mean.

Q. Do you know what the word professional means?

A. I don't consider myself a professional expert witness.¹³⁰

In one of the many lawsuits arising out of Michael Jackson's death, an expert witness was paid \$800 an hour and had expended 350 earning hours, totaling \$280,000.¹³¹ His opinion was that it was completely speculative whether Michael Jackson would have gener-

Motor Company, March Term 2005 # 001786, Court of Common Pleas, Philadelphia County. This expert's hourly rate in 2008 was \$600.

128. Defense experts in hormone replacement therapy mass tort litigation have testified to being paid \$929,584.92, and another \$592,494.28, \$464,680.51, and \$404,808.28. E-mail from Zoë Littlepage, trial counsel, Littlepage Booth (on file with author).

129. E-mail from Dan Ryan, O'Brien and Ryan, Philadelphia, Pa (on file with author).

130. Transcript of record, *Browning v. Wyeth* (2003). Testimony of Cheryl D. Blume, Ph.d. Prempro Products Liability Litigation, *Browning v. Wyeth* Commonwealth of Kentucky Pike Circuit Court Div. No. 1 Civ. Action #05-CI-01247; incorporated into In Re: Hormone Therapy Litigations Philadelphia County Court of Common Pleas Nov. Term, 2003, #0001.

131. This expert's team had expended an additional 500–600 hours at rates varying between \$300 and \$800 per hour. The firm billed \$700,000 before courtroom testimony. *Jackson v. AEG Live, LLC*, BC445597 Superior Court of the State of California, County of Los Angeles (2013).

ated any money from working or performing on tour had he not died.¹³²

A. highly paid expert witness tried to avoid answering questions about his allegiance.

Q. You're not here as an independent witness are you?

A. I'm not sure I understand your question. I was engaged in this matter by AEG and O'Melveny and Myers.

Q. Sir, are you here as an independent witness?

A. I'm offering my independent opinion in this matter.

Q. You're being paid for your opinions in this case, aren't you?

A. No, I as an individual am not being paid for my opinion in this matter.

Q. Your company that you work for is being paid for your testimony here, correct?

A. By "company" you mean F.T.I. consulting?

Q. Yes sir.

A. F.T.I. consulting is billing fees in this matter yes

Q. And you're not independent, you're being paid by this side over here, aren't you sir?

A. I don't agree with your characterization of "independent."

Q. Okay so you're on one side. You're not independent; you're on that side of the table, right sir?

A. I'm not sure I understand what your question is getting at.¹³³

In testimony, an expert witness refused to admit that \$83,000,000 made Ford a big, and therefore important, client:

Q. Ford is a big client of yours and a big client of Exponent, correct?

A. Ford is a client of Exponent, certainly.

Q. I asked you a different question. Ford is a big client of

132. Jackson v. AEG Live, LLC, BC445597 Superior Court of the State of California, County of Los Angeles (2013).

133. *Id.*

yours and a big client of Exponent, correct?

A. You know, Ford has used Exponent as has many other automotive manufacturers through the years. As a percentage of the revenues, that's a fairly small percent over an 11-year period.

Q. Ford is a big client. Anyone who pays you \$83 million over a decade is a big client; is that correct?

A. I define big as percentage of revenue. And if you're banking revenue at \$11 million per year in half, it's a percentage of digits.¹³⁴

As a result of the reformation of the Federal Rules of Evidence with respect to expert testimony, the profession of skilled testifiers has increased exponentially because they have created "super witness" experts with credentials, courtroom experience, and the right to interpret and "spin" the facts.¹³⁵ Recent rule changes even preclude discovery of interactions between lawyers and hired gun experts.¹³⁶ This rule change permits attorneys to secretly coach highly paid witnesses, and coordinate a tailored opinion with little or no fear that opposing attorneys or the jury will ever learn of the attorney's suggestions or rewrites.¹³⁷ It is simply naïve to think that at-

134. Transcript of Record, *Anthony v. Ford Motor Company* (2005). Dina K. and Gary L. *Anthony v. Ford Motor Company* March Term 2005 # 001786, Court of Common Pleas, Philadelphia County.

135. See Stephen D. Easton, *Ammunition for the Shoot-Out with the Hired Gun's Hired Gun: A Proposal for Full Expert Witness Disclosure*, 32 ARIZ. ST. L.J. 465, 468-70 (2000).

136. FED. R. CIV. P. 26(b)(4)(C).

(C) *Trial-Preparation Protection for Communications between a Party's Attorney and Expert Witnesses*. Rules 26(b)(3)(A) and (B) protect communications between the party's attorney and any witness required to provide a report under Rule 26(a)(2)(B), regardless of the form of the communications, except to the extent that the communications: (i) relate to compensation for the expert's study or testimony; (ii) identify facts or data that the party's attorney provided and that the expert considered in forming the opinions to be expressed; or (iii) identify assumptions that the party's attorney provided and that the expert relied on in forming the opinions to be expressed.

Id.

137. See *Blum, ex rel. Blum, v. Merrell Dow Pharm., Inc.*, No. 1027, 1996 WL 1358523, at *248 (Pa. Com. Pl. Dec. 13, 1996) *rev'd sub nom. Blum by Blum v. Merrell Dow Pharm., Inc.*, 705 A.2d 1314 (Pa. Super. Ct. 1997) *aff'd sub nom. Blum, ex rel. Blum v. Merrell Dow Pharm., Inc.*, 764 A.2d 1 (Pa. 2000).

The testimony demonstrated that articles were inserted in 'peer review' journals, without review by independent authorities, but edited by lawyers; that peer review journals published, as valid, the results of 'less than good studies'; that articles were rejected for publication by prestigious journals before being published in the 'peer review' journal of 'Teratology.' The testimony exposed scientific literature created for purposes of legal defense. The testimony revealed a sycophantic relationship between 'scientists' and their

torneys, in an advocacy system, do not or will not coach professional witnesses when the medical literature itself contains paid “scientific” studies inserted for marketing or even litigation purposes.

Client communications are totally protected by privilege. Attorney communications with an independent witness are not in any way protected. The new rule change, which makes communications between the attorney and the expert akin to an attorney-client relationship, formally acknowledges the “hired gun” reality. Since the expert witness is just another advocate, their relationship to the hiring attorney has been formally acknowledged as closer to that of a client than that of an independent witness who honestly shares the fruits of specialized knowledge. The new rule making attorney-expert communications privileged is the acknowledgement that we no longer even expect independent experts. In this adversarial system the Rules have created a “perfect storm” for unscrupulous or biased professional witnesses to take advantage of lay jurors. Many professional witnesses have greater courtroom experience than the lawyers who attempt cross-examination.¹³⁸

Forty years after adoption, we can see how these rule changes transformed the courtroom. The liberalization of the rules and the empowerment of experts has resulted in the emergence of highly paid oath taking professional experts who work exclusively for litigation interests, who advertise widely, who make incredible income exclusively from litigation and who are hired for their intransigence

funding source; the defendant, Merrell Dow. The testimony revealed circularity of reasoning, to prove preordained ‘scientific’ conclusions.... Finally, the testimony revealed factual editing of supposedly scientific research literature by the very lawyers defending in litigation.

The testimony in this case demonstrates how ‘scientific consensus’ can be created through purchased research and the manipulation of a ‘scientific’ literature, funded as part of litigation defense, and choreographed by counsel.”

Id. at *230. Even medical literature has been created and paid for from litigation funds: Dr. Smithells in a letter to Merrell Dow asking for research support said,

Much clearly depends upon the value of this publication to Merrell Dow National Labs. If it may save the company large sums of money, large sums in the California court (which is rather what I thought when we undertook this study), they may feel magnanimous. If with the passage of time, the study is of no great significance, I can only regard the figure you suggest as generous and welcome.

Id. at *219. Another expert performing a study for publication in the medical literature wrote, “I also indicated that we would be willing to discuss or modify any part of the proposal with you in order to meet a common objective.” *Id.* at *221. This Study was funded in excess of \$300,000 out of defense funds. *Id.*

138. Michael H. Graham, *Impeaching the Professional Expert Witness by a Showing of Financial Interest*, 53 IND. L.J. 35, 40 n.27 (1977) (stating “[i]n some instances the expert witness has more trial experience than the counsel conducting the cross-examination”).

and oratorical persuasive abilities, hired because of their ability to advocate. These professional witnesses with credentials often work exclusively for plaintiffs or defendants. It is recognized that oratorical abilities and intransigence rather than qualifications, factual accuracy or integrity determine trial outcome.

In addition to the financial incentives for an expert to be directly biased, selection bias predominates. Experts retained for litigation do not represent a sampling of expert opinions.¹³⁹ Each side's expert dogmatically presents the perspective of their paymaster, which even when sincere, can be an extreme of permissible professional thought.¹⁴⁰ The important criteria in hiring an expert are experience in court and expected credibility with a jury. Honesty and even credentials are clearly of a secondary importance. As a result, a jury hears extreme opinion from professional testifiers presenting advocacy arguments under the guise of learned opinion. This may cause a jury to believe there is a close issue even when expert opinion in the relevant field is overwhelmingly in one direction.¹⁴¹

In the worst of modern trials, the rules enable travesties of the constitutionality protected core principles of the right to trial by jury. Trials may occur where juries do not hear from witnesses who know facts firsthand, where lawyers don't actually question witnesses.¹⁴² Cross-examination is truncated. Incomprehensible and illogical jury instructions about the facts explained by the expert are delivered by a jurist who may not believe that the jury is capable of understanding the testimony or will not follow the court's instructions on the law even if understood. It is no wonder that so many people understand that something is rotten.

This degeneration of the American system of justice must inevitably lead, and has led, to distrust of judicial processes, a political institution still held by the public in reasonable regard.¹⁴³ Widespread distrust of the judicial process will eventually lead to self-help.

139. Bernstein, *supra* note 129, at 456.

140. *Id.* Since any concession to uncertainty or validity of the opponent's position will be capitalized upon, the hired experts represent extreme positions and they are often unwilling to budge.

141. Bernstein, *supra* note 129, at 457.

142. *Id.* at 455. Sadly, it is not uncommon for young attorneys to conclude the direct examination of their expert with an improper question which unknowingly acknowledges the expert's preeminent role in winning the case: "Is there anything else you think the jury needs to know?"

143. *Major Institutions*, POLLINGREPORT.COM, <http://www.pollingreport.com/institut.htm> (last visited Apr. 16, 2015). The Supreme Court and the justice system regularly poll ahead of

V. THE FAILURE OF THE CROSS-EXAMINATION SOLUTION

Wigmore believed cross-examination, the greatest invention for the determination of truth, was sufficient to deal with inadequately grounded opinion evidence. "When the source of knowledge is so insufficient, courts will rarely need to pronounce the formal exclusion of the testimony. Its weakness is self-exhibited Cross-examination will usually furnish the exposure."¹⁴⁴ This is true if the facts can be evaluated by firsthand proof. But once the factual basis does not need to be proven, and can even be hidden, a different dynamic prevails.

The codifiers believed that the factual basis did not have to be revealed in direct examination because deficiencies could be adequately confronted through cross-examination, or, if not based on facts "of record," the judge could preclude the opinion. The primary solution to the loss of logical cohesion by extirpation of the hypothetical question lays in cross-examination, "and by permitting the opposing party, on cross-examination, to call for a hypothetical specification of the data which the witness has used as the basis of the opinion."¹⁴⁵ They believed any issues about the factual basis of opinion could be resolved by Rule 705 which reads: "[T]he expert may be required to disclose those facts or data on cross-examination."¹⁴⁶ While in theory this solves the professionals' concerns, it does not address the lack of factual information supplied to the jury. This theoretical solution is also deficient because unfortunately, the codifiers never cross-examined experts of the professional expert class.

Cross-examination has been appropriately analogized to walking on egg shells. Under the Federal Rules cross-examination of expert witnesses has become exquisitely dangerous. Professional experts have become adept testifiers and poorly framed questions to professional testifiers are like hanging a curve to Hank Aaron in his prime. Even well-framed questions may open the door to opportunities for professional advocacy.

The effectiveness of cross-examination depends upon the cross-examiner's ability to expose factual weaknesses without affording the expert an opportunity to reiterate their advocacy position or

Wall Street, Congress, the press, organized labor, major companies, television news, and public schools. *See id.*

144. WIGMORE, *supra* note 41, § 660, at 898.

145. MODEL CODE OF EVIDENCE R. 409 cmt. b. (1942) (emphasis removed).

146. FED. R. EVID. 705 (amended 2011).

worse yet to present otherwise inadmissible evidence to the jury. The professional expert witness, seeing her role as an advocate with credentials, has become as proficient as a politician at avoiding directly answering questions and turning every answer into an opportunity to repeat and advance her position.¹⁴⁷ Indeed, this skill is often the reason experts are selected to testify. The dangers of exploring the factual basis when a professional witness can slip hearsay and other inadmissible material into evidence are manifest. The advent of professional expert witnesses skilled in answering and avoiding questions who view their testimonial function as an advocate with credentials on the witness stand makes such cross-examination extremely perilous. Questioning may frequently allow the professional advocate expert witness to make a closing argument from the witness stand, revealing material which otherwise would never be heard by the jury. The note to the 2000 revisions to Rule 703 acknowledges this problem: “[A]n adversary’s attack on an expert’s basis will often open the door to a proponent’s rebuttal with information that was reasonably relied upon by the expert, even if that information would not have been discloseable initially under the balancing test provided by this amendment.”¹⁴⁸

The codifiers considered the problem but did not understand the ramifications of their analysis. “If the objection is made that leaving it to the cross-examiner to bring out the supporting data is essentially unfair, the answer is that he is under no compulsion to bring out any facts or data except those unfavorable to the opinion.”¹⁴⁹ How prescient were the authors in understanding that cross-examining an expert—who could inject inadmissible material into the answer to any question about her factual basis—could be so perilous that the cross-examiner might strategically choose to forego the opportunity. Unfortunately, they did not recognize the ramifications of their prescience, or how the tactical decision to forego serious cross-examination would debase the search for truth in the courtroom. We can now see that these unanticipated consequences transformed how competent counsel approach cross-examination.

Irving Younger, a respected professor, lawyer, judge, and

147. Sadly, the judiciary too often fails to rein in expert witnesses or require explicit answers to even well-framed questions.

148. FED. R. EVID. 703 advisory committee’s note.

149. FED. R. EVID. 705 advisory committee’s note (1972) (Proposed Rules). *But see* Graham, *supra* note 4, at 68 (“Counsel may have the expert witness, however, withhold some information to unleash on an unsuspecting opposing counsel during cross-examination.”).

legal educator, says:

The rules tell you, the opponent, that if you wish to explore the underlying data, you may do so on cross-examination. With all deference, whoever wrote that provision never cross-examined anybody, because anybody who's ever cross-examined in a real trial knows that cross-examining a witness is approximately like crossing a mine field. You will not be alive when you get to the other side unless you have a map to begin with, and even then you may not make it.¹⁵⁰

The respected author and lecturer on trial work James W. McElhaney, writing in *Litigation*, says: "Of course the cross-examiner is entitled to go into the bases for the expert's opinion on cross-examination. Rule 705 says so. A cross-examiner is entitled to take all kinds of risk if he wants."¹⁵¹ Michael H. Graham puts the risk to the cross-examiner into perspective: "The growing number of experts whose livelihood depends in large part upon the litigation process compounds the difficulty in conducting a successful, destructive cross-examination. Such experts, with their vast amount of litigation experience, become exceptionally proficient in the art of expert witness advocacy."¹⁵² The highly paid professional expert witness from the professional expert industry often has more courtroom experience than the cross-examiner.¹⁵³ As Graham said: "The professional expert witness advocating the position of one side or the other has become a fact of life in American litigation. Expert witnesses have become so prevalent that many experts now derive a significant portion of their total income from litigated matters."¹⁵⁴ The result can be less experienced counsel questioning the skilled "hired partisan" with responses driven by pecuniary stimulus unrestrained by either judicial sanction or the oath.¹⁵⁵

150. Younger, *supra* note 100, at 29.

151. James W. McElhaney, *The Law of Experts*, 17 LITIG. 47, 50, 58 (1990).

152. Graham, *supra* note 4, at 74.

153. *See id.*

154. *Id.* at 44, 47 ("In the battle of experts, many expert witnesses will testify to almost anything the client desires. Even when totally honest experts testify, each party will produce the best witness, not necessarily the best qualified expert.")

155. *See* Ketchum, *supra* note 122, at 160. Moreover, the testimony "lacks the substantial safeguard of truth . . . since the opinion is the result of reasoning, and no one can be prosecuted for defective mental processes." *Id.* (quoting *Opp v. Pryor*, 128 N.E. 580, 583 (Ill. 1920)). Indeed, in some states experts are effectively immune from suit. For a fuller description see Douglas R. Richmond, *The Emerging Theory of Expert Witness Malpractice*, 22 CAP. U. L. REV. 693 (1993).

Once burned by the professional expert advocate, counsel learns caution.¹⁵⁶ Rather than affording the professional expert witness the opportunity to expound in advocacy, the clear-thinking, experienced attorney conservatively questions the professional expert witness and intends to win the case by calling a more convincing expert to express a contrary opinion.¹⁵⁷ Cross-examination of that second expert is likewise curtailed. As cross-examination is curtailed, the professional expert witness is enabled and encouraged to take further liberties. Like a tornado whose winds feed it, the Rules encourage the professional expert industry to fuel itself, emasculating both jury and counsel.

More importantly, the cross-examination solution does nothing to address the hidden problem of Rule 705: the failure to require disclosure and independent proof of factual claims underlying expert opinions. The Rules exacerbate the potential for biased expert witnesses by placing the burden to explore the underlying facts, data, and assumptions on the cross-examining party. Since the Rules do not require independent proof of assumed facts, they empower experts to provide biased testimony and encourage counsel to select such biased experts.¹⁵⁸

Judges who think every case should be settled before trial exacerbate this problem by creating the expectation that it is unlikely the expert will ever face any cross-examination in front of a critical jury

156. See, e.g., *Wheeler v. Deere & Co.*, No. 82-1790-K, 1990 WL 38586, at *11 (D. Kan. Mar. 16, 1990), *aff'd sub nom.* *Wheeler v. John Deere Co.*, 935 F.2d 1090 (10th Cir. 1991). The trial court noted that:

The cross-examination was quite brief and the witness was handled with 'kid gloves'. Not one question was addressed to this witness which pertained to the central issues in the case from the mouth of the witness. At best, defense counsel toyed with the witness' frequency in the courtroom and chided him with regard to the goodly number of cases with which he has dealt.

Id.

157. The author interviewed many excellent trial attorneys for a CLE program presented across the state by the Pennsylvania Bar Institute. One of the questions asked of each lawyer was: Do you ever have an expert witness who refuses to answer your question? All the attorneys said it happens "all the time." Many professional expert witnesses will answer a question in a non-responsive way by starting their non-answer with: "But in this case counselor . . ." The uniform response from those excellent attorneys was the advice of finding one or two irrefutable errors and getting the expert off the witness stand.

158. See Ketchum, *supra* note 122, at 157; see also Michael H. Graham, *Discovery of Experts Under Rule 26(b)(4) of the Federal Rules of Civil Procedure: Part Two, an Empirical Study and a Proposal*, 1977 U. ILL. L.F. 169, 189 n.44 (1977) ("A glib and unscrupulous expert witness with no qualification in his professed field other than a willingness to sell any opinion to anyone who wants it will frequently out sell the conscientious, well-trained and careful expert who gives no opinion that he cannot back up.").

on the contents of their report. Experts who do not expect to face cross-examination in a public courtroom may advocate positions they would never espouse to knowledgeable peers. One expert witness, the head of a department at a prestigious hospital in Philadelphia, testified directly contrary to the medical advice publicly provided on his department's website. He also admitted that he had never before expressed the medical opinion contained in his report. In *In re Air Crash Disaster v. Pan American*, the court said: "We know from our judicial experience that many such able persons present studies and express opinions that they might not be willing to express in an article submitted to a refereed journal of their discipline or in other contexts subject to peer review."¹⁵⁹ As so succinctly put by Professor Seaman, "[i]ronically, in the guise of liberalizing the rules of admissibility and broadening the types of expert opinion available to the jury, these rules had the effect of taking relevant evidence from the jury and placing the evaluation of that evidence in the hands of the expert witness."¹⁶⁰

VI. THE FAILURE OF THE COURT APPOINTED EXPERTS SOLUTION

The codifiers believed court-appointed neutral experts, specifically encouraged by Rule 706, would solve the expert testimony problems.¹⁶¹ In practice, the court-appointed expert solution does not exist.¹⁶² Judges virtually never appoint experts. Their use is so rare that

159. *In re Air Crash Disaster v. Pan American*, 795 F.2d 1230, 1234 (5th Cir. 1986).

160. Seaman, *supra* note 3, at 840.

161. See FED. R. EVID. 706.

162. See Joe S. Cecil & Thomas E. Willging, *Accepting Daubert's Invitation: Defining a Role for Court-Appointed Experts in Assessing Scientific Validity*, 43 EMORY L.J. 995, 1004-05 (1994) (reporting that 20% of federal judges surveyed have used appointed experts but less than half of those who used appointed experts appointed an expert a second time). This survey did not distinguish between experts as court advisors or as potential witnesses before a jury or between jury or non-jury cases; it also included appointments in mass tort and highly technical non-jury patent cases. *Id.* at 1006-08. Explanations for the nonuse of Rule 706 appointment powers include judicial reluctance to active involvement in the adversarial process, the difficulty in finding and paying an expert, and the reality that few experts are truly neutral. *Id.* at 1015; see also FED. JUDICIAL CTR., MANUAL FOR COMPLEX LITIGATION § 11.51, at 111-12 (4th ed. 2004) (describing in detail the problems and implications for appointing experts as including cost, neutrality, undue influence, delay and timing); Pamela Louise Johnston, *Court-Appointed Scientific Expert Witnesses: Unfettering Expertise*, 2 HIGH TECH. L.J. 249, 261 (1987) (citing SECTION OF LITIGATION, ABA, EMERGING PROBLEMS UNDER THE FEDERAL RULES OF EVIDENCE 157, 225-28 (1983) (stating "[t]oday, courts rarely exercise their power to appoint expert witnesses.")).

no discussion beyond saying, “it doesn’t work,” is needed.¹⁶³

VII. THE NECESSITY OF THE HYPOTHETICAL QUESTION HAS BEEN FORGOTTEN

Because American jurisprudence relies on such a significant lay fact-finding component, the essential logic of factual proof *cannot* be sacrificed. The abolition of the hypothetical question, which Wigmore accurately said “does violence to logic” for the sake of expediency, may cover the wound created by hypothetical question abuse. The abolition of the logical necessity to explain the assumptions of an expert may be glossed over by professionals, including judges who may pretend to incorporate nonsense into findings when acting as fact-finder in a non-jury trial. But, the illogic of never presenting substantive proof of assumptions cannot be comprehended by a lay juror. This problem is exacerbated when the logical absurdity is not acknowledged, and jurors are instructed by the judge in the logically inconsistent manner that the factual basis—accepted as true by the expert—cannot be accepted as true by the jury and must be considered only to evaluate the expert opinion. This logical inconsistency directly interferes with the most important evaluation the jury should make: determining the true facts of the claims presented.

Generations of attorneys, law professors, and judges have matured since the demise of the hypothetical question. The legal community no longer recognizes or understands the assault on trial logic created by these Rules.¹⁶⁴ While every profession suffers from the disease of insularity, insularity at trial is particularly insidious because courtroom decisions effect dramatic and wide-ranging societal

163. See David Sonenshein & Charles Fitzpatrick, *The Problem of Partisan Experts and the Potential for Reform Through Concurrent Evidence*, 32 REV. LITIG. 1, 26–28 (2013) (stating that despite reform advocacy dating to the critical reviews of expert testimony by Justice Learned Hand and John Henry Wigmore, court-appointed expert testimony has been consistently dismissed by American judges as unnecessary or disruptive despite its promise to overcome partisan imbalances in the adversarial system). For critical analysis of a 1993 study by the Federal Judicial Center on disapproval of court-appointed experts by judges and legal advocates, which found 80% of federal judges had never appointed an expert in a civil case using Rule 706, see Cecil & Willging, *supra* note 173, at 1005, 1015–19.

164. For a single judge today to insist on the use of the anachronistic hypothetical question is to present an unfair and possibly insurmountable problem to the trial lawyer. Over time, the Bar itself has lost the ability to ask proper hypothetical questions. The hypothetical question is no longer taught in law school. When I have required hypothetical questions, counsel routinely improperly phrase it in terms of testimony, questions such as: I want you to assume that a witness testified in this courtroom as follows: “....” It is not the fact of testimony that needs to be assumed, it is the truthfulness and accuracy of the factual testimony that must form the premises of a proper hypothetical question.

change beyond the courtroom confines.¹⁶⁵ Insularity in the legal profession suffers from another, even more serious, unintended consequence. Our legal system postulates that truth is revealed in the clash of private interest through an adversarial process where testimony is analyzed by lay citizens selected for the specific and limited purpose of evaluating the facts of a particular dispute and applying the law. This is what every jury is told as they begin their service.

Determining trial practice exclusively from the professional perspective ignores the critical role of non-professional jurors¹⁶⁶ and makes a mockery of jurors' expectations as well as the description given to them at the start of trial.

VIII. THE *DAUBERT* SOLUTION

As the decades passed, some of the problems with these expert rules became manifest and recognized. However, the solutions so far have not addressed the core problem discussed herein.

In 1993, the U.S. Supreme Court addressed some of the unanticipated fruits of the Rules in *Daubert v. Merrell Dow Pharmaceuticals, Inc.*¹⁶⁷ The *Daubert*, decision requires the trial court to act as "gatekeeper" by making a preliminary assessment of whether the reasoning or methodology underlying expert testimony is reliable and properly applied to facts of record.¹⁶⁸ The *Daubert* decision and its progeny were the judicial response to the perception that expert testimony had become courtroom carriers of junk science, that experts had become less interested in the scientific and factual accuracy of their methodology but rather had become highly paid advocates for a party in litigation.¹⁶⁹

165. For example, the courtroom products liability jury verdicts and the transformation of industry practices in warnings and guarding in industrial and consumer products that have resulted.

166. As this unintended transformation occurred, the Bar and even the judiciary forgot the essence of citizen juror fact-finding, and lawyers accepted a reduced role in the courtroom and expert presentation. As generations of lawyers matured under the rules and became judges, the institutional memory of the search for truth through citizen fact-finding was lost, and the essential role of the jury as fact-finder became obscured and forgotten.

167. *Daubert v. Merrell Dow Pharms. Inc.*, 509 U.S. 579 (1993). Now incorporated into FED. R. EVID. 702.

168. *Id.* at 597.

169. PATRICK E. HIGGINBOTHAM, *Commentary: Revisions to Rule 26: Expert Trial Witness Discovery to PROPOSED AMENDMENTS TO CIVIL RULES 26 AND 56, 1, 7-8* (2008) ("The *Daubert* decision and its progeny . . . [is] a response to the perception that expert testimony is a carrier of junk science; that experts are increasingly less disinterested in their methods and increasingly just advocates for a party, spinning under oath.").

By 1993, the Court recognized that expert testimony had gotten out of control. The Supreme Court justices understood that biased and unfounded professional expert testimony had sadly become commonplace in court. Experts were recognized as highly paid advocates in litigation and had to be controlled. The Court decided that a superstructure for the analysis of methodological reliability controlled by the judge was needed. The Supreme Court injected onto the Rules the requirement that judges become gatekeeper of the scientific accuracy of the methodology employed and the factual applicability of expert testimony.¹⁷⁰

The traditional *Frye* test, which was seldom used, required the judge to determine whether practicing professionals accepted the methodology used in Court.¹⁷¹

Concluding that the bright-line ‘general acceptance’ test established in *Frye* was at odds with the ‘liberal thrust’ of the Federal Rules of Evidence, the Supreme Court has made clear that the district court has a ‘gatekeeping’ function under Rule 702—it is charged with the task of ensuring that an expert’s testimony both rests on a reliable foundation and is relevant to the task at hand.¹⁷²

The *Daubert* system requires each judge to independently decide if the expert is reasoning scientifically or if not in a scientific field, reasoning in accord with specialized knowledge. While addressing the methodology problem of “junk science” and asking judges to control one abuse, more general systemic abuses were not addressed.

In *Daubert*, the Supreme Court placed faith in the judiciary to act as gatekeeper for expert testimony under the rubric of scientific evidence.¹⁷³ In subsequent rulings, the Supreme Court made clear that although the decision in *Daubert* speaks to “scientific evidence,” paid professional expert evidence generally is the issue addressed,

170. *Daubert*, 509 U.S. at 597.

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

172. *Amorgianos v. Nat’l R.R. Passenger Corp.*, 303 F.3d 256, 265 (2d Cir. 2002) (citation omitted).

173. David S. Caudill, *Lawyers Judging Experts: Oversimplifying Science and Undervaluing Advocacy to Construct an Ethical Duty?*, 38 PEPP. L. REV. 675, 682 (2011). The solution of a gatekeeper’s role has been criticized as requiring a non-jury trial prior to the jury trial and for wildly differing results. It has occurred in mass tort litigation that the exact expert testimony is permitted by one judge while being precluded to testify by others for being the fruit of a non-scientific methodology. It is one thing for a finder of fact to come to different conclusions. It is entirely different and erodes basic confidence in the court system, when judges, applying the same law, come to opposite conclusions on the exact same evidence. The appeal standard is abuse of discretion standard.

and the gatekeeper role was applied whenever expert testimony appeared in court.¹⁷⁴

Before allowing any expert to testify, the court must find the expert has adequate credentials through learning, training, or experience so that his or her opinion is useful to the fact-finder.¹⁷⁵ In the words of the original rules, the opinion must “assist” the jury.¹⁷⁶ After *Daubert* and its progeny, a preliminary judicial determination is also required to determine whether the methodology employed is scientific, properly applied, and is based on sufficient facts “of record.”¹⁷⁷ These prerequisites address whether the testimony presents useful analysis or opinion. However, these judicial considerations do not address whether the jury, as finder of fact, agrees with the factual assumptions on which opinions are based.

Recent amendments to the Federal Rules of Evidence patched cracks which remained after the *Daubert* fix.¹⁷⁸ The Federal Rules of Evidence now require the court itself to make a determination as to the appropriateness of the science employed, the applicability of the methodology, the facts of the case, and whether they were correctly applied.¹⁷⁹ Although the factual basis is not subject to jury review, the expert must first prove to the judge that there is some factual basis for his opinion involving case specific evidence.¹⁸⁰ The judge has been given the role of evaluating the facts to determine the “facts of record,” but the standard is very different from jury fact-finding. The judicial standard is evidentiary and preliminary, not believability.¹⁸¹

174. See *Gen. Elec. Co. v. Joiner*, 522 U.S. 136, 142 (1997); *Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 147–49 (1999).

175. *Daubert*, 509 U.S. at 588.

176. FED. R. EVID. 702; See also *Amorgianos*, 303 F.3d at 267 (“[T]he district court should undertake a rigorous examination of the facts on which the expert relies, the method by which the expert draws an opinion from those facts, and how the expert applies the facts and methods to the case at hand.”).

177. These requirements have been incorporated in FED. R. EVID. 702. Following the *Daubert* decision, the number of experts excluded from federal court exploded exponentially. See HUBER, *supra* note 25; Chesebro, *supra* note 25.

178. FED. R. EVID. 702.

179. *Id.*

180. *Id.*

181. In fact, except for privileges, the Rules of Evidence may be ignored by the judge in making the preliminary rulings. See generally FED. R. EVID. 104(a); *United States v. Franco*, 874 F.2d 1136, 1139 (7th Cir. 1989).

IX. FACTS OF RECORD

The *Daubert* decision and its progeny require the judiciary to evaluate the methodology and factual basis of an expert opinion and to determine if it was grounded in “facts of record.”¹⁸² An expert cannot create any factual prerequisite for an opinion;¹⁸³ he or she must base the opinion upon facts applicable to the case, even though the jury no longer has the ability to determine if accurate facts were assumed.¹⁸⁴ Traditionally, the problem of connecting the opinion to the facts of the case was solved by the independent proof prerequisite to the hypothetical question.¹⁸⁵ The solution, created by the Federal Rules of Evidence, to the hypothetical question has transmogrified this aspect of trial.¹⁸⁶ The determination that the opinion is based upon some case-specific facts has become nothing more than a factual evidentiary floor for judicial determination.¹⁸⁷

At common law, “of record” was easily defined. It was coterminous with “offered in evidence.” Now, defined as a judicially determination prerequisite to admissibility, “of record” has become extraordinarily ambiguous. Effectively, it means nothing more exists than something “permissively” relied upon by the expert, whether presented to the jury or not and whether admissible in evidence or not. “Of record” material need only be sufficient for the court to conclude that the expert is not making things up.¹⁸⁸ The requirement that an expert have a proper factual basis of expert opinion has become nothing more than an admissibility issue for judicial determination. Once the court has ruled that an opinion can be presented,

182. *Daubert v. Merrell Dow Pharms., Inc.*, 509 U.S. 579, 592 (1993).

183. *See Gen. Elec. Co. v. Joiner*, 522 U.S. 136, 146 (1997) (stating when upholding the district court’s refusal to admit expert’s conclusions, “nothing in either *Daubert* or the Federal Rules of Evidence requires a district court to admit opinion evidence that is connected to existing data only by the *ipse dixit* of the expert”); *Turpin v. Merrell Dow Pharm., Inc.*, 959 F.2d 1349, 1360 (6th Cir. 1992) (finding expert testimony inadmissible because “[p]ersonal opinion, not science, [was] testifying . . .”); *Nelson v. Tenn. Gas Pipeline Co.*, No. 95-1112, 1998 WL 1297690, at *9 (W.D. Tenn. Aug. 31, 1998) (stating “[e]xpert opinions are about science . . . not advocacy”).

184. FED. R. EVID. 703; *Williams v. Illinois*, 132 S. Ct. 2221, 2228 (2012).

185. *See Williams*, 132 S. Ct. at 2233.

186. FED. R. EVID. 703; *Williams*, 132 S. Ct. at 2228 (2012).

187. *See Seaman*, *supra* note 3, at 868. “The great failing of the *Roberts* reliability framework, which allowed admission of hearsay deemed trustworthy by a court, was that it ‘allow[ed] a jury to hear evidence, untested by the adversary process, based on a mere judicial determination of reliability.’” *Id.* (quoting *Crawford v. Washington*, 541 U.S. 36, 62 (2004)).

188. Although formulated in many different ways, no court will permit an expert to testify who candidly states: “I have no case specific factual basis for my opinions other than my learning in my field and my sincere belief that my opinion is true and applicable.”

the underlying factual premise need not be independently proven or even revealed.

Indeed, a federal lawsuit can be tried with no witnesses beyond expert witnesses offering differing opinions. While some may say this observation is unfair because it rarely occurs, given that it would be a poor way to try a case, its very possibility allows unethical attorneys to hire professional experts and file cases which never should exist, fueling unnecessary litigation. In fact these cases do get filed.¹⁸⁹ Beyond extreme examples, even ethical attorneys can avoid presenting unfavorable evidence by presenting favorable parts through an expert witness screen. This is the sad twenty-first century reality.

X. THE FAILURE OF THE "NOT FOR TRUTH" HYPOCRISY

The procedures adopted by the Federal Rules of Evidence on expert testimony violate a fundamental logical concept. Opposed to the impeccable logic of the hypothetical question, the modern theory is totally illogical. The factual basis for the opinion, possibly derived from inadmissible material, might be revealed by the expert's testimony in direct or in cross-examination. But if explained to the jury, it cannot be presented for the truth, but only to "explain" the factual basis for opinions, opinions which themselves are offered for their truth. Indeed, expert opinion is often case dispositive.¹⁹⁰ The logical burden presented when the factual basis is revealed by the expert in either direct or cross-examination was to be "cured" by the logically inconsistent, totally ineffectual, judicial instruction to restrict use of the factual basis evidence only to "evaluate the expert's opinion" and not for the truth of any of the facts relied upon.¹⁹¹

189. A variety of this abuse exists when counsel use highly paid professional expert witnesses' reports that hide their highly selective factual determinations in order to avoid a summary judgment ruling and thereby force settlements. "Litigation and economic pressures also lead to the use of 'professional experts,' whose testimony will unfailingly conform to their employer's advocated position, so long as the price is right. As a result, summary judgment is often avoided, resulting in prolonged litigation and increased expense." Douglas R. Richmond, *The Emerging Theory of Expert Witness Malpractice*, 22 CAP. U. L. REV. 693, 694 (1993).

190. Expert opinion can be sufficient basis for a verdict. See *Sphere Drake Ins. PLC v. Trisko*, 226 F.3d 951 (8th Cir. 2000); *United States v. Franco*, 874 F.2d 1136 (7th Cir. 1989).

191. The "not for the truth" jury instruction, espoused in every federal circuit, supposedly solves the problem of jurors "misinterpreting" the effect of factual testimony by experts. However, "[i]f, as the court says, the appropriate manner for the defendant to challenge the expert's opinion would be to demonstrate that the underlying information is 'incorrect or unreliable,' then it is plain that it is in fact being offered for its truth. If it were not offered for its truth, its reliability would be irrelevant." See *Seaman*, *supra* note 3, at 827.

Jury instructions about the “facts” on which the expert opinion is based compound the jury’s problem. Appellate court decisions liberally encourage trial courts to illogically tell the jury: “The expert witness cannot introduce facts into this case. Any facts that the expert witness presented to you were only to help you evaluate that witness’s opinion and may not be considered for their truth.” This instruction is nonsense because it is simply an inescapable fact of logic that if the essential factual basis of the opinion is inaccurate the opinion is likewise inaccurate.¹⁹²

Any opinion analysis must logically begin with an evaluation of the accuracy of the factual basis on which the opinion is grounded. By telling the jury that the factual basis presented in expert testimony was not admitted for its “truth,” the judge presents this illogic as if it were the fact-finding role of the jury.¹⁹³ The “extirpation” of the hypothetical question has turned a logical breach into a gaping chasm.

What can the jury rely upon to evaluate expert testimony? If the factual basis has not been revealed or, if revealed, presented “not for the truth,” and has never been independently proven by witnesses with firsthand knowledge, analysis of the accuracy of the expert’s application of specialized knowledge to case-specific facts is impossible. Without learning the factual basis on which an opinion is based, and without independent proof of case-specific facts, jury evaluation is limited to proxy criteria like the expert qualifications, bias, and demeanor (the expert’s bedside or “courtside” manner). These limitations, which exacerbate inherent selection biases and pecuniary interest bias, contribute to the expansion of the professional expert industry. Precluded from the opportunity to judge the truth of the factual premises, or even to learn the case-specific factual assumptions on which the opinions are predicated, the jury can only evaluate expert opinions by comparing credentials, sincerity,

192. See *People v. Goldstein*, 843 N.E.2d 727, 732 (N.Y. 2005):

We do not see how the jury could use the statements of the interviewees to evaluate Hegarty’s opinion without accepting as a premise either that the statements were true or that they were false. Since the prosecution’s goal was to buttress Hegarty’s opinion, the prosecution obviously wanted and expected the jury to take the statements as true. Hegarty herself said her purpose in obtaining the statements was “to get to the truth.”

Id.

193. See *Blinka*, *supra* note 15, at 555–58 (1997). The charge that “basis evidence,” if offered into evidence not “for the truth,” as has been recommended by appellate courts in every circuit has been described as “dubious,” “incomprehensible,” a pretense, “futile,” and “meaningless.” *Id.* at 553–56.

and courtroom persuasiveness—a parody of jury fact-finding that further encourages the professional expert industry.

Perhaps the worst example of expert as oath taker can be found in the case of *Delaware v. Fensterer*, in which the Supreme Court of the United States found no error in admitting expert witness testimony presented by an expert who could not recall or even reconstruct the factual basis for his opinion.¹⁹⁴ By admitting potentially determinative expert testimony even when factual cross-examination was impossible, this 1985 Supreme Court decision *de facto* held that case-specific facts are irrelevant. Presumably, it was thought that the jury's evaluation of the expert's credentials and sincerity should be sufficient for a proper verdict. The only question for the jury to decide is which oath taken by the highly paid professional expert the jury believes.¹⁹⁵ Too often, the modern jury trial deteriorates into whether the jury believes the expert from Harvard or the expert from Princeton. Trial has become the modern compurgation swearing contest.

Even in theory, the “not for the truth” solution requires an impossibly bifurcated brain because if the assumed factual basis is inaccurate, the conclusions are inaccurate too.¹⁹⁶ This instruction cannot make sense to a lay juror. The accurate instruction, illogical as it truly is, has been described by one commentator as:

Ladies and Gentlemen of the jury. You have heard expert A

194. 474 U.S. 15, 16 (1985).

195. The process thus described was historically known as “compurgation.” See Black, *supra* note 21, at 498.

196. Ronald J. Allen & Joseph S. Miller, *The Common Law Theory of Experts: Deference or Education?*, 87 NW. U. L. REV. 1131, 1135 (1993). Junk in, junk out. Professor Rice argues the restriction on basis testimony deems experts “super-fact finders.” *Id.* (citing Rice, *supra* note 106, at 586) (stating “the restriction on basis testimony, then, functions to turn the expert into a ‘super-fact finder capable of producing admissible substantive evidence (an opinion) from inadmissible evidence.”); see also *United States v. Sims*, 514 F.2d 147, 149-50 (9th Cir. 1975) (finding expert opinion evidence admissible despite inadmissible hearsay statements as the basis for such opinion and noting the necessity of a jury instruction limiting the scope of the evidence).

Unfortunately, the distinction between permitting jurors to receive hearsay for the limited purpose of explaining an expert's opinion versus admitting the evidence to prove the truth of the data or information is subtle. Attorneys who elicit experts' supporting data or information before juries on direct examination typically do so without fear of limiting instructions. If trial lawyers are disturbed by their adversaries' use of Rule 703 as a means of persuading jurors, and they should be, such concern at least teaches that Rule 703 is a useful trial weapon for two reasons. First, it allows experts to base their opinions on inadmissible data. Second, it allows a party to effectively present inadmissible evidence to the jury in the guise of foundation.

FAUST F. ROSSI, EVIDENCE FOR THE TRIAL LAWYER 160-61 (1989).

testify that she relied on [describe statement] in arriving at her opinion. You may consider this statement only in assessing the credibility of A's opinion. You cannot use the statement as proof of [whatever is described in the statement] even though A herself used it for this purpose.¹⁹⁷

On these instructions, the late legal scholar Paul Rice wrote:

[T]his practice is both illogical and inconsistent with the independent and exclusive fact-finding role of the jury. But it is even more inconsistent with the limited role of the expert – assisting the jury in reaching its independent conclusions. . . . [W]hen the jury is allowed to accept the truth of the expert's conclusions, it implicitly accepts the opinion's factual basis too.¹⁹⁸

To accept any conclusory opinion, one must accept the essential factual assumptions underlying the opinion.¹⁹⁹

The illogic of “not for the truth” has sadly manifested in decisions. In *Sphere Drake Insurance v. Trisko Designer Jewelry*, the issue was whether missing jewels had been stolen or were an unexplained loss that would not be covered by theft insurance.²⁰⁰ The district court allowed a “police officer expert” to rely on what “Hernando” and “Freddy” told him.²⁰¹ These non-testifying informants told the expert that two other unnamed thieves had been paid to steal the jewels.²⁰² On this double hearsay basis, the retired police officer expert offered into evidence his opinion that the missing jewelry had been stolen and were not an unexplained loss.²⁰³ This presentation of expert opinion was challenged on appeal.²⁰⁴ The Eighth Circuit Court of Appeals said:

The insurers next complain about the hearsay statements of Freddie and Hernando, introduced through the testimony of Crowley. Had these hearsay statements been introduced for their truth, they would be inadmissible. However, as an

197. Blinka, *supra* note 15, at 547–48.

198. Paul R. Rice, *Expert Testimony: A Debate Between Logic or Tradition Rather Than Between Deference or Education*, 87 NW. U. L. REV. 1166, 1167 (1993).

199. When a used car salesman says the car is mechanically sound, the reasonable man test drives it to see if it drives.

200. 226 F.3d 951, 954 (8th Cir. 2000).

201. *Id.* at 955.

202. *Id.* at 954.

203. *Id.*

204. *Id.* at 953.

expert, Crowley was entitled to rely on otherwise inadmissible hearsay in forming the basis of his opinion, so long as the hearsay is of the type reasonably relied upon by experts in his field. Crowley testified that he regularly relied on the statements of informants as an investigating officer. He likewise was permitted to do so in forming the basis of his expert opinion.

An expert may “testify about facts and data outside of the record for the limited purpose of exposing the factual basis of the expert’s opinion.” The district court specifically instructed the jury “to give no weight to the statements of Hernando or Freddie in the consideration of the issues in this case. You are to consider that testimony only in developing what Detective Crowley did in the course of his investigation.” Because the hearsay statements were not admitted for their truth, but rather only to inform the jury of the factual basis of Crowley’s expert opinion, they were properly admitted by the district court.²⁰⁵

If Hernando and Freddie had appeared in court, they would not have been allowed to testify to what they were told because it is rank hearsay. Whether what Hernando and Freddie were told was truthful, boastful, or a blatant lie could not be tested by cross-examination because they know nothing of the truth; they could only report what someone else said. Yet the expert can present this inadmissible double hearsay because it is supposedly not offered “for its truth.”²⁰⁶

Of course trial lawyers understood that the jury having heard the statements will consider the double hearsay for its truth.²⁰⁷ Indeed, this double hearsay has been triply given the imprimatur of truth. The first imprimatur is that the retired police officer expert believed

205. *Id.* at 955 (citations omitted); *see also* Rice, *supra* note 110, at 584 (stating “[i]f this practice sounds like judicial double talk, it is”). Even if the hearsay statements had not been repeated to the jury, its existence is precisely what Julie Seaman describes as “stealth hearsay.” Seaman, *supra* note 3, at 829.

206. *See* Seaman, *supra* note 3, at 879 (explaining that whether the hearsay source is revealed or not is irrelevant: even if never revealed it is still “stealth hearsay” presented without explanation through the mouth of the paid professional expert.).

207. Graham, *supra* note 4, at 66 (“For most, but not all, practical purposes Rule 703 nevertheless functions as the equivalent of an additional exception to the rule against hearsay and as an alternative method of satisfying the authentication requirement . . . for most practical purposes admitting the information as the basis of an expert’s opinion is equivalent to admitting the evidence for its truth under a hearsay exception . . .”)

it to be true.²⁰⁸ The second imprimatur is that it is the type of information “routinely relied upon” in the field.²⁰⁹ Finally, it is given an imprimatur of truth because the judge who preliminarily announced the expert as “qualified” allowed the expert to tell the jury what others said.²¹⁰ If Hernando and Freddie’s statements are truly to be afforded “no weight” for truth, the opinion grounded on this information must also be given no weight, and a directed verdict should have been granted since there was no other evidence of theft.²¹¹ In *People v. Thomas*, a conviction for gang-related activities was premised upon a “gang expert” police officer’s testimony.²¹² He formed his opinion solely because other gang members told him that the defendant was also a gang member.²¹³

In *North Carolina v. Jones*, an assumption expert, Agent Hamlin, who played no part in the arrest or in analyzing the substance seized, based his opinion testimony exclusively upon a lab analysis to testify that the substance seized had been cocaine.²¹⁴ His opinion was accepted into evidence because this type of lab analysis is routinely relied upon in the expert’s field, law enforcement.²¹⁵ The jury was told the laboratory analysis was not offered for the “truth” but only to explain the basis for Agent Hamlin’s expert opinion.²¹⁶ On this expert testimony, the defendant was convicted.²¹⁷ Other than that expert opinion, there was no substantive proof that the substance seized was cocaine.²¹⁸ If, in reality, the laboratory analysis was not to be considered as true and accurate, there was no direct substantive proof whatsoever that the defendant possessed a controlled substance. Through the mouth of a police agent expert witness, the laboratory evidence had been presented in a way that pre-

208. *Sphere Drake Ins.*, 226 F.3d at 955.

209. Of course, if the expert is testifying in forensics or criminal investigations, it is a self-defined advocacy field. *Id.*

210. *Id.*

211. *Id.*

212. 30 Cal. Rptr. 3d 582, 587 (Cal. Ct. App. 2005).

213. *Id.* at 584. Analyzing this case extensively, Julie A. Seaman states “[u]nder these circumstances, however, the defendant is faced with a catch-22: he can either leave the basis of the expert’s opinion unchallenged, or he can risk having otherwise inadmissible, potentially prejudicial evidence disclosed to the jury.” Seaman, *supra* note 3, at 836.

214. No. COA03-976, 2004 WL 1964890, at *4 (N.C. App. Sept. 7, 2004).

215. *Id.*

216. *Id.* at *2.

217. *Id.*

218. *See id.*

cluded any meaningful cross-examination. As accurately summarized by Faust F. Rossi:

Unfortunately, the distinction between permitting jurors to receive hearsay for the limited purpose of explaining an expert's opinion versus admitting the evidence to prove the truth of the data or information is subtle. Attorneys who elicit experts' supporting data or information before juries on direct examination typically do so without fear of limiting instructions. If trial lawyers are disturbed by their adversaries' use of Rule 703 as a means of persuading jurors, and they should be, such concern at least teaches that Rule 703 is a useful trial weapon for two reasons. First, it allows experts to base their opinions on inadmissible data. Second, it allows a party to effectively present inadmissible evidence to the jury in the guise of foundation.²¹⁹

The instruction that the factual basis of expert opinion is not offered for the truth but only to explain the basis of the opinion is a logical fallacy.²²⁰

Unless the factual content of hearsay statements or other factual material are true and accurate, the expert opinion is inaccurate, illogical, and wrong. In reality, if the analysis is given no weight for truth or accuracy, then it can be considered wrong. It follows that if the analysis is wrong, the opinion is likewise wrong. In *Williams v. Illinois*, recently decided by the Supreme Court, five justices acknowledged the absurdity of the "not for the truth" solution to the elimination of the hypothetical question, and explicitly rejected it as illogical nonsense.²²¹

219. ROSSI, *supra* note 202, at 160-161.

220. See Seaman, *supra* note 3, at 847. The "not for the truth" jury instruction, espoused in every Federal Circuit, supposedly solves the problem of jurors "misinterpreting" the effect of factual testimony by experts. *Id.* However, "[i]f, as the court says, the appropriate manner for the defendant to challenge the expert's opinion would be to demonstrate that the underlying information is 'incorrect or unreliable,' then it is plain that it is in fact being offered for its truth. If it were not offered for its truth, its reliability would be irrelevant." *Id.*

221. *Williams v. Illinois*, 132 S. Ct. 2221, 2268-89 (2012) (Kagan, J., dissenting).

XI. SUPREME COURT'S REJECTION OF THE "NOT FOR THE TRUTH" FICTION

In *Williams*, a jury found the defendant guilty of rape.²²² The case was appealed, eventually finding its way to the United States Supreme Court.²²³ The Court affirmed the guilty verdict in a plurality decision written by Justice Alito.²²⁴ In their separate opinions, five Justices articulated that the "not for the truth" instruction was untenable fiction.²²⁵

At trial, the government presented a DNA expert witness who had neither performed nor supervised any DNA analysis.²²⁶ Dr. Sandra Lambatos, a forensic specialist at the Illinois State Police laboratory,²²⁷ was the perfect assumption witness. She compared the DNA profiles maintained by the State Police with a DNA profile created by an independent laboratory and found that the two matched.²²⁸ She testified that the odds that the match did not reveal identity were at least one in 109 quadrillion.²²⁹ If she had only compared the two results there would have been no evidentiary issue; she would have used her expertise to compare two DNA profiles and opined that they matched. However, no one from the independent laboratory testified at trial.²³⁰

Lambatos was the only witness who testified that the DNA profile created by the independent laboratory Cellmark had been "found in semen from the vaginal swab of [the victim]."²³¹ Therefore, the critical question on appeal was not scientific or methodological but purely factual. The issues presented were whether expert Lambatos could testify that the profile created by the independent laboratory came from DNA taken from the rape victim, and whether this testimony—the only identification that the source of the Cellmark specimen was semen taken from the victim—had been properly admit-

222. *Id.* at 2231.

223. *Id.* at 2231-32.

224. *Id.*

225. *Id.*

226. *Id.* at 2230.

227. *Id.* at 2229.

228. *Id.* at 2230 ("Asked whether she would 'call this a match to [petitioner],' Lambatos answered yes, again over defense counsel's objection." (citation omitted)).

229. *Id.*

230. *Id.* at 2229.

231. *Id.* at 2230 ("We now conclude that this form of expert testimony does not violate the Confrontation Clause because that provision has no application to out-of-court statements that are not offered to prove the truth of the matter asserted.").

ted into evidence.²³² Lambatos's factual statement could not be admitted to prove the origin of the sample because the expert had no personal knowledge as to where the semen sample came from and she was only assuming the source identified in the lab report itself was accurate.²³³ Nonetheless, Justice Alito found no error.²³⁴

Justice Alito's plurality opinion provided several reasons for affirmance, including the "not for truth" justification, the fact that the case had been tried before a judge sitting without a jury, and issue waiver.²³⁵ Justice Alito believed the judge could understand that critical evidence connecting the analyzed semen swab to the victim could not be considered "for the truth" but only to explain the expert's properly presented opinion evidence.²³⁶ Justice Alito's opinion also specifically noted that the only issue preserved for appellate purposes was the denial of cross-examination of a "testimonial" statement, impermissible according to *Crawford*, and not a direct Sixth Amendment claim.²³⁷ Ruling that the hearsay basis testimony was not "testimonial," he found no *Crawford* violation in presenting it to the judge.²³⁸

In his opinion, Justice Alito described the history of expert testimony, noting that,

[a] long tradition in American Courts permits an expert to testify in the form of a "hypothetical question," where the expert assumes the truth of factual predicates and then offers testimony based on those assumptions. Modern evidence rules dispense with the need for hypothetical questions and permit an expert to base an opinion on facts "made known to the expert at or before the hearing," though such reliance does not constitute admissible evi-

232. *Id.* at 2227-28.

233. *Id.* at 2234 (citing ILL. R. EVID. 703; FED. R. EVID. 703) ("Under both the Illinois and the Federal Rules of Evidence, an expert may base an opinion on facts that are 'made known to the expert at or before the hearing,' but such reliance does not constitute admissible evidence of this underlying information.").

234. *Id.* at 2244.

235. *See id.* at 2233-35.

236. *Id.* at 2235 ("When the judge sits as the trier of fact, it is presumed that the judge will understand the limited reason for the disclosure of the underlying inadmissible information and will not rely on that information for any improper purpose.").

237. *Id.* at 2226; *see Crawford v. Washington*, 541 U.S. 36, 68 (2004). *Crawford* held that the government cannot present hearsay that is testimonial in a criminal case even if it would be admissible under a long-accepted hearsay exception. *Id.*

238. *See Williams*, 132 S. Ct. at 2243.

dence of the underlying information.²³⁹

Justice Alito also acknowledged a Supreme Court decision from 1887 that approved the following jury instruction:

You must readily see that the value of the answers to these questions depends largely, if not wholly, upon the fact whether the statements made in these questions are sustained by the proof. If the statements in these questions are not supported by the proof, then the answers to the questions are entitled to no weight, because based upon false assumptions or statements of facts.²⁴⁰

He further acknowledged that Lambatos's testimony, the only identification of the source of DNA, "was not admissible for the purpose of proving the truth of the matter asserted."²⁴¹ Since adoption of the Federal Rules of Evidence, courts need not require independent evidence, and *Williams* did not provide any independent proof.²⁴² Justice Alito further says that "if the prosecution cannot muster independent admissible evidence to prove foundational facts that are essential to the relevance of the expert's testimony, then the expert's testimony cannot be given any weight by the trier of fact."²⁴³ In fact, permission for expert witnesses to rely on unrevealed, inadmissible evidence, as provided for in Rules 703 and 705, has not been so interpreted.²⁴⁴ Rather, an expert witness's facts need not be proven independently to the jury; indeed, an expert's facts may come from material, "inadmissible" evidence.²⁴⁵ Justice Alito rather definitively says, "It is then up to the party who calls the expert to introduce other evidence establishing the facts assumed by the expert."²⁴⁶

Justice Alito went on to state,

While it was once the practice for an expert who based an

239. *Id.* at 2223–24 (citations omitted).

240. *Id.* at 2234 (quoting *Forsyth v. Doolittle*, 120 U.S. 73, 77 (1887)).

241. *Id.* at 2236.

242. *Id.* at 2223–24.

243. *Id.* at 2241.

244. *Id.*

245. *See* FED. R. EVID. 703; *see also* 89 A.L.R.4th 456; 49 A.L.R. Fed. 363.

246. *Williams*, 132 S. Ct. at 2228. Nonetheless, Justice Alito specifically pointed out that the issue as to whether the state offered sufficient foundational evidence to allow Lambatos's opinion into evidence had not been preserved on appeal and was not before the court. *Id.* at 2238.

opinion on assumed facts to testify in the form of an answer to a hypothetical question, modern practice does not demand this formality

. . . .

. . . [Therefore,] [w]hen Lambatos referenced the report during her direct examination, she did so “for the limited purpose of explaining the basis for [her expert opinion],” not for the purpose of showing “the truth of the matter asserted” by the report.²⁴⁷

If one is to take Justice Alito at his word, the inevitable conclusion is the court should have dismissed the case because there was no “for the truth” evidence that the DNA sample, which matched the defendant’s DNA, came from the vaginal swab.²⁴⁸ But Justice Alito did not have to confront this inescapable conclusion because the only issue preserved for appeal was whether a “testimonial” statement barred by *Crawford* had been offered into evidence.²⁴⁹ The fact that there was no evidentiary foundation for the opinion had not been preserved for appeal.²⁵⁰ Because the independent lab formulated the DNA profile before the police identified any specific suspect, any improperly admitted hearsay was nontestimonial under *Crawford*, and the conviction was affirmed.²⁵¹

Justice Alito also finds the distinction between a jury and nonjury trial important.²⁵² He states that “‘basis evidence’ that is not admissible for its truth may be disclosed even in a jury trial under appropriate circumstances. The purpose for allowing this disclosure is that it may ‘assis[t] the jury to evaluate the expert’s opinion.’”²⁵³ Nonetheless, because a judge is capable of understanding words “not expressed for the truth,” there was no confusion of what “not for the truth” could mean.²⁵⁴

247. *Id.* at 2228, 2231–32 (quoting *People v. Williams*, 939 N.E.2d 268, 282 (Ill. 2010)).

248. *Id.* at 2235.

249. *Id.* at 2238.

250. *Id.* (stating the issue on appeal is whether the defendant’s Sixth Amendment rights were violated, not whether the State’s foundational evidence was sufficient).

251. *Id.* at 2240, 2244. Any other claim of error had been waived. *Id.* at 2238. Justice Alito implies that a constitutional violation more generally grounded in a Sixth Amendment confrontation violation might present different issues. Justice Alito also alludes to harmless error because independent eye-witness testimony identified the defendant as the rapist.

252. *See id.* at 2234–35.

253. *Id.* at 2239–40 (quoting FED. R. EVID. 703 advisory committee’s notes) (alteration in original).

254. *Id.* at 2236–37.

Justice Thomas concurred in the result but explicitly states that Cellmark's statement could only have been offered for its truth.²⁵⁵ He articulates the absurdity of the Federal Rules of Evidence "not for the truth" solution to the abuses of the hypothetical question by stating, "In my view, however, there was no plausible reason for the introduction of Cellmark's statements other than to establish their truth."²⁵⁶ Justice Thomas further states,

There is no meaningful distinction between disclosing an out-of-court statement so that the fact finder may evaluate the expert's opinion and disclosing that statement for its truth. To use the inadmissible information in evaluating the expert's testimony, the jury must make a preliminary judgment about whether this information is true.²⁵⁷

Applying this fact of common sense logic to the case before him, Justice Thomas correctly says, "Thus, the validity of Lambatos' [sic] opinion ultimately turned on the truth of Cellmark's statement."²⁵⁸ The assertion that Cellmark's statements were merely relayed to explain "'the assumptions on which [Lambatos'] [sic] opinion rest[ed]' . . . overlooks that the value of Lambatos' [sic] testimony depended on the truth of those very assumptions."²⁵⁹ Precisely as analyzed by Wigmore, McCormick, and others decades before, Justice Thomas agrees that basis testimony not independently proven at trial can only logically be offered for its truth content.²⁶⁰

Four Justices dissented; Justice Kagan wrote the opinion in which Justices Scalia, Ginsburg, and Sotomayor joined.²⁶¹ These four Justices joined Justice Thomas in articulating that testimony on the factual basis for an expert's opinion cannot possibly be offered only to explain an opinion and not for its truth.²⁶² Thus, five justices agree that the jury instruction pertaining to the basis for an expert's testimony

255. *Id.* at 2256 (Thomas, J., concurring).

256. *Id.*

257. *Id.* at 2257 (quoting DAVID H. KAYE ET AL., THE NEW WIGMORE: A TREATISE ON EVIDENCE: EXPERT EVIDENCE § 4.10.1 196 (2d ed. 2011)). See also DAVID H. KAYE ET AL., THE NEW WIGMORE: EXPERT EVIDENCE § 3.7 19 (Supp. 2005) ("(T)he [sic] factually implausible, formalist claim that experts' basis testimony is being introduced only to help in the evaluation of the expert's conclusions but not for its truth ought not permit an end-run around a Constitutional prohibition.").

258. *Williams*, 132 S. Ct. at 2258 (Thomas, J., concurring).

259. *Id.* (alteration in original) (quoting *id.* at 2228 (plurality opinion)).

260. *Id.*

261. *Id.* at 2264 (Kagan, J., dissenting).

262. *Id.* at 2265.

can be revealed to the jury “not for truth” is an untenable fiction.²⁶³ Five Supreme Court Justices have now rejected as illogical and untenable the solution the codifiers of the Federal Rules of Evidence invented to justify abolishing the hypothetical question.²⁶⁴

Justice Kagan’s opinion for the dissenters explains the absurdity of the fiction in terms reminiscent of Wigmore.²⁶⁵ Her opinion begins with the purpose of cross-examination, stating, “Our Constitution contains a mechanism for catching such errors—the Sixth Amendment’s Confrontation Clause.”²⁶⁶ The facts of this case illustrate that “the prosecution introduced the results of Cellmark’s testing through an expert witness who had no idea how they were generated.”²⁶⁷ The government used the expert as a “conduit for this piece of evidence.”²⁶⁸ Evidence that could not be directly offered at the trial was offered by the expert witness supposedly “not for the purpose of showing the ‘truth of the matter asserted.’”²⁶⁹ Ms. Lambatos, who had no knowledge of Cellmark’s operations, could not be cross-examined about the analyst’s proficiency, the care in performing work, the analyst’s veracity, whether the right vial had been tested, whether the labels had been inverted, whether a technical error had occurred, or whether the results were simply made up.²⁷⁰ Justice Kagan correctly notes,

[W]hen a witness, expert or otherwise, repeats an out-of-court statement as the basis for a conclusion . . . the statement’s utility is then dependent on its truth. If the statement is true, then the conclusion based on it is probably true; if not, not. So to determine the validity of the witness’s conclusion, the fact-finder must assess the truth of the out-of-court statement on which it relies.²⁷¹

263. *Id.*

264. *Id.*

265. *Id.* at 2264–65.

266. *Id.* at 2264.

267. *Id.* at 2265.

268. *Id.* at 2267.

269. *Id.* at 2231–32 (plurality opinion).

270. *Id.* at 2267 (Kagan, J., dissenting).

271. *Id.* at 2268–69. *But cf.* WIGMORE, *supra* note 41, § 672, at 934. Wigmore’s description of the logical necessity of the hypothetical question: “[t]he key to the situation, in short, is that there may be two distinct subjects of testimony—premises, and inferences or conclusions; that the latter involves necessarily a consideration of the former; and that the tribunal must be furnished with the means of rejecting the [conclusion] if upon consultation they determine to reject the [premise] . . .” *Id.*

Justice Kagan quoted from the new Wigmore Expert Evidence, stating, “[T]o pretend that it is not being introduced for the truth of its contents strains credibility.”²⁷² Justice Kagan continued:

Lambatos’s description of the Cellmark report was offered for its truth because that is all such “basis evidence” can be offered for; as described earlier, the only way the fact finder could consider whether that statement supported her opinion (that the DNA on L.J.’s swabs came from Williams) was by assessing the statement’s truth. That is so, as a simple matter of logic²⁷³

Because Lambatos’s opinion logically depends on the truth of her assumptions, the alternative

approach would allow prosecutors to do through subterfuge and indirection what we previously have held the Confrontation Clause prohibits. . . . [U]nder the plurality’s approach, the prosecutor could choose the analyst-witness of his dreams (as the judge here said, “the best DNA witness I have ever heard”), offer her as an expert (she knows nothing about the test, but boasts impressive degrees), and have her provide testimony identical to the best the actual tester might have given. . . . As Justice Thomas points out, the prosecutor could similarly substitute experts for all kinds of people making out-of-court statements.²⁷⁴

Justice Kagan correctly characterizes this technique as a “neat trick” because “the State could sneak it in through the back.”²⁷⁵ This neat trick of substituting of expert opinion for factual evidence occurs in civil cases all across the country.²⁷⁶

This opinion is discussed in the latest edition of McCormick on Evidence. The authors acknowledge that the majority of justices rec-

272. *Williams*, 132 S. Ct. at 2269 (Kagan, J., dissenting) (quoting *KAYE ET AL.*, *supra* note 269 § 4.10.1, at 196–97).

273. *Williams*, 132 S. Ct. at 2271 (Kagan, J., dissenting) (citation omitted).

274. *Id.* at 2272 (Kagan, J., dissenting).

275. *Id.*

276. As a young lawyer starting in civil practice, I was asked to determine if the contents of a police report could be presented into evidence as a business record. The answer was “no,” but I asked my senior partner, “Why don’t you just call a police officer?” The response was, “I spoke to the police officer and he has information that is very detrimental to our case so I don’t want him in the courtroom.” At that time, I had no solution to this problem. The solution now clearly is to present an expert witness whose basis will include the information contained in the police report and wait until cross-examination of that expert allows him to reveal the contents of the police report.

ognized that the fiction of “not for the truth” is untenable.²⁷⁷ The authors say, “[T]here is a strong argument that the jury ought to be permitted to consider the resulting opinion only when there is admissible, independent evidence of the 703 fact.”²⁷⁸ The McCormick editors state:

If such evidence is lacking, the judge should bar the opinion. As in the case of a hypothetical question when the proponent attempts to introduce the opinion, the opponent should have a parallel right to object on the ground that there is no extrinsic, admissible evidence of the 703 facts.²⁷⁹

Not only is there a strong “argument” that independent evidence should be required, but if the five Justices who have said independent proof is necessary do not change their minds, independent proof has become constitutionally required, as it has always been logically necessary. Justice Alito must be added to make six! As described above, Justice Alito also believes independent proof of the basis for opinion evidence is required.²⁸⁰

Five Justices have realized and articulated the absurdity of the “not for the truth” instruction that jurors are told is the law. We must devise a better solution to the problems presented by the logical necessity of the hypothetical question.

SOLUTIONS

The trial process created by the Federal Rules of Evidence inhibits, rather than fosters, fundamental logical inquiry. In practice, the result of these new rules obliterates the factual proof requirement and effectively precludes presentation of their fundamental connection to expert opinion in either direct or cross-examination. The rules enable and enrich professional witnesses who act as advocates with credentials and argue from the witness stand.

The Federal Rules of Evidence further the incomprehensible illogic of material never independently proven, never revealed by the expert, or, if revealed, presented not for the truth, but to explain the basis of the opinion.²⁸¹ Basic logic requires that an opinion be disre-

277. 1 KENNETH BROUN ET AL., MCCORMICK ON EVIDENCE: PRACTITIONER TREATISE SERIES § 15, at 135 (7th ed. 2013).

278. *Id.*

279. *Id.*

280. *See supra* pp. 61–64.

281. FED. R. EVID. 703, 801.

garded if any significant part of its essential basis is untrue. The most recent rule changes protecting attorney influence on opinion testimony is another unfortunate step moving experts directly into an advocacy role.

When the Federal Rules of Evidence codifiers eliminated the hypothetical question, they unknowingly raised the expert witness to the pedestal of arbiter of admissibility and determiner of facts, and reduced the jury to deciding which oath taker was more credible. In many cases, the battle of experts has been elevated for determination by the well-meaning but ill-conceived (and in some respects, naïve) liberalization of admissibility. The expert revolution of the Federal Rules of Evidence has permitted the trial to revolve around the style, personality, and advocacy of the expert witness and the respect in which the fact-finder holds the expert's paper credentials and demeanor.²⁸² As Judge Weinstein stated, though evidence scholars breathed a great sigh of relief when the Federal Rules of Evidence were adopted by Congress in 1975, "[s]oon, . . . as with many reforms, the secondary effects became apparent leading many to question whether we had not created more difficult problems than the ones we had solved."²⁸³ Mason Ladd, who was directly involved in creating the Federal Rules of Evidence, unknowingly summarized the problem of the Rules regarding expert testimony when he said,

The purpose of expert testimony is to communicate to this body of ordinary persons the wisdom and understanding necessary for the triers to exercise sound judgment in determining the issues in controversy. The examination of experts should be directed to this end. As far as possible the examination should be conducted in such manner that a juror should be able to say, "My conclusion is in accord with the opinion of the expert, not because he has expressed the opinion, but because he made me understand the facts in such a way that my opinion is the same as his."²⁸⁴

282. The expert revolution has also reduced attorneys to puppeteers whose role becomes: "Mr. Advocate-expert, would you kindly tell the jury what they need to know to rule in my favor?" "The 'vanishing trial' risks relegating the trial jury to history's museum of curiosities while breeding a generation of lawyers lacking fundamental trial skills and adept only at settlement." Daniel D. Blinka, *Why Modern Evidence Law Lacks Credibility*, 58 *BUFF. L. REV.* 357, 362 (2010).

283. Weinstein, *supra* note 26, at 477.

284. Ladd, *supra* note 1, at 428.

Without independent proof and clear delineation of factual assumptions, Ladd's proper description of the rational use of expert testimony in a just system cannot occur.

The purpose of expert testimony is the same in the twenty-first century as it was in the thirteenth century. Expert testimony should provide the trier of fact with the honest fruits of specialized knowledge to understand issues beyond common knowledge. For our jury system to be logical, and for juries to fulfill their factfinding role, the jury must be given the tools to evaluate the truthfulness and accuracy of the application of opinion to the facts of the case. This evaluation can only be performed if the expert witness applies, or more precisely, translates, his or her specialized knowledge into case-specific facts. This evaluation can only be performed if the assumed case-specific facts are revealed and independently proven.

Fortuitously, the years of experience in case management and judicial evaluation of the substance of expert testimony required by *Daubert* provide judicial background knowledge, experience, and ability to solve these problems. Once the problem is acknowledged as the role of jury fact-finding, functional solutions can be found. It is not my purpose to offer a specific solution to the core problems identified. For the remainder of this article, I hope only to point the way to possible solutions.

While the abuses outlined above worsened and became more clearly manifested, the judiciary also changed. Case management was non-existent when Wigmore wrote, and was in its infancy when the Federal Rules of Evidence were adopted.²⁸⁵ Many things have changed in the world of litigation since 1975. The revolutionary nature of the active "hands-on managerial" judges of today was then unimaginable. Indeed, expert discovery itself and the concept that "trial by ambush" could be eliminated were relatively new. The Federal Rules of Evidence concerning experts did not come into being until the 1970 amendments to the Federal Rules of Civil Procedure, five years after the evidentiary revolution.²⁸⁶

285. Case management is the control exercised by the court in setting reasonable deadlines for discovery, expert discovery, pretrial motions, and pretrial conferences to create transparency. This aids settlement and clarifies the issues for trial. FED. JUDICIAL CTR., MANUAL FOR COMPLEX LITIGATION § 11.212, at 39 (4th ed. 2004). Every Federal Court system and the vast majority of state court systems employ judicially mandated case management to control their caseloads.

286. Michael H. Graham, *Discovery of Experts Under Rule 26(b)(4) of the Federal Rules of Civil Procedure: Part Two, An Empirical Study and a Proposal*, U. ILL. L. F. 169, 169 (1977).

As the volume of cases increased over the decades, sophisticated case management techniques came into widespread use. Judicial management and detailed pretrial conferences have become commonplace. Judicial case management is so common that it comprises much of modern litigation.²⁸⁷ While filings have increased, the number of cases actually being tried to verdict has decreased. As of 2002, almost 98% of all civil jury cases are settled before trial.²⁸⁸ Settlement is strongly encouraged and assisted by an active judiciary for many reasons, not least of which is the impossibility of bringing every filed case to a full jury trial and verdict.

Judges involve themselves directly in the settlement process. Every jurisdiction requires pretrial conferences, in which the judge shapes the trial to: (1) effectuate settlement; (2) clarify the issues; and, (3) streamline the trial of those cases that cannot settle. Modern judicial management and discovery techniques are designed to ensure that before trial, all counsel know which witnesses will testify and what documents will be offered. An important part of this modern managerial philosophy is the idea that when all experienced counsel understand the case, surprises will be minimized at trial. This allows cases to be properly evaluated, causing settlements. Judges managing all aspects of litigation are commonplace. Moreover, the modern judiciary is specifically authorized by Federal Rule of Evidence 611 to control interrogation, frequently rule on technical expert issues in *Daubert* hearings, and regularly control trials through pretrial case management. This includes imposing strict time limits upon each party, which would never have been tolerated under the historic abuses of the hypothetical question. The modern judiciary is capable of controlling the hypothetical question.

Suggestions for trial reform, such as written jury instructions and interim arguments by counsel, directly address some criticism of the hypothetical question. Other reforms, such as juror note taking, providing jurors with trial notebooks, and allowing jurors to ask questions, reflect a concept of involvement beyond the comprehension of the early twentieth century judge.²⁸⁹ Frequently imposed time limits for trial would make long hypothetical questions impos-

287. See Higginbotham, *supra* note 180, § 1.01, at 7 ("With this decline of trials, the trial courts increasingly function in a manner more akin to an administrative than a judicial body.").

288. Marc Galanter, *The Vanishing Trial: An Examination of Trials and Related Matters in Federal and State Courts*, 1 J. EMPIRICAL LEGAL STUD. 459, 461 (2004).

289. See Hon. Michael A. Yarnell, *THE ARIZONA JURY: PAST, PRESENT, AND FUTURE REFORM* 72 (2005).

sible.²⁹⁰ The modern judge has no reason to accept the prior generation's impotency to control the hypothetical question.

Felicitously, the revolution in case management has generated the judicial experience and knowledge to reinstate logic and citizen fact-finding to the justice process.²⁹¹ Modern case management techniques and pretrial judicial involvement make the hypothetical question a manageable problem. The *Daubert* experience of expert testimony management has provided expert evaluation experience. Courtroom standards for expert testimony administered by the judge can further be heightened, and the bar—which is remarkably capable of adjusting to major Federal Rules of Evidence changes—can comply.

Through the use of extensive but common pretrial techniques and modifications to the Federal Rules of Evidence, we can restore to the jury its traditional fact-finding function. A start would be eliminating the word “inadmissible” from Rule 703, and requiring the presentation of opinion testimony by hypothetical question, or otherwise requiring the experts to explain the factual basis upon which they based their opinions. Federal Rule of Evidence 705 should be changed to require independent affirmative evidence for every essential expert assumption. Every jurisdiction can adopt its own method to ensure the essential facts necessary for jury evaluation are independently proven and expert factual assumptions are explained. Countless methods exist to ensure that jurors are provided with information to evaluate the facts of the case. In this last section of this article, I offer some ideas for possible solutions.

The expert discovery process could readily provide an answer. In expert discovery, the court could require experts to set forth the case-specific facts they relied on in reaching their opinions. This expert witness disclosure would more clearly define the exact issues in controversy. Although critics might argue that this would unnecessarily increase expenses and the length of trials, the discovery rules and pretrial requirements were subject to the same criticism decades ago, yet no one today would seriously contend these were not pro-

290. See AM. JURY PROJECT, *supra* note 8, at 17 (“The Court, after conferring with the parties, should impose and enforce reasonable time limits on the trial or portions thereof.”).

291. See *Amorgianos v. Nat'l R.R. Passenger Corp.*, 303 F.3d 256, 267 (2d Cir. 2002) (“[T]he district court should undertake a rigorous examination of the facts on which the expert relies, the method by which the expert draws an opinion from those facts, and how the expert applies the facts and methods to the case at hand.”); see generally *Graham*, *supra* note 4 (offering reasonable solutions to the problem of trustworthiness and encouraging judges to take a much harder look at the material relied upon). Although it is certainly a productive step, this solution does not address the problem of jury fact finding created by the Federal Rules.

ductive reforms. It is not even necessarily true that expenses would appreciably increase. This solution might increase the use of requests for admission to delineate what factual questions are actually in controversy. Additionally, this reform would increase transparency of opinion testimony and possibly reduce the time of trial.²⁹² But how can we avoid pages of factual recitation?

Alternatively, the court could require the proponent of expert testimony to delineate the case-specific facts upon which the expert based his or her opinion and identify the precise hypothetical question to be asked. The hypothetical question does not have to include every fact. It can be limited to the essential facts in dispute in the litigation. These hypothetical questions can clarify the expert opinion, provide a proper basis for the jury to evaluate that opinion, and narrow the issues presented at trial.

To trim the factual recitation to the essential issues in controversy after counsel has identified the essential facts, the court could require opposing counsel to designate which facts are not actually in controversy. Agreed upon facts can be read to the jury at the start of trial, thereby reducing the time of trial, reducing obfuscation at trial, reducing the length of the hypothetical question, and eliminating the need for independent proof of agreed upon facts. This, in effect, would actually reduce the length of trial. In fact, this technique has been tested and used. The Model Expert Testimony Act required parties to first submit every hypothetical question in writing to the opposing party and get approval from the court.²⁹³ Michigan utilizes this practice, and it has been described as “practically ideal.”²⁹⁴

By agreeing to facts not in controversy, or by motion convincing the court that some of the facts contained in a hypothetical are argumentative or irrelevant to an opinion, the court can shape the hypothetical questions during pretrial. If counsel can demonstrate to the court, as part of a *Daubert*-like factual sufficiency hearing, that no evidence will be admitted that would permit a necessary factual finding by the jury, then the court can preclude an improper opinion.

292. See Comment, *Evidence – Expert Witnesses – Hypothetical Question – Model Expert Testimony Act*, 22 WASH. U. L. Q. 283, 284–85 (1937) [hereinafter *Comment*]; Harold S. Hulbert, *Psychiatric Testimony in Probate Proceedings*, LAW & CONTEMP. PROBS. 448, 454 (1935). Of course, the modern judge is much better equipped to establish the proper scope of a hypothetical question than the judge of 1935.

293. *Comment*, *supra* note 298, at 284.

294. *Id.* at 284–85 (quoting Hulbert, *supra* note 298, at 454).

Greater use of requests for admission monitored by the court can also dramatically reduce the necessary facts to be included in a hypothetical question. Through this method, the court can eliminate frivolous cases or frivolous professional witnesses. The court can identify and clarify precise factual issues. McCormick made this very suggestion decades ago, but because managerial judges were not commonplace then, it was never utilized. McCormick thought it impractical, stating that “it would probably be feasible for such [hypothetical] questions to be framed by both counsel in conference with the judge, either at a pre-trial [sic] hearing or during the trial, with the jury excluded. But this is wasteful of time and effort.”²⁹⁵ The experienced managerial judge of the twenty-first century can feasibly manage the hypothetical question.

The judge can also “encourage” counsel to reduce the “facts” of the hypothetical question by requiring counsel to certify that every listed fact is in controversy and necessary for the opinion. A specific jury charge directing the jury to disregard any opinion if any such designated fact is found to be inaccurate would police good faith efforts by counsel. The court could submit a written list of the factual necessities to accept an opinion to the jury as a checklist. This reform would provide dramatic incentives for counsel themselves, working with their hired experts to reduce the number of essential facts necessary for the opinion. The rules should, of course, require independent proof of facts that are actually contested. These changes would indeed require greater judicial diligence, time, and effort, but they would produce a revolutionary, salutary change in the behavior of counsel and the expert community.²⁹⁶ Everyone will be astonished at how few facts are truly in controversy and are essential to an opinion when the alternative is exclusion from evidence or the jury’s mandatory disregard of the opinion based on its findings of fact.

295. MCCORMICK, *supra* note 52, §16, at 34.

296. See *In re Air Crash Disaster at New Orleans, La.*, 795 F.2d 1230, 1234 (5th Cir. 1986) (“Our message to our able trial colleagues: it is time to take hold of expert testimony in federal trials.”); see also Judge Posner’s comments in *ATA Airlines, Inc. v. Fed. Express*, 665 F.3d 882, 889 (7th Cir. 2011) (“[The] cursory, and none too clear, response to [objections to expert testimony] did not discharge the duty of a district judge to evaluate in advance of trial a challenge to the admissibility of an expert’s proposed testimony. The evaluation of such a challenge may not be easy; the ‘principles and methods’ used by expert witnesses will often be difficult for a judge to understand. But difficult is not impossible. The judge can require the lawyer who wants to offer the expert’s testimony to explain to the judge in plain English what the basis and logic of the proposed testimony are, and the judge can likewise require the opposing counsel to explain his objections in plain English.”).

Greater changes in trial practice than those suggested here were occasioned by the expert testimony revolution of the 1975 Federal Rules of Evidence. My suggested salutary changes or other better ideas, which address the core problem identified in this article, can restore the essential fact-finding role of the citizen jury. The American Bar Association can, and will, adjust. Trials can be reduced in length, counsel and experts can be better prepared, and the jury can be given the evidence it needs to decide the facts. Expert testimony can be restored to its proper place in litigation—assisting jury fact-finding.

Of course, these wonderful results cannot occur until the discussion about what is wrong in the American justice system centers on the real problem of expert testimony, which is the emasculation of the jury role in fact-finding. Somehow, the factual bases of essential expert explanation opinion must be described to the jury and independently proven. Then jurors can use their common sense and life experiences to, “find the facts, apply the law as given by the Judge, and determine whether the plaintiff has met their [sic] burden of proof.”²⁹⁷

297. PENNSYLVANIA BAR INSTITUTE, PENNSYLVANIA SUGGESTED STANDARD CIVIL JURY INSTRUCTIONS § 12.00(2) (4th ed. rev. 2013).