

## **FIDDLING WHILE ROME BURNS: THE STORY OF THE FEDERAL RULES AND EXPERTS**

*Ronald J. Allen\**

It is a great privilege and honor to be asked to participate in even a small way in the work of the rules advisory process. The topic today is important, and there is a lot of brain power in the room, so much that we may be able to solve some of the problems posed by forensics. Knowledge is certainly advancing, and generally reliable consensus on some of the issues plaguing the use of forensic experts at trial may be decided in the sense that any issue is decided in a typical scientific field. More or less definitely resolving scientific controversies will have two important consequences in the real world. First, certain issues will not really be the subject of litigation, notwithstanding the conventional but false belief that there can be no directed verdicts, even partial directed verdicts, in criminal cases. In fact, certain issues will already have been decided, such as many issues concerning the scientific foundations of DNA testing. Second, certain other issues will continue to be the foundation upon which qualified experts offer opposing opinions.

The best of all possible worlds will be the success of the forensic sciences in actually establishing their various fields on sufficiently secure grounds to prevent distracting evidence from trying to suggest anything to the contrary. When judges do not let in evidence attacking the secure knowledge about genetic testing or the operation of X-ray machines, they are essentially directing a verdict on those issues, which is not only exactly what they should do but also the ideal solution to the problem facing forensics.

However, not all issues will be resolvable in that fashion. New developments will continue to come along periodically, and, more significantly, the practical application of scientific principles in the immediate context will remain a persistent issue for forensics, such as comparing smudged and clear fingerprints, or the unknown mix of genetic samples. What, then, should be done to address such problems?

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\* John Henry Wigmore Professor, Northwestern University; President, International Association of Evidence and Forensic Science; Fellow, The Forensic Science Institute, China University of Political Science and Law. This Article was prepared for the *Symposium on Forensic Expert Testimony, Daubert, and Rule 702*, held on October 27, 2017, at Boston College School of Law. The Symposium took place under the sponsorship of the Judicial Conference Advisory Committee on Evidence Rules. For an overview of the Symposium, see Daniel J. Capra, *Foreword: Symposium on Forensic Expert Testimony, Daubert, and Rule 702*, 86 *FORDHAM L. REV.* 1459 (2018).

The first thing to do is to be clear about the conceptual foundation of the problem. I think it was captured by a colleague of mine whom I shall call by the gender-neutral name Blake for anonymity. Blake speaks Romeyka, a variety of Pontic Greek, named after what once was the Pontus region near the present-day Turkish city of Trabzon, made famous by having been visited by Jason and the Argonauts and for being the home of the Amazons.<sup>1</sup> Blake is an ancient Greek specialist, and Romeyka is believed to be the last surviving variety of Ancient Greek.<sup>2</sup> Blake is a wonderful person but somewhat excitable. When startled, Blake often starts speaking Romeyka, which, for Blake, is really the language of choice. Blake observed an accident involving a rather gruesome injury and was called as a witness. Blake was obviously quite nervous about this and asked me to come with him to court.

Blake was called to the stand, and things went well through the preliminary questions. The plaintiff's counsel then showed Blake a picture of the crash scene, and Blake's face turned white. The oblivious counsel asked Blake if Blake saw what happened and Blake, with an effort, nodded yes. The counsel responded by saying, "Let the record show. . . ." Counsel then asked Blake to describe what happened, which set off an uncontrollable hurricane in Romeyka. The counsel tried to intervene, but Blake was unstoppable.

Finally, the judge intervened and asked Blake, "What's going on here?"

Blake responded, in English, "The defendant was reckless and is totally responsible for the plaintiff's injuries."

"Please tell us what happened," responded the judge.

"But I just did!" said Blake with puzzled astonishment.

Suppose you are the trial judge in this case. Would you let this testimony go to the jury in this form, or would you do something about it? I think I know the answer to this question, so let me pose the next. Why, then, do judges let a certain subset of experts speak the functional equivalent of Romeyka—such as testimony with complex scientific jargon—to the jury, followed by an equally uninformative assertion of who should win the case?

Using expert testimony in many trials in the United States is a reproach to the deepest aspirations that we hold for such form of dispute resolution. Check your own intuitions, knowledge, and experience and see if they coincide with mine. The deepest aspiration that we have for trials is that facts will be found and the law applied by disinterested, unbiased, fair-minded, intelligent decision makers who will process and comprehend the evidence and deliberate upon it using all the cognitive tools at their disposal in a fair-minded fashion, and by doing so reach the most plausible appraisal of the

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1. *Against All Odds: Archaic Greek in a Modern World*, U. CAMBRIDGE (July 1, 2010), <http://www.cam.ac.uk/research/news/against-all-odds-archaic-greek-in-a-modern-world> [<https://perma.cc/57PW-22H4>].

2. Ioanna Sitaridou, *Rediscovering Romeyka*, ROMEYKA.ORG, <http://www.romeyka.org/the-romeyka-project/rediscovering-romeyka> [<https://perma.cc/2H8F-DN9D>] (last visited Feb. 14, 2018).

truth of the matter available to them.<sup>3</sup> None of this can happen if a witness speaks Romeyka, regardless of which label is attached to that witness, lay or expert.

Let us take a conceptual step back from this conundrum and examine its origins. Trials are almost exclusively educational, pedagogical events: a disinterested person—judge or juror—is educated about the pertinent events and assigned the task of doing the best that he or she can to figure out what actually happened at the time in question. That can only occur if the fact finder understands the evidence, but in many instances the way in which so-called<sup>4</sup> expert testimony is provided at trial makes comprehension largely impossible. It is not provided to educate the fact finder;<sup>5</sup> it is offered as a conclusion to be deferred to by the fact finder.

The critical conceptual disaster at the heart of the use of expert testimony in the United States centers on the difference between education and deference.<sup>6</sup> Trials are supposed to be educational events but deteriorate into deference in many instances of expert testimony. This highlights a critical flaw of *Daubert v. Merrell Dow Pharmaceuticals, Inc.*<sup>7</sup> *Daubert* took a good first step in essentially requiring the trial judge to become sufficiently educated about a proposed testimony to judge it rationally.<sup>8</sup> However, it did not take the equally critical second step of requiring its presentation to the fact finder in the same fashion, thus allowing the deferential mode of presenting expert testimony to continue.<sup>9</sup>

You may resist this line of reasoning with the comforting but false belief that deference can occur rationally; it cannot. Putting aside extreme cases of charlatans who are unworthy of discussion, one can rationally choose to whom to defer only if one understands the pertinent field, in which case deference is inherently unnecessary.

You may resist this analysis with the equally false but conventional view that juries will defy being educated, a resistance informed in part by many of

3. See generally Ronald J. Allen, *The Nature of Juridical Proof: Probability as a Tool in Plausible Reasoning*, 21 INT'L J. EVIDENCE & PROOF 133 (2017).

4. “So-called” because it abuses the word “testimony” to apply it to what is gibberish to the decision maker.

5. See FED. R. EVID. 702(a) (stating that an expert witness’s opinion is allowed only “if the expert’s . . . specialized knowledge will *help* the trier of fact to understand the evidence or to determine a fact in issue” (emphasis added)).

6. For discussions, see generally Ronald J. Allen, *Expertise and the Daubert Decision*, 84 J. CRIM. L. & CRIMINOLOGY 1157 (1994); Ronald J. Allen & Joseph S. Miller, *The Common Law Theory of Experts: Deference or Education?*, 87 NW. U. L. REV. 1131 (1993); Ronald J. Allen & Joseph S. Miller, *The Expert as Educator: Enhancing the Rationality of Verdicts in Child Sex Abuse Prosecutions*, 1 PSYCHOL. PUB. POL’Y & L. 323 (1995). For further discussion, see also Ronald J. Allen, *Expertise and the Supreme Court: What Is the Problem?*, 34 SETON HALL L. REV. 1, 10 (2003) (“[M]y present view is that a person who cannot explain the basis of testimony in an accessible fashion or explain how it can be verified ought not be allowed to testify.”); Steven I. Friedland, *Law, Science and Malingering*, 30 ARIZ. ST. L.J. 337, 391 (1998).

7. 509 U.S. 579 (1993).

8. *Id.* at 589 (“[T]he trial judge must ensure that any and all scientific testimony or evidence admitted is not only relevant, but [also] reliable.”).

9. See FED. R. EVID. 703; *id.* r. 705.

the ridiculous judicial practices that treat juries like children in need of nannies but have literally no justification outside of the insular world of judges' chambers.<sup>10</sup> But this, too, is false. The question is whether the *jury* can be educated, not whether each *juror* is educated, and we know a fair amount about the collective cognitive capacities of small groups that are quite at odds with the disparaging view that animates those ridiculous juridical practices I just referred to.<sup>11</sup> Indeed, if I had to take my chances on a complex factual issue with a randomly selected judge or a jury selected in the normal way, I would choose the latter every time: no matter how any particular juror scores on your favorite test of cognitive capacities, they collectively bring a wealth of knowledge and experience that overwhelms that of a single individual.

“But, tut-tut Professor Allen. That is all very interesting but it is so ‘academic.’ How would a judge ever know if a jury were adequately informed about a matter, and like a typical academic, you have not even thought about the cost!” Shame on me.

These are rather unconvincing excuses, in my humble opinion, for failing to do the right thing. First, it is true that no one ever knows what is in the mind of another person, but we have a lot of tools available to help us make an approximation. Indeed, that is exactly what happens every time judges rule on a peremptory motion—they imagine what may reasonably happen in the mind of the decision maker.

Here, similarly, the question is not whether you know whether some state of mind exists or will exist; it is whether it is reasonable to believe so. And yes, there would be some added cost, but the real significance of cost lies hidden today. One party can shift the costs of explanation to the other in contravention of the normal cost-bearing rules of our legal system<sup>12</sup> simply by offering unexplained expert opinion testimony. If the testimony would lead to a wrong result, the opposing party must explain why rather than the

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10. A good example of this is the hullabaloo over the reliability of present sense impressions and excited utterances that Judge Richard Posner first addressed in *United States v. Boyce*, 742 F.3d 792, 802 (2014), which led to the previous rules advisory symposium published in this journal, see generally Symposium, *Hearsay Reform*, 84 FORDHAM L. REV. 1323 (2016). When the Federal Judicial Center actually looked at the data, it was confirmatory of the empirical basis of the rules. See Memorandum from Timothy Lau to Advisory Comm. on Rules of Evidence (Mar. 5, 2016), [https://www.fjc.gov/sites/default/files/2017/Reliability\\_of\\_Hearsay\\_Evidence\\_Memorandum.pdf](https://www.fjc.gov/sites/default/files/2017/Reliability_of_Hearsay_Evidence_Memorandum.pdf) [<https://perma.cc/7M97-GB9A>]. Moreover, and more generally, the data suggest that jurors are competent to handle hearsay evidence. The judicial concern over the jurors being led astray is essentially unjustified. See generally Ronald J. Allen, *The Hearsay Rule as a Rule of Admission Revisited*, 84 FORDHAM L. REV. 1395 (2016).

11. See, e.g., JOSEPH E. MCGRATH, GROUPS: INTERACTION AND PERFORMANCE 72 (1984) (“Early studies . . . found that the average judgments of groups . . . were more accurate than the single judgments of the individuals in those groups.”); Petru Lucian Curșeu et al., *Decision Rules and Group Rationality: Cognitive Gain or Standstill?*, 8 PLOS ONE 1, 1 (2013) (“Recent research in group cognition points towards the existence of collective cognitive competencies that transcend individual group members’ cognitive competencies.”).

12. See *Daubert*, 509 U.S. at 592 n.10 (extending the reasoning of *Bourjaily v. United States*, 483 U.S. 171 (1987), to require the proponent of expert testimony to bear the burden of proving the testimony is reliable).

proffering party justifying it.<sup>13</sup> It is also peculiar that the objection to the cost of education is limited to information that may actually be useful to jurors in their real lives, as compared to the vast amount of education foisted upon them in the typical case that will be quite useless except perhaps as fodder for cocktail conversation. It might actually be helpful for the average juror to learn a little bit about statistics or oncology as compared to, say, the nine or so months of absorbing completely useless information that the O.J. Simpson jury suffered through.

But maybe there are some issues that really do defy comprehension. In those cases, the jury can't be educated. And those cases should not be tried. To try a case where the trial judge actually thinks comprehension is impossible is to turn what is supposed to be a rational system into something more akin to trial by combat and ordeal. Judges should not preside over such rituals, although a complete explanation of how to avoid doing so would require more time than I have. Briefly, you would have two choices. First, if you the trial judge think you understand the issue but that the jury cannot (a bit presumptuous, I must say, but I suspect captures a slice of reality), you should direct a verdict. If no one, including you, can understand the testimony, you should exclude it unless you would also admit a lay witness speaking Romeyka.

So, you now see why the title of this brief Article refers to fiddling while Rome burns. Everyone should be absolutely clear that I am not being disrespectful to the scientists or the lawyers and law professors working hard to advance knowledge and improve its use at trial. No, not at all. Rather, I am criticizing the judges who tolerate this mess and the rules process that perpetuates it. We should all be collectively ashamed of ourselves for allowing this paradigmatic example of irrationality to work its way into the heart of a process for which, as I said at the beginning and I repeat, our deepest aspiration is that facts will be found and the law applied by disinterested, unbiased, fair-minded, intelligent decision makers who will process and comprehend the evidence and deliberate upon it using all the cognitive tools at their disposal in a fair-minded fashion, and by doing so reach the most plausible appraisal of the truth of the matter available to them.

What can we do about it? As much as I respect the Reporter, his proposed solution is not a solution at all. He proposes to add a subsection (b) to Rule 702, which says:

(a) *In General.* A witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise if:

- (1) ~~(a)~~ the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue;
- (2) ~~(b)~~ the testimony is based on sufficient facts or data;

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13. See, e.g., *id.* at 582–83 (explaining how the petitioners arguing against the respondent's expert testimony introduced eight of their own expert witnesses).

(3) ~~(e)~~ the testimony is the product of reliable principles and methods;  
and

(4) ~~(d)~~ the expert has reliably applied the principles and methods to the  
facts of the case.

*(b) Forensic Expert Witnesses. If a witness is testifying on the basis of a forensic examination [conducted to determine whether an evidentiary sample is similar or identical to a source sample] [or: “testifying to a forensic identification”], the proponent must prove the following in addition to satisfying the requirements of Rule 702(a):*

*(1) the witness’s method is repeatable, reproducible, and accurate—as shown by empirical studies conducted under conditions appropriate to its intended use;*

*(2) the witness is capable of applying the method reliably—as shown by adequate empirical demonstration of proficiency—and actually did so;  
and*

*(3) the witness accurately states, on the basis of adequate empirical evidence, the probative value of [the meaning of] any similarity or match between the evidentiary sample and the source sample.<sup>14</sup>*

This proposed solution says, in essence, “We are quite serious about what we have said about these matters in subsection (a), so please take that provision seriously.” Maybe an admonition to take seriously what has already more or less been said will change behavior, but I doubt it.

I suggest quite a different amendment that says simply, “Expert testimony must be presented in a comprehensible manner.” Lousy science cannot be presented in a comprehensible manner; indeed its internal inconsistencies, outlandish assumptions, lack of empirical support, and often carelessness in application are what make it lousy science in the first place. These matters cannot be explained away in a comprehensible fashion, and thus requiring experts to explain themselves adequately for comprehension would erect a significant part of the barrier to the admissibility of lousy evidence for which the Rules Committee has been searching for a long time. This does not mean that no mistakes would be made; they undoubtedly would. Nor does it mean that there would be no inappropriate cost shifting; again there undoubtedly would. However, the standard for judging human institutions should be a practical one rather than perfection.

Requiring experts to testify in a comprehensible fashion would reduce the incidence of junk science, would facilitate maintaining the proper distribution of costs at trial, and I believe could lead to more accurate results overall. This seems superior both to doing nothing and to drafting a simple admonition to

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14. Memorandum from Daniel J. Capra, Reporter, Advisory Comm. on Evidence Rules, to Advisory Comm. on Evidence Rules, Symposium on Forensic Expert Testimony, *Daubert* and Rule 702 (Oct. 1, 2017), in ADVISORY COMMITTEE ON RULES OF EVIDENCE OCTOBER 2017 AGENDA BOOK 371, 380 (2017) (alterations in original) (providing a proposed amendment to Rule 702), [http://www.uscourts.gov/sites/default/files/a3\\_0.pdf](http://www.uscourts.gov/sites/default/files/a3_0.pdf) [<https://perma.cc/VJ5T-RAG3>].

trial judges to do what they were previously asked to do, but have ignored.  
At least it is worth a try.