A MINIMALIST APPROACH TO THE PRESENTATION OF EXPERT TESTIMONY

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Simplify. Simplify. 1

Some commentators have suggested that, in the United States, trial by jury is becoming trial by expert.² It is undeniable that the use of expert testimony is widespread. In the early 1990s, the Rand Corporation released a study on the incidence of expert testimony.³ The database included 529 civil cases tried in California Superior Court.⁴ The researchers found that

[e]xperts testified in 86% of these civil jury trials. Overall, there were an average of 3.3 experts per trial; in the trials in which any experts appeared, there were an average of 3.8. Most trials with experts had two, three, four or five of them.⁵

The incidence of expert testimony would not be so high unless trial attorneys believed that jurors find that type of evidence persuasive. Yet there are indications that jurors often find that species of evidence unconvincing. For example, despite the substantial amount of expert testimony that the government proffered in the prosecution of O.J. Simpson, the jury acquitted. The behavior of the jury in the *Simpson* case is not an isolated phenomenon. In one study during the 1970s, researchers discovered that in cases where the prosecution introduced sound spectrography (voiceprint) evidence, the conviction rate was 11% lower than average. In another study conducted by one of the leading American legal psychologists, Dr. Elizabeth Loftus, the data suggested that lay

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^{1.} Henry David Thoreau, Walden, or Life in the Woods 97 (Heritage Press 1939).

^{2.} Edward J. Imwinkelried, Foreword, 30 U. Cal. Davis L. Rev. 941, 941 n. 5 (1997).

^{3.} Samuel R. Gross, *Expert Evidence*, 1991 Wis. L. Rev. 1113, 1113. Professor Gross discusses the Rand Corporation study and suggests that the use of neutral, court-appointed experts would remedy the perception of bias on the part of paid experts. *Id*.

^{4.} Id. at 1119.

Id

^{6.} Henry F. Greene, Voiceprint Identification: The Case in Favor of Admissibility, 13 Am. Crim. L. Rev. 171, 190–191 (1975).

jurors attach more weight to confident, impartial eyewitness testimony than to expert evidence. Similarly, several researchers have concluded that lay jurors tend to underutilize statistical testimony and give it less weight than it is entitled.

At first blush, these research findings seem to undercut the conventional wisdom among trial attorneys that it is advisable to rely on expert testimony at trial. However, both the researchers and the trial attorneys might be right. The attorneys are right in thinking that expert testimony can impress the trier of fact. At the same time, the researchers are correct in concluding that lay triers often come away unconvinced because they find the testimony confusing rather than impressive. Thus, the presentation of expert testimony is a double-edged sword. If properly presented, expert testimony can impress, as litigators commonly assume. However, if presented in a sloppy, careless manner, expert testimony can be worse than ineffective; it can be counterproductive and generate confusion, resulting in an adverse verdict.

The thesis of this Article is that trial attorneys should take a minimalist approach to the presentation of expert testimony at trial. The temptation to present elaborate expert testimony can be acute. Again, many attorneys assume that expert testimony is impressive. Moreover, if the proponent has had to make an extensive showing of the reliability of the expert testimony at a lengthy pretrial *Daubert* admissibility hearing, the proponent might assume that he or she should submit the same detailed testimony to the jury. There is an understandable tendency to call the same witnesses and elicit the same testimony. However, that tendency is both mistaken and dangerous. The first part of this Article discusses the general strategic advisability of making a minimalist presentation at trial.

^{7.} Elizabeth F. Loftus, *Psychological Aspects of Courtroom Testimony*, in *Forensic Psychology and Psychiatry* vol. 347, 27, 32–33 (Fred Wright et al. eds., N.Y. Acad. Sci. June 20, 1980).

^{8.} D.H. Kaye & Jonathan J. Koehler, *Can Jurors Understand Probabilistic Evidence?*, 154 J. Royal Statistical Socy. 75, 79–80 (1991) (The authors survey the studies and state that "[t]he clearest and most consistent finding" in the studies is that laypersons undervalue expert testimony of a statistical nature).

^{9.} Daubert v. Merrell Dow Pharm., Inc., 509 U.S. 579 (1993). In Daubert, the Court announced that purportedly scientific testimony must rest on sound scientific methodology to be admissible. Id. at 592–593. Justice Harry A. Blackmun, writing for the majority, listed some of the factors that trial judges should consider in deciding whether proffered testimony satisfies the test. Id. The factors include considerations such as whether the underlying hypothesis has been tested, whether it has been subjected to peer review and publication, whether the technique has a known error rate, and whether there are accepted standards controlling the operation of the technique. Id. at 593–594.

The second part of this Article describes the specific tactics that the proponent of expert testimony can use to sculpt a minimalist presentation. The simple, clear presentation of expert testimony at trial requires an intensive effort by both the attorney and the expert witness. Given the significant risk that the testimony will confuse rather than impress, the attorney should not call the expert to the stand unless he or she is willing to invest the time and effort needed to present a package of expert information that will be easy for the jury to digest.

I. THE GENERAL STRATEGIC ADVISABILITY OF MAKING A SIMPLE TRIAL PRESENTATION

In 1990 the American Bar Association Litigation Section released a study titled *Jury Comprehension in Complex Cases*. ¹⁰ The researchers debriefed jurors who had served in complex federal and state cases and asked them to list their complaints about the attorneys who had presented the cases to them. By a wide margin, the jurors' primary complaint was that the volume of information that the attorneys presented was excessive. ¹¹ In the jurors' opinion, the attorneys called too many witnesses and submitted too many exhibits. ¹² Anecdotes by successful trial attorneys point to the same conclusion. In the words of one distinguished trial litigator, "[I]n complex . . . litigation . . . the key to winning is being able to 'simplify in a clear and powerful way. It's the single most important thing to accomplish at trial." The strategic imperative is to "reduce the complexity" and eliminate the "clutter." ¹⁵

The risk of violating that strategic imperative is especially grave in cases involving expert testimony. All too often, attorneys present lengthy, arcane expert testimony. Suppose that the question is the identity of a person who committed a bank robbery. The prosecution could be content with a lay opinion by an acquaintance of the defendant that the defendant is the person depicted in a bank

^{10.} Spec. Commn. on Jury Comprehension, ABA Sec. of Litig., *Jury Comprehension in Complex Cases* (ABA 1989).

^{11.} Id. at 27–28, 31.

^{12.} Id.

^{13.} Harry M. Reasoner, *Juries Need Guidance without Condescension*, 14 Natl. L.J. S8, S8 (Feb. 3, 1992).

^{14.} Donald E. Vinson, What Makes Jurors Tick?, 24 Tr. 58, 62 (June 1988).

^{15.} James W. McElhaney, Clutter, 77 ABA J. 73, 73 (Mar. 1991).

surveillance photograph.¹⁶ The foundation for that lay opinion could be quite short,¹⁷ perhaps requiring only a few minutes of trial time. In contrast, suppose that the prosecutor attempted to establish the defendant's identity by presenting an expert analysis of the DNA in the saliva¹⁸ on a cigarette that the perpetrator discarded during the robbery. In some DNA cases, expert testimony has consumed more than 5,000 pages of transcript.¹⁹ Moreover, the testimony was riddled with jargon such as "buccal cells,"²⁰ "nucleotides,"²¹ "amplified-fragment length polymorphisms,"²² and "alleles."²³

Consider a personal injury action arising from a traffic accident. The plaintiff could be content with an observer's lay opinion that the defendant's car was going seventy miles an hour. The speed of an automobile is a proper subject for lay opinion testimony. That foundation could also be short. However, if a police car equipped with moving radar happened to clock the defendant's car shortly before the accident, the plaintiff might decide to present expert testimony about moving radar. In one case where the parties litigated the admissibility of that type of testimony, the testimony ran for more than 2,000 pages of transcript. Like the testimony about DNA typing, this testimony could be replete with potentially confusing terms of art, such as the phrases "lock loop," "cosine error," and "audio Doppler tone."

^{16.} E.g. U.S. v. Robinson, 804 F.2d 280, 282 (4th Cir. 1986); U.S. v. Alexander, 816 F.2d 164, 167–168 (5th Cir. 1987); U.S. v. Towns, 913 F.2d 434, 437, 445 (7th Cir. 1990); U.S. v. Barrett, 703 F.2d 1076, 1086 (9th Cir. 1983); U.S. v. Goodheim, 686 F.2d 776, 779 (9th Cir. 1982); Brent G. Filbert, Admissibility of Lay Witness Interpretation of Surveillance Photograph or Videotape, 74 A.L.R.5th 643, 643 (1999).

^{17.} Edward J. Imwinkelried, Evidentiary Foundations 281-282 (4th ed., LEXIS L. Publg. 1998).

^{18.} Marie Allen et al., Mitochondrial DNA Sequencing of Shed Hairs and Saliva on Robbery Caps: Sensitivity and Matching Probabilities, 43 J. Forensic Sci. 453, 453–454 (1998).

^{19.} People v. Castro, 545 N.Y.S.2d 985, 986 (N.Y. Sup. 1989).

^{20.} Paul C. Giannelli & Edward J. Imwinkelried, *Scientific Evidence* vol. 2, § 18-2, 3 (3d ed., LEXIS L. Publg. 1999).

^{21.} Id. at § 18-2, 5.

^{22.} *Id.* at § 18-3(C), 20.

^{23.} *Id*.

^{24.} Kenneth S. Broun et al., McCormick on Evidence vol. 1, § 11, at 47 (John William Strong ed., 5th ed. West 1999).

^{25.} Imwinkelried, supra n. 17, at 279-281.

^{26.} $State\ v.\ Aquilera$, 25 Crim. L. Rptr. (BNA) \S 2, 2189 (Fla. Dade Cty. Ct. May 7, 1979).

^{27.} Giannelli & Imwinkelried, supra n. 20, at § 28-2(C), 655.

^{28.} Id. at § 28-2(C), 658.

^{29.} Id. at § 28-2(C), 661.

Scientific literacy lags in the United States.³⁰ Consequently, there can be a severe tension between achieving the strategic objective of making an appealingly simple trial presentation and the introduction of time-consuming, dense expert testimony. The only way to resolve that tension is to implement a set of tactics designed to minimize the risk that expert testimony will confuse rather than impress the jury. The following section discusses those tactics.

II. SPECIFIC TACTICS DESIGNED TO ENSURE THAT ANY EXPERT TESTIMONY IS AS SIMPLE AND COMPREHENSIBLE AS POSSIBLE

The risks in presenting expert testimony are so pronounced that the litigant must keep those concerns in mind throughout every step of the planning process. The attorney must bear those concerns in mind when deciding whether to present expert testimony, which expert witness to call, how to draft the expert's direct examination, how to conduct the pretrial conference with the expert, and how to conduct the examination at trial.

A. Deciding Whether to Present Expert Testimony

Attorneys should not assume that it is necessary or even desirable to present expert testimony. Today, there is such a wide variety of expertise that if the attorney is imaginative enough, he or she can find an excuse to present expert testimony at every trial.

To be sure, in some cases expert testimony is mandatory. In most instances, a medical malpractice plaintiff has no choice but to offer expert testimony about the pertinent standard of care.³¹ If the plaintiff does not procure favorable expert testimony on that subject,

^{30.} J. Michael Bishop, *Enemies of Promise*, 82 Academe 19, 21 (Jan./Feb. 1996). "The mass ignorance of science confronts us daily. In recent international testing, U.S. high school students finished ninth in physics among the top twelve nations, eleventh in chemistry, and dead last in biology." *Id.* The results of the Third International Math and Science Study (TIMSS) were recently released. Nanette Asimov, *No Gain by U.S. Students on International Exams*, S.F. Chron. A1 (Dec. 6, 2000). Among the thirty-eight countries participating, the United States ranked nineteenth in mathematics and eighteenth in science. "U.S. experts in math and science instruction" characterized the performance of American students as "disappoint[ing]." *Id.* at A19.

^{31.} E.g. Rolan-Alvarado v. Municipality of San Juan, 1 F.3d 74, 78–79 (1st Cir. 1993); Morlan v. Harrington, 658 F. Supp. 24, 25–26 (D.N.D. 1986); Dolan v. Cunningham, 648 S.W.2d 652, 653–655 (Tenn. App. 1982); H.H. Henry, Necessity of Expert Evidence to Support an Action for Malpractice against a Physician or Surgeon, 81 A.L.R.2d 597, 600–601 (1962).

the defendant may successfully move for pretrial summary judgment.³² If, after furnishing a favorable pretrial affidavit, the plaintiff's expert fails to appear at trial or recants the favorable opinion, the plaintiff will suffer a directed verdict, nonsuit, or judgment as a matter of law at trial.³³

However, in other cases, there is no legal necessity for expert testimony, and the attorney must decide whether the presentation of expert testimony would be desirable as a matter of tactics. The tactical analysis for the burdened party (usually the plaintiff or prosecutor) is slightly different than the analysis for the opponent (ordinarily the defendant).

One of the reasons attorneys offer expert testimony so routinely is that they believe that many jurors expect such testimony. For decades, American television viewers have watched programs such as The F.B.I.³⁴ and Quincy, ³⁵ and movies like The Bone Collector³⁶ that focus on the work of forensic scientists. Perhaps most importantly, there has been intense media coverage of trials, such as that of O.J. Simpson, showcasing expert testimony in complex areas like DNA analysis. The cumulative result is that in certain cases, especially criminal trials, lay jurors expect to hear expert testimony.³⁷ For instance, in a trial where the linchpin issue is the accused's identity as the perpetrator, prosecutors have long assumed that jurors tend to expect fingerprint evidence. 38 Additionally, in the wake of the two Simpson trials, DNA testimony is sometimes expected. The absence of an anticipated type of expert evidence can raise doubts in the jurors' minds. The existence of such doubt is very problematic for the party assigned the ultimate burden of proof. Hence, whenever there is a type of expert analysis that (1) most laypersons are familiar with and (2) obviously would be relevant to the key issue in the case, it makes tactical sense for the burdened party to offer expert testimony.

As previously stated, the analysis differs for the opponent. Suppose, for instance, that the central issue is relatively straightforward, such as whether the collision occurred in the north or south

^{32.} Fed. R. Civ. P. 56(b) (2000).

^{33.} Broun et al., supra n. 24, at § 338, 571-574.

^{34.} The F.B.I. (ABC 1965-1974) (tv series).

^{35.} Quincy, M.E. (NBC 1976-1983) (tv series).

^{36.} The Bone Collector (Universal Studios 2000) (motion picture).

^{37.} Edward J. Imwinkelried, Evidence Law and Tactics for the Proponents of Scientific Evidence, in Scientific and Expert Evidence 33, 36–37 (2d ed., PLI 1981).

^{38.} Id. at 36.

lane, and that the opponent, the defendant, can call several seemingly distinterested lay witnesses who will testify favorably on that issue. If the lay witnesses are independent — they are not related and had different vantage points at the time of the accident — it may be unnecessary to call a defense expert, even when the plaintiff calls one. One defense attorney who decided against calling an expert told the jury during his closing argument:

Now these accident reconstruction experts . . . can be real helpful *in the right type of case* You know the kind I'm talking about, one of those collisions up on the interstate when there's a lot of ice and snow and lots of vehicles and maybe a tractor-trailer or two, and it's dark, and nobody really knows or remembers how it all happened, and you need someone to help re-create it — those types of cases. *But not cases like this*. In this case, we have an eyewitness. We don't need an accident reconstruction expert to tell us what he thinks happened. We have an eyewitness to tell us what actually happened. No guesswork. No fancy math.³⁹

Moreover, the opponent has the advantage of hearing the burdened party's case-in-chief before making a final decision about whether to call an expert. Suppose that the plaintiff's expert proved to be both obnoxious and confusing. If the defense attorney read the jurors' facial expressions, and midway through the expert's testimony, some jurors turned away and paid little or no attention to the testimony, while other jurors registered incredulous looks, the defense attorney might make a sound, on-the-spot, situational judgment that it is unnecessary and potentially dangerous to call his or her expert. If the defense goes to the length of calling a contrary expert, the defense might send the jurors the signal that he or she thinks that the testimony of the plaintiff's expert did real damage to the defense's case. Moreover, the defense witness's testimony, including the cross-examination, might clarify some of the questions left muddied by the plaintiff's expert. On these facts, the best course of action for the defense is to keep his or her own expert off the stand.

Nevertheless, there certainly will be cases where it is advisable for the opponent to present expert testimony. For example, assume that rather than being obnoxious and confusing, the proponent's

^{39.} E. James Burke, *Don't Expect the Expert*, 34 Tr. 76, 76 (Nov. 1998) (emphasis in original).

expert turns out to be charismatic and crystal clear. The opponent ordinarily must respond in kind with a contrary expert. Moreover, there will be occasions when the opponent ought to call an expert, even when the burdened party did not. For example, suppose that in a prosecution, the defense decides to rely on an insanity defense. In most jurisdictions, the defense may proffer lay opinion testimony by the defendant's acquaintances on the topic of sanity. However, many jurors would be troubled if the defense offered only lay opinion testimony. The jurors realize that psychiatrists and psychologists have expertise on the topic. Suspecting that the defense could not find even a single expert to testify as to the defendant's insanity, the jurors may be sorely tempted to discount the lay testimony. Thus, as a practical matter, if the defense elected an insanity defense, it would have to call a mental health expert to substantiate the defense.

B. Selecting an Expert Witness to Call

Assuming that the attorney decides to present expert testimony, the next task is selecting the expert. It is ideal if the expert has impressive credentials, including extensive research in the pertinent field. However, the focus of this Article is on simplifying expert testimony to make it more comprehensible to the jury. The risk of confusing the jurors should influence the selection of an expert witness. As we have seen, the presentation of expert testimony can be a double-edged sword, and in offering such testimony, the primary danger that the proponent should endeavor to avoid is confusing the jury. Starting with that premise, the proponent ought to seek a witness who, first and foremost, is an effective teacher. The proponent does not need the researcher who pioneered the short tandem repeat (STR) technique of DNA typing; rather, the propo-

^{40.} In many jurisdictions, the prosecution has the ultimate burden of proof on insanity even though the defense has the initial burden of production. Edward J. Imwinkelried, Paul C. Giannelli, Francis A. Gilligan & Fredric I. Lederer, *Courtroom Criminal Evidence* vol. 2, § 2915, 1101 (3d ed., LEXIS L. Publg. 1998). However, experienced defense counsel appreciates that "the insanity defense is unpopular in many circles." Ronald L. Carlson & Edward J. Imwinkelried, *The Dynamics of Trial Practice* § 4.8(A), 61 (2d ed., LEXIS L. Publg. 1995). Consequently, a defense counsel cannot be confident that the jury will resolve any doubt on the issue of insanity in the defendant's favor.

^{41.} E.g. Cal. Evid. Code § 870 (West 2001) (allowing a lay witness to testify about the sanity of a person); Avery v. State, 609 S.W.2d 52, 54 (Ark. 1980); Philips v. State, 587 S.W.2d 83, 85–87 (Ark. 1979); Est. of Clegg, 151 Cal. Rptr. 158, 161–162 (Cal. App. 1st Dist. 1978); Spillman v. Est. of Spillman, 587 S.W.2d 170, 172–173 (Tex. Civ. App. 5th 1979).

nent needs an expert who is familiar with that research and can effectively explain the technique to the jury.

If the expert has previously testified and there is an available transcript of the testimony, the attorney should review the transcript. Better still, the expert might have appeared at a videotaped deposition; viewing the videotape will give the attorney an excellent sense of whether the witness will be an effective courtroom teacher. When the expert is a classroom teacher who has not previously testified, the attorney might request to see the expert's latest sets of student teaching evaluations. Most evaluation forms ask the students to rate the teacher's clarity, and some forms inquire specifically whether the teacher is adept at explaining concepts in class. If the students give the expert low marks as a classroom teacher, the odds are that jurors will give the expert similarly low marks as a courtroom teacher.

C. Deciding How Much Expert Testimony to Present

Assume that an attorney decides to present expert testimony and finds one or more potential witnesses who will be effective courtroom teachers. Even on these assumptions, the attorney should not leap to the conclusion that it is advisable to call all the potential witnesses during his or her case-in-chief.

Consider the following fact pattern. The attorney is a prosecutor, and opposing counsel intends to rely on an insanity defense. To do so, the defense attorney plans to call three psychiatrists who are prepared to testify that, at the time of the *actus reus*, the accused suffered from a psychosis that grossly interfered with his grasp on reality and his ability to differentiate right from wrong. The prosecutor has several impartial lay witnesses who will describe the accused's seemingly rational, calculating conduct before, during, and after the alleged crime: the careful planning of the crime, its split-second execution, and the brilliant getaway. In addition to calling the lay witnesses, should the prosecutor match the defense expert for expert? The answer is no. The lay testimony will support a powerful, common sense inference that the accused was sane at the time of the *actus reus*. ⁴² A single, effective prosecution expert should

^{42.} Roger Rook, *Take the High Ground: A Practical Approach to Meeting the Insanity Defense*, in *The Prosecutor's Deskbook* 598, 599 (Patrick F. Healy & James P. Manak eds., Natl. D.A. Assn. 1971) ("[T]he prosecutor can start bringing out the physical facts, the actions of the defendant before, during, and after the crime which . . . only a sane man would have done.").

suffice to neutralize the defense expert testimony. ⁴³ If the prosecutor called additional experts, the expert testimony might begin to dominate the trial, and the jury could easily lose sight of the damning lay testimony. Furthermore, there could be slight differences among the testimony by three prosecution psychiatrists; at the very least, their reasoning processes might vary. ⁴⁴ In many jurisdictions, even though the defense has the initial burden of production on the issue of an accused's insanity, the prosecution bears the ultimate burden of proof ⁴⁵ and must establish the accused's sanity beyond a reasonable doubt. The defense might persuade the jury that the differences among the prosecution witnesses suffice to create reasonable doubt. ⁴⁶ In short, in these circumstances it would be a mistake for the prosecution to present as much expert testimony as the defense.

D. Planning the Witness's Direct Examination

After deciding to call a particular expert witness, the attorney should spend a good deal of time outlining the direct examination to ensure that it is as simple and comprehensible as possible. In most cases, after the proponent qualifies the witness as an expert, the balance of the direct examination flows very much like a syllogism. ⁴⁷ A classic syllogism consists of a major premise, a minor premise, and a conclusion. ⁴⁸ In the typical case, the expert relies on a theory or technique that functions as the expert's major premise. For instance, a psychiatrist might be prepared to rely on a set of diagnostic criteria for a particular mental disorder. The psychiatrist could restate the criteria for paranoid schizophrenia set out in the American Psychiatric Association's *Diagnostic and Statistical Manual of Mental Disorders*. ⁴⁹ The expert applies the theory or technique to evaluate specific facts in the instant case, thus forming the minor premise. The psychiatrist could apply the diagnostic

^{43.} Id. at 598.

^{44.} Edward J. Imwinkelried, *The Methods of Attacking Scientific Evidence* § 13-5, 373 (3d ed., LEXIS L. Publg. 1997).

^{45.} Imwinkelried et al., supra n. 40, at § 2915, 1101.

^{46.} Id. at § 2916, 1103.

^{47.} Edward J. Imwinkelried, *The "Bases" of Expert Testimony: The Syllogistic Structure of Scientific Testimony*, 67 N.C. L. Rev. 1, 2 (1989).

^{48.} Edward J. Imwinkelried, *The Educational Significance of the Syllogistic Structure of Scientific Testimony*, 67 Nw. U. L. Rev. 1148, 1148 (1993).

^{49.} Am. Psych. Assn., Diagnostic and Statistical Manual of Mental Disorders 273–288 (4th ed., Am. Psych. Assn. 1998).

criteria to the patient's case history. One diagnostic criterion for schizophrenia is the patient's experience of hallucinations.⁵⁰ The expert might point to hospital records documenting the occasions on which the patient reported experiencing hallucinations.⁵¹ The result of the application is a relevant opinion — the conclusion yielded by the syllogism. The opinion could be the conclusion that the patient in question is suffering from paranoid schizophrenia. After the witness describes his or her qualifications as an expert,⁵² the witness describes his or her process of syllogistic expert reasoning. At every step in the process, there are techniques that the attorney should plan to use to decrease the risk of confusing the jury.

1. Stating the Ultimate Opinion Early in the Direct Examination

Some jurisdictions adhere to the traditional view that the expert may state his or her final opinion only after specifying all the bases for the opinion. However, Federal Rule of Evidence 705 overturns that view. In pertinent part, Rule 705 allows the expert to state his or her conclusion "without prior disclosure of the underlying facts or data." This provision gives the witness's proponent the choice of either (1) following the traditional practice and adducing the opinion near the end of the direct examination or (2) invoking Rule 705 and eliciting the opinion early in the direct. Which choice is tactically preferable?

There are two schools of thought on this question.⁵⁴ One view is that despite Rule 705, the proponent should defer the opinion until the end of the witness's direct examination. Doing so supposedly "heightens the jury's interest and creates a bit of suspense and surprise."⁵⁵ The contrary view is that the attorney should capitalize

^{50.} Id. at 285

^{51.} The proponent might be able to elicit this testimony without even invoking the provision in Federal Rule of Evidence 703 that allows an expert to base an opinion on facts and data that are not independently admissible. Fed. R. Evid. 703 (2000). The relevant passages in the hospital records would amount to double hearsay: The author of the report asserts that the patient made an assertion. However, both levels would arguably fall within hearsay exceptions. The initial level, the hospital records themselves, would amount to business records under Federal Rule of Evidence 803(6); and the patient's statement might qualify as exceptions codified in Rules 803(3)–(4) for assertions of state of mind. See Fed. R. Evid. 803 (2000) (listing hearsay exceptions when the availability of the declarant is irrelevant).

^{52.} Fed. R. Evid. 702 (2000).

^{53.} Fed. R. Evid. 705 (2000).

^{54.} Imwinkelried, supra n. 37, at 59-60.

^{55.} Id. at 59.

on the opportunity afforded by Rule 705. The argument favoring this view is that stating the opinion early will help the jury follow the subsequent reasoning:

Even if the witness . . . uses simple language, it may be difficult for the lay jurors to follow the reasoning process leading from the test result to the ultimate opinion. It is probably true that if the witness states the opinion early, the direct testimony is less suspenseful. There is a tradeoff of surprise for clarity. However, given the primary danger of jury confusion, the tradeoff is worthwhile; the additional guarantee of the jury understanding is worth the cost in diminished surprise. ⁵⁶

The old bromide is that you should tell someone what you are going to tell them, tell them, and then tell them what you have told them. The early statement of the opinion lets the jury know where the reasoning is leading. Hopefully, the preview of the opinion will better enable the jurors to follow the flow and logic of the reasoning.

2. Describing the Underlying Theory Component of the Expert's Major Premise

At the deepest level, the expert may be relying on a theory or principle recognized in his or her discipline. When the expert contemplates doing so, two tactical issues arise. First, should the proponent attempt to obviate the need for live testimony about the theory by requesting judicial notice? Second, if the proponent will present the expert's testimony about the theory, what techniques can the proponent use to minimize the risk of confusion?

To begin with, it might be advisable to request judicial notice of the theory. Federal Rule of Evidence 201(b) states:

A judicially noticed fact must be one not subject to reasonable dispute in that it is either (1) generally known within the territorial jurisdiction of the trial court or (2) capable of accurate and ready determination by resort to sources whose accuracy cannot reasonably be questioned.⁵⁷

The statute is worded in the alternative. Even if the proposition is not a matter of common knowledge noticeable under 201(b)(1), it can

^{56.} Id. at 60.

^{57.} Fed. R. Evid. 201 (2000).

be noticed when it qualifies under (b)(2). Given (b)(2), the courts have been willing to judicially notice a large number of propositions relating to such expert subjects as "radar, intoxication tests, fingerprints, palm prints, firearms identification, handwriting comparisons, DNA profiling, and blood-spatter evidence." ⁵⁸

If judicial notice is permissible, should the proponent request it, or would it be preferable to present impressive live testimony? The attorney must conduct a cost-benefit analysis. One obvious benefit is that judicial notice could shorten and thereby simplify the expert's direct examination. The judge's grant of the judicial notice request might eliminate the need for half an hour or more of live testimony. However, there would be a substantial cost if the judge gave the jury only a weakly worded instruction on the judicially-noticed fact. In criminal cases, Federal Rule 201(g) forbids the judge from ordering the jurors to assume that the judicially-noticed fact is true.⁵⁹ In a criminal trial, the judge is to instruct the jurors that they may, but need not, accept the fact as proven. 60 In contrast, in a civil case the judge directly instructs the jury that they must assume the fact to be true. 61 If the proponent knows that the judge in question has a forceful personality and will give the jury a powerfully worded, mandatory instruction, it may be advisable to seek judicial notice.

Assume, though, that the proponent decides against requesting judicial notice or that the judge denies the request. In either event, the proponent will need to present live testimony to the jury about the theory. The testimony on this topic often confuses the jurors and is often the most abstract evidence presented to the jury during the trial. How can the proponent reduce the danger of jury confusion? Two techniques are available.

First, to the extent possible, the proponent should eliminate expert jargon from the direct testimony:

During the pretrial conference with your expert witness, determine whether there are any simple lay terms that can substitute for the technical terms. In a surprising number of cases, with the aid of a regular dictionary, a thesaurus, and a technical dictionary, the attorney and expert can find effective substitutes.⁶²

^{58.} Giannelli & Imwinkelried, supra n. 20, at vol. 1, § 1-2, 4-5.

^{59.} Fed. R. Evid. 201.

^{60.} Id.

^{61.} Id.

^{62.} Imwinkelried, supra n. 37, at 44.

If the expert cannot avoid using terms of art, the proponent should use demonstrative aids to help the jury understand the terms. It is ineffective to repeatedly interrupt the witness's direct examination to invite the witness to define each term of art. One alternative is to mount a large chart of the definitions in the jury's view at the outset of the direct examination. When submitting the chart to the judge before trial, the judge should be told point blank that counsel and his or her expert wracked their brains to find lay substitutes for those terms, but were unsuccessful. The proponent should expressly state that he or she is willing to accept reasonable modifications to the definitions that his or her opponent suggests. Another possibility is to give each juror a list of the definitions. In February 1998, the American Bar Association approved its new Civil Trial Practice Standards. 63 Standard 2 encourages trial judges to distribute notebooks to jurors before the trial begins.⁶⁴ Standard 2.a.iv.F specifically mentions the possibility of including a glossary of key terms in the notebook.⁶⁵

Second, during the direct examination, the expert should be forced to give the jury an everyday analogy that illustrates the operation of the theory. Before trial, counsel should explain to the witness that a commonplace illustration would be helpful and aid the witness in finding an appropriate analogy. At trial, the witness should be asked: "Doctor, what would be a common, everyday example of this theory?"66 In the civil wrongful-death action against O.J. Simpson, the plaintiffs called Dr. Werner Spitz, a leading forensic pathologist, as an expert on cause of death. At one point in his testimony Dr. Spitz referred to "the aorta." His theory was that the killer had slashed Ron Goldman's aorta and that blood gushed out so quickly that the victim died in a matter of minutes. To help the jury understand his testimony, Dr. Spitz used an analogy; he stated that the aorta is "a garden-hose-diameter pipe." Giving the jury a concrete, familiar analogy greatly increases the probability that it will grasp the theory.

^{63.} Edward J. Imwinkelried & David A. Schlueter, Federal Evidence Tactics app. A (Matthew Bender 1999).

^{64.} Id.

^{65.} Id.

^{66.} Imwinkelried, supra n. 37, at 43.

^{67.} Beverley R. Meyers, *The Courtroom Explained through the Trials of the Century: The Evidence, Arguments and Drama behind the Cases against President Clinton and O.J. Simpson* 116 (2000) (quoting Dr. Spitz).

3. Describing the Specific Technique Component of the Expert's Major Premise

Even if the proponent does not submit any testimony about the underlying theory to the trier of fact, the proponent usually elicits testimony about the specific technique or instrument that the expert used. On the one hand, as in the case of the underlying theory or principle, the trial judge might be willing to judicially notice the validity of the instrument or technique. The parallel continues; as in the case of the underlying theory, a judicial instruction about that proposition would enable the proponent to shorten the direct testimony. On the other hand, to understand the expert's opinion, the jury ordinarily needs some context. Without more, the judicial instruction may not give the jury enough context to appreciate the expert's reasoning. For that reason, even when the judge judicially notices the specific instrument or technique, the proponent typically elicits additional live testimony on that subject.

When presenting the testimony, in essence the proponent does two things. To begin with, the proponent asks the witness to describe the instrument or technique. Once again a risk of confusion arises. If the witness is describing an instrument with which laypersons are unfamiliar, the jurors may find it difficult, if not impossible, to visualize the instrument. To combat that risk, the proponent should present a chart or photograph of the instrument. A similar risk arises when the expert details a multistep technique. If there are a large number of steps and lay jurors will find it difficult to envision one or more of the steps, the risk can be substantial. This is an ideal occasion for resorting to a computergenerated animation (CGA). A CGA is a powerful tool for simplification. It might take an expert an hour or more to verbally describe all the steps in short tandem repeat DNA typing. A CGA could condense that material into five or ten minutes.⁶⁸

After describing the instrument or technique, the proponent will want to impress on the jurors that the instrument or technique is reliable. Even if the judge has already ruled that the testimony is admissible, the proponent must convince the jury to assign substantial, if not dispositive, weight to the testimony. To do so, the proponent must present some testimony about the validation of the

^{68.} Robert J. Bingle, Winning the Verdict with Videos and Virtual Reality, 20 Natl. L.J. B7, B7 (June 15, 1998).

instrument or technique. Once again the risk of jury confusion materializes. If the expert believes that the attorney wants the same sort of detailed information that the expert would make as a principal presenter at a scientific meeting, the jury will be overwhelmed. The attorney should explain to the expert that, on direct examination, the jury needs only the tip of the iceberg; all other details can be reserved for redirect examination or rebuttal. The direct testimony ought to be pared down to the bare minimum: eyepopping summational numbers (30 studies and 130,000 subjects⁶⁹) and attention-getting names such as the Mayo Clinic and Harvard Medical School. That is all the jury needs to hear on direct examination.

4. Setting out the Expert's Minor Premise

After the expert describes the theory and technique upon which he or she is relying, the proponent frequently has the expert identify the case-specific facts that the expert will evaluate by applying the theory and technique. In the view of some litigators, this portion of the witness's direct examination gives the questioner "a chance to [deliver] a . . . summation while the trial is still in process." On occasion, direct examiners go to extremes in endeavoring to preview their closing arguments during this phase of the questioning. In one New York case, the direct examiner used two hypothetical questions to supply the expert with the case-specific facts. The two questions together consisted of about 36,000 words, that is, about 36 columns of newspaper print, and occupied more than four hours in the reading.

The questioner should resist the temptation to dry run his or her closing argument during the expert's direct examination. Common sense suggests that such a lengthy statement of the witness's minor premise is more likely to confuse than impress the jury. For that matter, it is also likely to confuse the witness and render the witness vulnerable to devastating cross-examination. Unless the witness has a phenomenal memory, even in the short-

^{69.} Daubert, 509 U.S. at 582. "Doctor Lamm stated that he had reviewed all the literature on Bendectin and human birth defects — more than 30 published studies involving over 130.000 patients." *Id.*

^{70.} Dennis R. Suplee & Margaret S. Woodruff, *Direct Examination of Experts*, 33 Prac. Law. 53, 58 (Dec. 1987).

^{71.} Francis L. Wellman, The Art of Cross-Examination 109 (4th ed., MacMillan Co. 1936). 72. Id.

term the witness will be unable to remember all the facts posited in the hypothesis. In that event, the cross-examiner can take the following tack:

On cross-examination, ask the witness to repeat all the elements of the hypothesis. The witness will probably admit that she cannot. Then, ask her to recite "even ten of the facts." It will soon become apparent that she was not listening closely. During summation, argue that the expert was not basing her opinion on the assumed facts. The expert was predisposed to give an opinion favoring your opponent, and she did not "even bother" to listen to the facts the opinion was supposedly based on.⁷³

If the witness stumbles badly in recalling the facts listed in the hypothesis, ⁷⁴ the jurors will discount the witness's opinion. It is far better for the direct examiner to simplify the hypothesis. The direct examiner ought to be discriminating; the examiner should select a handful or two of salient, case-specific facts and make it clear to the jury that the witness's opinion rests squarely upon them.

5. Eliciting the Testimony about the Manner in Which the Expert Applied the Major Premise to the Minor Premise

Sloppy test procedure is the Achilles' heel of many an expert opinion. The proficiency studies of laboratories indicate that, in a large number of cases, improper test protocol is the cause of misanalysis.⁷⁵ Yet those studies also point to the conclusion that error occurs in only a minority of cases.⁷⁶ Those statistics explain why the opponent mounts a pointed attack on the expert's test procedure in only a small percentage of the cases that go to trial.

In that light, it is understandable that most direct examiners devote little time to this portion of the witness's testimony. The proponent is typically satisfied with the expert's conclusory testimony that the expert followed "correct" or "standard" test

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^{73.} Imwinkelried, supra n. 44, at § 11-2(c), 314.

^{74.} Jules Henry Baer & Simon Balicer, Cross-Examination and Summation 137 (2d ed., Modern L. 1948) (quoting Wellman, supra n. 71, at 109).

^{75.} Edward J. Imwinkelried, *The Debate in the DNA Cases over the Foundation for the Admission of Scientific Evidence: The Importance of Human Error as a Cause of Forensic Misanalysis*, 69 Wash. U. L.Q. 19, 32 (1991).

^{76.} Id. at 35.

procedures. Abbreviating this phase of the testimony shortens and simplifies the direct examination.

There are, however, situations that warrant more extended direct testimony about test protocol. One situation is the case in which the proponent anticipates that the opponent will mount a heated attack on cross-examination. In a civil case, the opponent might have focused on test procedure at the witness's pretrial deposition. Or at the preliminary hearing in a criminal case, the defense counsel might have queried the forensic scientist closely about the procedures. More detailed direct testimony about test procedures can preempt the cross-examination and take some of the sting out of the attack.

The second situation is a case in which the proponent ultimately asks the jury to accept the expert's breathtaking opinion. Suppose that, in a civil products liability case, liability will turn on a measurement of a minute quantity in a microgram amount. Neutron activation analysis is capable of making such a measurement. To Or assume that, in a criminal case, the prosecution proffers an expert's testimony that there is only a one in 7.87 trillion probability that a randomly chosen member of the population would possess the same set of DNA markers as the accused. If the proponent expects the jury to accept such an exact measurement or a staggering random match probability, the expert must convince the jury that he or she conducted the test in a meticulous fashion.

Yet, even when the proponent decides to go into more detail about test protocol on direct examination, the proponent should not go overboard. Going into excessive detail can confuse the jury, and it can make the expert sound too defensive about his or her test procedures. The proponent can shorten the direct examination by introducing a checklist that the laboratory analyst used, quoting a few key passages during direct, and saving the remainder of the checklist for redirect examination. Depending on whether it is the analyst's regular practice to prepare the checklist, whether the analyst is a government employee, and whether the analyst can recall the analysis, the checklist could qualify for admission under

^{77.} S.S. Krishnan, Merits and Demerits of Forensic Activation Analysis When Compared to Other Trace Analysis Methods, in Scientific and Expert Evidence, supra n. 37, at 311.

^{78.} That was the staggering random match probability that F.B.I. experts cited in their investigation of whether President Clinton was the source of the semen found on Monica Lewinsky's dress. CNN, There Is Substantial and Credible Information That President Clinton Committed Acts That May Constitute Grounds for an Impeachment http://www.cnn.com/starr.report/7groundsa.htm (Sept. 9, 1998).

the business entry,⁷⁹ official record,⁸⁰ or past recollection recorded⁸¹ hearsay exceptions. If the cross-examiner's attack on test protocol is stronger than anticipated or if the direct examiner notices that jurors are startled by the ultimate opinion, the direct examiner can delve into more detail about test procedure during redirect.

6. Eliciting the Expert's Final Opinion

Courts often voice the fear that one type of expert evidence in particular, statistical testimony, will overwhelm the jury. In its famous *People v. Collins* decision, the California Supreme Court asserted that "in our computerized society,' mathematics is 'a veritable sorcerer" capable of awing lay jurors. ⁸² However, as previously stated, the studies conducted to date indicate that for the most part, lay jurors underappreciate and undervalue statistical evidence. ⁸³ Statistical evidence epitomizes the thesis of this Article that expert testimony is a double-edged sword. An opinion couched as a random match probability exceeding seven trillion can be undoubtedly impressive; but in the process of attempting to lay the foundation for that opinion, the proponent can easily confuse the jury. If the proponent has decided to proffer an opinion stated in statistical terms, he or she must proceed one small step at a time and explain each individual step as simply as possible.

At the beginning of the process, the proponent should ask the expert to state the formula that the expert intends to use. On a chart or using an overhead projector, the proponent can set out the formula. By way of example, the proponent might ask the expert to write the multiplication or product rule:

$$P(A \text{ and } B) = P(A) \times P(B).^{84}$$

Next, on the same chart or transparency, the proponent can have the expert explain what each entry in the formula represents:

^{79.} Giannelli & Imwinkelried, supra n. 20, at vol. 1, 6-2(C), 312 (discussing Fed. R. Evid. 803(6)).

^{80.} Id. at § 6-2(A), 302 (discussing Fed. R. Evid. 803(8)).

^{81.} Id. at § 6-2(D), 314 (discussing Fed. R. Evid. 803(5)).

^{82.} Id. at § 15-7(B), 729 (quoting People v. Collins, 438 P.2d 33, 33 (Cal. 1968)).

^{83.} Id. at § 15-7(B), 729 n. 285.

^{84.} Id. at § 15-7(A), at 723.

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P(A)

P(B)

X

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P(A and B).

The expert should be marched through every entry in the formula one by one.

Then the expert should be invited to give the jury a simple illustration of the use of the formula:

$$.01 = .1 \times .1$$
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At this point, the proponent should pause and have the expert explain the significance of the product, .01.

The next to last step is having the expert identify the casespecific values to be inserted in the formula:

P(A) .01

P(B) .01.

Again, the proponent needs to go one small step at a time. The expert should identify the source for every value inserted in the formula and show the jury that each value has a reliable source. The proponent must show that the expert did not simply pull the figures out of the air.

The final step is making the last computation and explaining its significance in terms of the facts of the case:

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.0001 = .01 \times .01.
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If the proponent proceeds in this methodical manner, the expert's reasoning should not only be clear to the jury, but better still, the testimony should create the impression that the final number is the product of an inexorable, undeniable logic.

E. Preparing the Witness to Testify at Trial

It is not enough to formulate a sound pretrial plan for the witness's direct examination. Counsel must explain the plan to the witness and ensure that the witness is prepared to effectively execute the plan at trial. There are, of course, several topics that the attorney needs to discuss with the witness at this conference. For

instance, if the expert has never appeared in court before, the attorney might give the witness some guidance about trial procedures and appropriate courtroom attire.

However, our present focus is ensuring that expert trial testimony is presented in a simple, understandable manner. Even when the witness has had prior courtroom experience, the worst thing the questioner can do is to simply turn the witness loose on direct examination. At the conference, the proponent must strongly caution the expert against becoming non-responsive and exceeding the scope of the question asked. The expert may nod knowingly when the attorney tells the expert that the expert ought merely to answer the question asked. However, some witnesses become more talkative when they are nervous. In the excitement of the moment at trial, the witness may begin giving lengthy answers, especially if the witness has a genuine passion for the subject matter of the testimony or is describing his or her own breakthrough research.

At the conference, counsel must be emphatic. The attorney should tell the witness that he or she must meet a courtroom teaching challenge that is more difficult than any the witness has previously encountered in the classroom. The proponent may be asking the expert to teach a concept from the advanced, upper-division organic chemistry course to jurors who have never had the introductory, lower-division course. The proponent must explain to the witness that the jury can digest only so much technical material in a single gulp and point out that there is no need to present all the information on direct examination; there will be a later opportunity for redirect examination or even rebuttal or surrebuttal. The attorney can pre-arrange a signal with the witness. For example, the witness and the proponent may agree that if the witness is becoming non-responsive, the proponent will say, "Thank you, Doctor. You've more than answered the question."

F. Presenting the Expert Testimony at Trial

At trial, the attorney must monitor both the expert and the jury. As previously stated, at the pretrial conference, counsel should impress upon the expert that he or she should simply respond to the question asked. Even if the expert appeared to grasp this point at the conference, he or she may slip into lengthy, non-responsive answers at trial. Neophyte counsel are sometimes so self-conscious at trial that they do not listen intently to the witness's answers. Counsel conducting the direct examination of an expert must hang on every word coming out of the expert's mouth. If the witness

becomes non-responsive, initially there is no need to formally move to strike. If counsel were to move and the judge granted the motion, the ruling might send the jury the unfortunate message that even the attorney thinks that the witness has done something improper. Rather than moving to strike, the proponent should use the prearranged signal. If the witness persists in being non-responsive, he or she should politely be cut off; counsel can interrupt as delicately as possible and say, "Professor, you've answered the question." Motions to strike should be used only as a last resort.

In addition, the attorney must observe the jurors' reaction to the expert's testimony. Before trial, counsel might have gone to great lengths to make certain that the expert's testimony is as free from jargon as possible. The attorney might even have gone to the trouble to present the testimony to mock jurors. Before trial, the uniform reaction of every listener could have been that the testimony was easily comprehensible. However, in the final analysis the only reactions that count are those of the actual trial jurors. Although the attorney is free to talk to the mock jurors, he or she cannot question the trial jurors. The only available clue to their reaction is their demeanor during the expert's testimony. If possible, during the expert's direct examination, counsel should take up a position near the end of the jury box. From that position, the attorney can inconspicuously read the jurors' demeanor, including their facial expressions. If one or more of the jurors' facial expressions is registering confusion rather than comprehension, the proponent should pause, back the witness up, and force the witness to explain the material in simpler terms, such as, "Doctor, you just said Could you tell us what that means?"85

III. CONCLUSION

The proponent's end objective is to make it easy for the jury to understand the expert testimony. Attaining that objective necessitates hard work on the proponent's part. The proponent must invest the time needed to gain a deep understanding of the expert subject. In addition, at virtually every stage of the pretrial- and trial-planning process, the attorney must factor into his or her tactical decisions the need to simplify the expert information. If the attorney does not do so, the presentation of the expert testimony can be

^{85.} Jerrold M. Ladar, *Direct Examination: Tips and Techniques*, 87 Case & Comment 7, 12–14 (Mar./Apr. 1982).

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worse than ineffective; it can be counterproductive, generating confusion that results in a verdict adverse to his or her client. Simply stated, Thoreau had it right.86

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