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## RESOLVING THE *FRYE* DILEMMA—A RELIABILITY APPROACH

Fredric I. Lederer\*

### PROPOSAL

The purpose of this compilation of proposed rules is, of course, to resolve what might reasonably be termed the *Frye*' dilemma—how should courts determine the admissibility of novel scientific evidence. Most commentators have recognized<sup>2</sup> that *Frye*'s "general acceptance" test suffers from numerous deficiencies,<sup>3</sup> not the least of which is the peculiar fact that it is unclear whether *Frye* survived the adoption of the Federal Rules of Evidence and its various state analogs.<sup>4</sup>

The primary alternative to *Frye* has been the relevance approach.<sup>5</sup> I propose a different alternative, a reliability approach that is between the relevance

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<sup>1</sup>*Frye v. United States*, 293 F. 1013 (D.C. Cir. 1923).

<sup>2</sup>See, e.g., Moenssens, *Admissibility of Scientific Evidence—An Alternative to the Frye Rule*, 25 WM. & MARY L. REV. 545 (1984). *Symposium on Science and Rules of Evidence*, 99 F.R.D. 188 (1983); Graham, *Relevancy and the Exclusion of Relevant Evidence: Admissibility of Evidence of a Scientific Principle or Technique—Application of the Frye Test*, 19 CRIM. L. BULL. 51 (1983). McCormick, *Scientific Evidence: Defining a New Approach to Admissibility*, 67 IOWA L. REV. 879 (1982); Giannelli, *The Admissibility of Novel Scientific Evidence: Frye v. United States, A Half-Century Later*, 80 COLUM. L. REV. 1197 (1980). See also 3 J. WEINSTEIN & M. BERGER, WEINSTEIN'S EVIDENCE ¶ 702[03] (1985).

<sup>3</sup>See, e.g., *Symposium on Science and Rules of Evidence*, 99 F.R.D. 188, 191-93 (1983). Interestingly, the three working groups formed as part of the 1983 Symposium unanimously agreed on the need to abandon *Frye*. *Id.* at 229-33.

<sup>4</sup>See, e.g., 3 J. WEINSTEIN & M. BERGER, WEINSTEIN'S EVIDENCE ¶¶ 702[03]; 702[06] (1985).

<sup>5</sup>M. Berger, *A Relevancy Approach to Scientific Evidence*, 26 JURIMETRICS J. 245 (1986). See also 3 J. WEINSTEIN & M. BERGER, WEINSTEIN'S EVIDENCE ¶ 702[03] (1985).

test and the *Frye* rule. Specifically, I propose that Federal Rule of Evidence 702 be amended to provide:

If *reliable* scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion or otherwise.<sup>6</sup>

### COMMENTARY

The proposed rule, which is identical to Federal Rule of Evidence 702 except for the addition of "reliable," is taken verbatim from Proposed Virginia Rule of Evidence 702 which is now undergoing review by the Supreme Court of Virginia.<sup>7</sup> As noted in the drafter's Comment to the Proposed Virginia Rule: The word "reliable" represents a more flexible and receptive attitude toward scientific and expert evidence than is indicated in some decisions in other jurisdictions that quote particular language from *Frye v. United States*, . . . and that insist that any approach labeled "novel" must be generally accepted in a designated field before it may be utilized by an expert. Rule 702 is not a bar to all techniques of recent origin. But the rule does require the trial judge to determine that a scientific or expert technique is reliable enough for use by courts and that triers of fact can appreciate the degree of reliability associated with a technique.

Although perhaps overly simplistic, it might reasonably be said that the primary criticisms of *Frye* are that the doctrine is unclear and hard to apply, and that to the extent that there is agreement on its meaning, *Frye* tends to be unduly conservative in its effect on the admissibility of novel evidence. Adherents of *Frye*, on the other hand, usually applaud its conservative nature urging that what may occasionally be a vice is actually a virtue—especially in criminal cases where the questioned evidence is customarily offered by the prosecution.<sup>8</sup> What all commentators appear to agree on is that scientific evidence, novel or not, ought to be reliable.<sup>9</sup> It is how we are to reach that goal that is the crux of the present exercise.

<sup>6</sup>Proposed Virginia Rule of Evidence 702, Article VII, Opinions and Expert Testimony, Approved Committee Draft (November 10, 1984) (emphasis added).

<sup>7</sup>A broad based committee appointed by the Chief Justice of the Virginia Supreme Court forwarded proposed rules of evidence to the Chief Justice in 1985. The rules, which are presently under consideration by the Supreme Court of Virginia, require legislative enactment. Professor Stephen Saltzburg of the University of Virginia served as Reporter for the drafting committee for the rules and was the author of Proposed Virginia Rule of Evidence 702.

<sup>8</sup>See, e.g., Giannelli, *The Admissibility of Novel Scientific Evidence: Frye v. United States, A Half-Century Later*, 80 COLUM. L. REV. 1197, 1243-45 (1980).

<sup>9</sup>See, e.g., Graham, *Relevancy and the Exclusion of Relevant Evidence: Admissibility of Evidence of a Scientific Principle or Technique—Application of the Frye Test*, 19 CRIM. L. BULL. 51, 52-53 (1983); McCormick, *Scientific Evidence: Defining a New Approach to Admissibility*, 67 IOWA L. REV. 879, 911-12 (1982); 3 J. WEINSTEIN & M. BERGER, WEINSTEIN'S EVIDENCE ¶ 702[03] (1985). Despite this recognition, few courts have utilized an express reliability analysis. *But see, e.g., United States v. Downing*, 753 F.2d 1224, 1238-39 (3d Cir. 1985); *State v. Kersting*, 50 Or. App. 461, 623 P.2d 1095 (1981), *aff'd*, 292 Or. 350, 638 P.2d 1145 (1982). Compare *State v. Kersting*, *supra* with *State v. Brown*, 297 Or. 404, 687 P.2d 751 (1984).

The relevance approach requires that the proffered evidence satisfy the relevance requirements of Federal Rule of Evidence 401, which necessarily requires an evaluation of the evidence's probative worth.<sup>10</sup> Theoretically, once the evidence has been established to have probative value, it is relevant and admissible under Federal Rule of Evidence 402, unless it fails to satisfy Federal Rule of Evidence 702's requirement that the evidence "will assist the trier of fact."<sup>11</sup> Unless this language is to be viewed as providing a general reliability requirement, relevant evidence usually will be admissible subject only to Federal Rule of Evidence 403's exclusion of relevant evidence when its "probative value is substantially outweighed by the danger of unfair prejudice, confusion of the issues, or misleading the jury. . . ." This test is conducive to admission of novel scientific evidence. However, it presents a significant theoretical risk that unreliable evidence could be admitted because of the meager demands of logical relevancy.

The *Frye* "general acceptance" test is often viewed as a guarantee of reliability inasmuch as *Frye* requires, at least in its original formulation, "general acceptance in the particular [scientific] field in which it belongs."<sup>11</sup> Although this doctrine has the questionable "virtue" of being subject to judicial ascertainment without substantial scientific inquiry<sup>12</sup> it guarantees not "reliability" but only that the evidence is in accord with the scientific wisdom of the moment.<sup>13</sup> The *Frye* test, then, may accomplish its task of providing some measure of reliability, but may do so at great evidentiary cost and without substantial judicial support.

What is needed is a reliability requirement more demanding than mere logical relevancy but easier of application than *Frye*. Proposed Virginia Rule of Evidence 702 provides one such attempt.

The proposed rule echoes aspects of the conservative approach often applauded in *Frye*. It requires not just that the evidence be logically relevant but also that the evidence be found by the trial judge to be "reliable" (implicitly) for the specific purpose offered. The burden is on the proponent. The evidence must not only be reliable, but also must "assist the trier of fact" under Federal Rule of Evidence 702. If the proposed amendment were accepted, it is likely

<sup>10</sup>A number of different formulations have been offered to assist courts in evaluation of probative value. See, e.g., McCormick, *Scientific Evidence: Defining a New Approach to Admissibility*, 67 IOWA L. REV. 879, 911-12 (1982); Imwinkelried, *A New Era in the Evolution of Scientific Evidence—A Primer on Evaluating the Weight of Scientific Evidence*, 23 WM. & MARY L. REV. 261 (1981).

<sup>11</sup>*Frye v. United States*, 293 F. 1013, 1014 (D.C. Cir. 1923).

<sup>12</sup>Because the court in *Frye* contemplated that evidence which was supported by general acceptance in the appropriate scientific community would be reliable, it is unlikely that it contemplated a substantial inquiry into the validity of generally accepted scientific theory of procedure.

<sup>13</sup>It may be that this should be sufficient for admissibility at trial because admission is not dispositive; the adversary system may ensure that the fact finder will be exposed to any questions of weight. On the other hand, as Professor Giannelli has pointed out in *Symposium on Science and Rules of Evidence*, 99 F.R.D. 188, 206-07 (1983), even if witnesses are available for both parties, there may be a scientific "information gap." What is generally accepted may not in fact reflect the latest, the most accurate, scientific understanding.

that the "assistance" aspect of 702 would no longer be used as a substitute for a reliability analysis.<sup>14</sup> Either the "assistance" portion of Rule 702 or Rule 403 would provide a protection against reliable evidence that should be excluded for other reasons.

A candid analysis of the proposed rule makes it clear that the rule is not a panacea. It mandates that the trial judge will determine reliability but does not define the standard to be used, inherently vesting broad discretion in the trial judge. It necessarily requires the judge to make a scientific determination: from the foundation presented is the evidence sufficiently reliable to be admitted? The lack of scientific background in the trial bench and bar has been properly criticized.<sup>15</sup> The proposed rule arguably forces one to come head to head with that deficiency: with such a lack of scientific knowledge, how well can one expect a reliability standard to work? I can see, however, little or no difference between the judge's duties under this approach and those under the relevancy one. Under either, the trial judge must determine the probative value of the proffered evidence,<sup>16</sup> and the same questions that must be addressed in a relevance analysis should be resolved in a reliability examination. Evidence that is unreliable is logically inadmissible. At most, one might argue that the standard in the proposed amendment of Rule 702 is more demanding than the relevancy requirement. That may be so, but it is unclear whether the difference is qualitative rather than quantitative.<sup>17</sup>

The proposed rule does have the virtue of requiring the *proponent* to establish more than either logical relevance or mere "general acceptance." In theory, the rule risks further complication of litigation involving experts inasmuch as it applies not just to novel scientific evidence but to all expert testimony offered under Rule 702. Although it may be that some form of restriction to novel scientific evidence is both possible and desirable, such a restriction may be unnecessary. Those procedures that are in fact generally accepted are not likely to be challenged,<sup>18</sup> and the reliability of some customary procedures and techniques may be subject to judicial notice in any event.

<sup>14</sup>In such a case, Rule 702's "assistance" requirement could be used to exclude evidence that would be within the knowledge of the jury and not of particular assistance to them.

<sup>15</sup>See, e.g., *Symposium on Science and the Rule of Legal Procedure*, 101 F.R.D. 599, 603-04 (1984) (remarks of Chief Judge Howard T. Markey).

<sup>16</sup>But see Imwinkelried, *Judge Versus Jury: Who Should Decide Questions of Preliminary Facts Conditioning the Admissibility of Scientific Evidence?* 25 WM. & MARY L. REV. 577 (1984) (concluding that in the absence of *Frye* and further amendment, Federal Rule of Evidence 901(b)(9) would result in jury determination of the validity of scientific theory or process).

<sup>17</sup>A cynic might suggest, however, that pragmatic limits on the presentation of expert testimony will result in little or no difference regardless of the legal standard applied. If the courts are limited to one or two uncontroverted government witnesses in criminal cases, for example, there may be little difference between *Frye* or a reliability standard. Absent some reason to believe that further inquiry might be needed, a judge is unlikely to consider appointing a court expert.

<sup>18</sup>See, e.g., Graham, *Relevancy and the Exclusion of Relevant Evidence: Admissibility of Evidence of a Scientific Principle or Technique—Application of the Frye Test*, 19 CRIM. L. BULL. 51, 52 (1983).

It must be conceded that the proposed rule does nothing to resolve the numerous pragmatic difficulties faced in the day-to-day handling of expert testimony. Accordingly, the proposed amendment should not be viewed as an entity in and of itself. Many of the procedural suggestions made by others merit adoption notwithstanding the admissibility standard that is adopted. Professor Giannelli's notice provision (which appears in this set of proposed rules), increased use of tailored jury instructions dealing with expert testimony, and greater use of court appointed experts, would, for example, be valuable.

One may reasonably ask whether adding a reliability requirement to Rule 702 is actually necessary. With one caveat, the answer depends in large part on how judges actually handle admission of scientific and expert evidence. If the judge determines carefully the probative value of evidence using the techniques espoused by a number of commentators and judges and then uses the evaluation in a determination of logical relevancy, a determination of whether the evidence "will assist the trier of fact," or a determination of whether the evidence should be excluded under Rule 403, there may well be no difference in pragmatic result whatsoever. The proposed rule does, however, mandate that the judge make a probative value determination and that the determination exceed the minimum requirement of logical relevancy.

The proposed rule does have one additional advantage. As previously noted, there has been great debate as to whether *Frye* survived the adoption of the Federal Rules of Evidence.<sup>19</sup> Amendment of Rule 702 would finally put that issue to rest and leave us with a single standard. Thus, the caveat referred to above.

## CONCLUSION

Whether adoption of such a standard with its own inherent questions is the best approach is, of course, the question and the reason for the inclusion of the position in this collection of approaches. Some resolution of the present uncertainty strikes me as highly desirable, and the reliability approach seems, on balance, to be a useful method of improving on our present difficulties.

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<sup>19</sup>See note 4 *supra*.