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**Evidence:**  
*Admissibility vs. Weight in Scientific Testimony*

David L. Faigman<sup>1</sup>

Fundamental to all evidence codes is the distinction between admissibility and weight. Judges decide admissibility, and, if the evidence is admitted, jurors decide what weight to give it. Hence, a “dying declaration” that is hearsay is only admissible if the judge determines, among other things, that the statement was made by a declarant “while believing that the declarant’s death was imminent.”<sup>2</sup> This predicate issue of whether the defendant believed death was imminent is called a “preliminary fact,” one that the judge must determine by a preponderance of the evidence. If admitted, the weight, if any, that should be accorded the particular dying declaration is up to the jury to decide.

This division of responsibilities between judge and jury also applies to scientific evidence presented by experts. Although fundamental to all evidentiary decisions, this distinction received little attention in courts’ consideration of experts until the Supreme Court decision in *Daubert v. Merrell Dow Pharmaceuticals, Inc.*<sup>3</sup> *Daubert*, interpreting Federal Rule of Evidence 702, held that judges are “gatekeepers” and obligated to determine whether the methods and principles underlying proffered expert testimony are—more likely than not—reliable and valid.<sup>4</sup> The Court thus treated the evidentiary reliability of the scientific evidence proffered in the case as a preliminary fact and thus within the judge’s purview to determine.

In contrast to the usual preliminary-fact determination, however, the complex nature of scientific evidence has created substantial confusion among courts about just where the judge’s authority to decide admissibility ends and the jury’s responsibility to assess weight begins. *Daubert* endeavored to set this line by instructing

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1. Summarized and excerpted from David L. Faigman, Christopher Slobogin & John Monahan, *Gatekeeping Science: Using the Structure of Scientific Research to Distinguish Between Admissibility and Weight in Expert Testimony*, 110 NW. U. L. REV. 859 (2016).

2. FED. R. EVID. 804(b)(2).

3. 509 U.S. 579 (1993).

4. *Id.* at 589.

judges to “focus . . . solely on principles and methodology, not on the conclusions that they generate.”<sup>5</sup> This distinction between methodology and principles on the one hand and conclusions on the other has assumed major significance. Many courts believe that the methodology-conclusions distinction provides a useful guide for distinguishing the judge’s role from that of the jury. However, the Court itself abandoned this distinction just four years after *Daubert* in *General Electric Co. v. Joiner*,<sup>6</sup> and the 2000 amendments to Rule 702 made no mention of it.

### *Using Science to Guide Scientific Testimony*

In fact, the methodology-conclusions distinction has no principled basis in science and thus should have none in law. Since the distinction does not align with the nature of the evidence that scientists proffer in court, it is destined to fail and should be explicitly jettisoned. In its place, courts should adopt a framework that is consonant with the structure of science itself.

The structure of scientific evidence has one central characteristic: science is general in nature because it involves study of categories of individuals or cases rather than study of a single individual or case. Generalization permeates the scientific enterprise, cutting across methodology, principles, and conclusions. In a nutshell, then, the legally relevant issue of whether, say, benzene can cause leukemia is a general question that involves the methods, principles, and conclusions embedded in the research. If the answer to this question is affirmative, there remains the methodology, principles, and conclusions on the ultimate issue of whether a specific plaintiff’s leukemia was caused by benzene exposure.

This insight regarding the fundamental generality of science has an important consequence for the distinction between admissibility and weight. In short, scientific procedures and principles, *as well as* any conclusions of general application that are derived from them, ought to be evaluated by judges, not by juries that sit on a single case.

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5. *Id.* at 595.

6. 522 U.S. 136, 142 (1997) (“[C]onclusions and methodology are not entirely distinct from one another.”).

It is a well-established aspect of our modern jury system that, while laypeople are in charge of finding facts specific to the case at hand, courts are in charge of ascertaining legal rules that will have application to other cases. This allocation is based in part on an assessment of the relative capacities of judges and juries and in part on a desire for uniformity across cases. The same rule should apply for *facts* that will have application to other cases, for the same reasons.

Acceptance of this proposition means that the role of the judge and jury should depend not on a distinction between methodology and conclusion but on the distinction between the general and the specific. The reliability that *Daubert*, *Joiner*, and Rule 702 all require the judge to determine as a preliminary fact entails assessing every aspect of scientific evidence, not just its methodology or some other subset of the testimony.

At the same time, the general-specific distinction that derives from the nature of scientific inference also means that, whether they involve methods or conclusions, factual disputes that relate solely to the case at hand are for the jury to assess. Thus, whether an expert in the instant case actually applied the methodology that the judge found valid generally is a matter of weight, as is any conclusion the expert reaches that is applicable to the litigants.<sup>7</sup>

For example, in the controversial area of “shaken baby syndrome,”<sup>8</sup> an expert’s assertion that research indicates that subdural hematoma, retinal bleeding, and brain swelling, when they appear together, are indicative of child abuse is a general proposition and a matter of admissibility; an expert’s assertion that the victim in the case had this triad of symptoms, however, is a case-specific assertion and thus a matter of weight.

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7. The only caveat here is the traditional one that the judge may keep any issues from the jury when no rational jury could credit the expert’s assertions about them. FED. R. EVID. 104(b).

8. Compare Sandeep K. Naveng et al., *A Daubert Analysis of Abusive Head Trauma/Shaken Baby Syndrome – Part II: An Examination of the Differential Diagnosis*, 13 HOUS. J. HEALTH L. & POL’Y 203, 207 (2013) (finding the science fundamentally sound) with Keith A. Findley et al., *Shaken Baby Syndrome, Abusive Head Trauma and Actual Innocence: Getting it Right*, 12 HOUS. J. HEALTH L. & POL’Y 209, 213 (2012) (finding the science fundamentally unsound).

Likewise, in a case involving testimony about DNA, the assertion that a particular method of testing DNA is reliable is of general import and a matter of admissibility, while an opinion regarding a case-specific fact, such as whether the technician properly labeled the samples prior to testing, is a matter of weight. A labor economist in an employment-discrimination case who admittedly fails to control for a key variable such as seniority or wage structure in a regression analysis has committed a general error that should lead to exclusion by a judge; but determining whether the economist did in fact include such a variable, or whether he or she obtained accurate information about the variable, is an assessment that should be carried out by the jury.

*Specifying the Boundaries of the Admissibility-Weight Distinction*

Although the proposal described here is entirely consistent with the current version of the Federal Rules, the following test sets forth clearly the boundary between a judge's obligation to determine admissibility and the jury's task to assess weight:

Preliminary facts that describe the principles or methods of scientific research or generally applicable conclusions drawn therefrom are within the judge's responsibility to decide as a matter of admissibility under Federal Rule of Evidence 104(a) and equivalent state rules. Conditional facts that describe whether the expert adhered to a reliable principle or method are matters of weight and within the province of the trier of fact to decide if a reasonable trier of fact could find that the fact is true, as provided in Federal Rule of Evidence 104(b).

This approach to the admissibility-weight issue in expert testimony cases has three important benefits. First, it aligns squarely with the purposes of evidence codes and the Constitution's due-process and right-to-jury provisions by making optimal use of the relative competencies of judges and juries. Juries will be prevented from hearing unreliable evidence and, at the same time (assuming the expert testimony is admitted), will be given full authority to decide facts relevant to the case before them.

Second, the division suggested by the structure of scientific inference implements the key goal of ensuring uniformity between cases regarding general propositions of science.

Third, and possibly more important for a rule of evidence, this approach has the benefit of clarity. The current focus on attempting to distinguish methodology from conclusions leaves courts in a quandary because, as a scientific matter, methodology and conclusions are not always separable. The proposed alternative is more straightforward: when the statement of fact (or inference) that is asserted to support proffered expert opinion transcends the instant case, it is a preliminary fact to be decided by the court under Rule 104(a). When the statement of fact (or inference) that is asserted to support proffered opinion is pertinent only in the instant case (after a judge has found that it is the product of reliable principles and methods), it is a question of weight and only subject to review under Rule 104(b) as a matter of conditional relevance.