

# CALIFORNIA LAW REVISION COMMISSION

## BACKGROUND STUDY

### Comparison of Evidence Code with Federal Rules: Part II. Expert Testimony and the Opinion Rule

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**COMPARISON OF EVIDENCE CODE WITH FEDERAL RULES:  
PART II. EXPERT TESTIMONY AND THE OPINION RULE**

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**by Professor Miguel A. Méndez\***

**A. INTRODUCTION**

The rules of evidence recognize that occasionally jurors need expert help in resolving important factual issues. The California Evidence Code and the Federal Rules of Evidence have responded by replacing restrictive Common Law rules with a generous approach that generally allows experts to present to jurors the same kind of information experts use and rely upon in their respective fields. But opening the door to expert testimony has raised a number of concerns. Chief among these is the fear that testimony by experts with impressive credentials will overwhelm the jurors. Rather than resolve factual controversies by a dispassionate consideration of the evidence, the rules betray a concern that jurors might overestimate the value of expert testimony and give undue weight to evidence of dubious worth.

The framers of modern evidence codes have sought to diminish the risk of juror attributional error by requiring trial judges, upon objection, to withhold unreliable expert testimony from the jurors. Entrusting judges with this gatekeeping task raises two questions. One is whether the judge should play a limited or expansive role in screening the evidence. The other concerns the grounds for excluding unreliable expert testimony.

Whether a judge should play a limited or expansive role in screening the evidence depends on one's view of the competency of jurors to assess expert testimony. Those with confidence in the ability of jurors to assess the testimony would favor the use of a sufficiency standard. If the question, for example, is whether the expert used inappropriate matter in reaching an opinion, the judge would overrule the objection and allow the jurors to hear the opinion if the proponent's evidence that the expert used appropriate data is believed. The opponent would still be entitled to adduce contrary evidence through its own experts in its case-in-chief or rebuttal. But that evidence would not result in the reconsideration of the admissibility decision. Instead, the jurors would be allowed to consider the conflicting evidence presented by the parties in assessing the weight they should give to the expert's opinion. In the end the jurors would be the final arbiters of the value and validity of the expert testimony.

Those who distrust the ability of jurors to assess expert testimony would favor giving judges a greater role in screening the evidence. The judge should be empowered to withhold expert opinion from the jurors unless the judge is convinced that the opinion is valid. In fact, both the Code and the Rules adopt this model. But neither the language of their respective rules nor the opinions construing those rules specifies adequately the grounds for objecting to expert testimony or the burden the proponent must discharge, although

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recent amendments to the Federal Rules have remedied some of these defects in federal trials.

The law's discomfort with expert testimony can be measured by comparing the law's response to hearsay. Hearsay is frequently cited as the classic example of unreliable evidence. Unless hearsay falls into an exception, it is excluded because the opposing party is deprived of the opportunity to test its trustworthiness whenever the testimonial source is not produced for examination under oath in front of the fact finder.<sup>1</sup> Where the opponent does have that opportunity, concern about the use of hearsay diminishes and in some cases disappears altogether.<sup>2</sup> In contrast, the opportunity to cross examine experts on their credentials as well as on the data, principles, and methods they use in arriving at their opinions does not automatically result in the admission of their testimony. Unless the judge is convinced by all the evidence, including the opposing party's, that the expert opinion is reliable, the judge must (or should) withhold the evidence from the jurors.

The grounds for excluding expert testimony can best be determined by focusing on the opposing party's objections. Opponents should be able to choose from an array of objections. These include objecting to the need for the expert testimony as well as challenging the qualifications of the witness to provide the evidence. In addition, the opponents should be able to object to a particular opinion on the ground that it is based on inappropriate matter as determined by experts in the field. They should also have an opportunity to contest the validity of the principles and the propriety of the methods employed by the witness in reaching the expert opinion. The Code and the Rules are not in agreement on the availability of these grounds.

This paper compares the California and federal approaches to the admissibility of expert testimony. Part B discusses the opinion rule, a fundamental limitation that discourages the use of opinions by witnesses. Part C introduces an exception for some lay opinions. Part D traces the evolution of the exception for expert opinions and shows how the Code and the Rules use similar approaches to withhold unreliable evidence from the jurors. Part E explores some important differences in the role California and federal judges play in screening some types of expert testimony. Part F suggests changes to the Code that would specify more fully the grounds for objecting to expert testimony and clarify the burden the proponent should discharge. Parts G and H round out the paper by comparing the California and federal rules governing the cross-examination of experts and the appointment of experts by judges.

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1. In California, a judge is empowered to withhold hearsay from the jurors unless the proponent convinces the judge by a preponderance of the evidence of the existence of the circumstances justifying the exception. Once that showing has been made, the judge may allow the jurors to hear the hearsay declaration. See Cal. Evid. Code § 405.

2. Indeed, under the Federal Rules of Evidence, the opportunity to cross-examine witnesses about their prior statements has resulted in exempting their out of court statements from the definition of hearsay. See Fed. R. Evid. 801(d). Subject to certain limitations, their out of court statements can be offered for the truth even if the opponent declines the opportunity to cross examine them. *Id.* The Code achieves the same outcome by creating hearsay exceptions for these statements. See Cal. Evid. Code §§ 1235, 1236, 1238.

## B. THE OPINION RULE

The American system of proof discourages the giving of opinions.<sup>3</sup> It proceeds on the assumption that the fact finder can resolve factual disputes on the basis of the information presented by the parties. If the issue is whether the defendant was negligent, then the jurors can decide that question on the basis of the evidence that was received. The jurors do not need a witness to tell them whether in the witness's opinion the defendant was negligent.<sup>4</sup>

Observations, however, are often expressed in the form of opinions or conclusions. When we say that it is raining or it is cold, these observations are really deductions or conclusions based on our experience with weather conditions. Though the law of evidence disfavors opinions, it recognizes that forcing witnesses to describe their observations without using conclusions would make for awkward, time-consuming testimony. Both the Code and the Federal Rules allow lay witnesses to testify in the form of an opinion if the opinion is rationally based on the perception of the witness and is helpful to a clear understanding of the witness's testimony.<sup>5</sup>

At times, however, the fact finder, whether judge or juror, is incapable of resolving a factual issue because the knowledge needed is beyond the fact finder's competence. An issue in a personal injury case, for example, may be whether the plaintiff's back injury is permanent. Jurors hearing the plaintiff's description of her injuries and even her doctor's diagnosis of the injuries will probably be unable to decide this issue without expert help. Accordingly, the law of evidence will permit an expert to tell the jurors whether in the expert's opinion the plaintiff's injuries are permanent.<sup>6</sup> Of course, the expert will not be allowed to provide the jurors with the opinion or prognosis, unless he or she is qualified to do so.<sup>7</sup> The jurors, however, do not need to be "wholly ignorant" of the subject to which the expert opinion is directed. Expert opinion should be excluded only when it would add nothing to the jurors' common fund of knowledge.<sup>8</sup>

To ensure the reliability of the expert opinion, in California the proponent also must satisfy the judge that, in reaching the opinion, the expert relied on matters of a type reasonably relied upon by experts in the field.<sup>9</sup> Sometimes, the proponent must clear an additional hurdle. If the expert's testimony is based on a novel scientific principle, the proponent may also have to demonstrate that the principle has been generally accepted as valid by the relevant scientific community.<sup>10</sup>

The Federal Rules of Evidence governing expert opinion are remarkably similar to the California Evidence Code provisions. But, as will be shown, as a result principally of

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3. *Holland v. Zollner*, 102 Cal. 633, 635, 36 P. 930, 931, *aff'd*, 102 Cal. 633, 37 P. 231 (1894).

4. See *Westbrooks v. State*, 173 Cal. App. 3d 1203, 1209-10, 219 Cal. Rptr. 674, 678 (1985) (Expert opinion could not be received on whether safety measures eliminated dangerous conditions at a collapsed bridge as the jurors could determine that issue from the evidence without expert help.).

5. Cal. Evid. Code § 800; Fed. R. Evid. 701.

6. Cal. Evid. Code § 801; Fed. R. Evid. 702.

7. Cal. Evid. Code § 801; Fed. R. Evid. 702.

8. *People v. McDonald*, 37 Cal. 3d 351, 367, 690 P.2d 709, 719, 208 Cal. Rptr. 236, 246 (1984).

9. Cal. Evid. Code § 801.

10. *People v. Kelly*, 17 Cal. 3d 24, 30, 549 P.2d 1240, 1244, 130 Cal. Rptr. 144, 148 (1976).

judicial interpretation, the role of the federal trial judge today differs markedly from that of the California trial judge in determining the admissibility of some kinds of expert testimony.

### C. LAY OPINION

Despite the general proscription against opinions, lay witnesses are allowed to give a variety of opinions. For over a century, California lay witnesses have been permitted to estimate quantity, value, weight, measure, time, distance, and velocity; to describe such emotions as anger, fear, excitement, love, hatred, sorrow, and joy; to describe character traits, such as truthfulness and mendacity; to describe aspects of appearance, such as age, manner of walking, and type of hair; to relate whether others appeared to be sick, well, intoxicated, or even irrational.<sup>11</sup>

Some of these deductions resemble observations that for convenience's sake are expressed in the form of a shorthand opinion or conclusion, for example, describing others as angry, happy, or sad. Others imply greater deliberation in reaching the characterization, for example, describing someone as irrational. The witness who provides this opinion can probably describe a number of specific acts which prompted the witness to characterize the conduct as irrational.<sup>12</sup> Yet, both characterizations — angry and irrational — are offered by the California Law Revision Commission as examples of permissible lay opinions.<sup>13</sup> The examples underscore the modern approach to lay opinions. The question is not whether the witness can describe the observations underlying an opinion but whether the opinion is helpful to a clear understanding of the witness's testimony.<sup>14</sup> If in the exercise of discretion a California or federal judge finds that the opinion is helpful, the judge will permit the jurors to hear the opinion if it is rationally based on the witness's perception.<sup>15</sup>

The Federal Rule was amended in 2000 to exclude lay opinions which are based on scientific, technical, or other specialized knowledge and which would otherwise be governed by the limitations imposed on expert testimony by Rule 702.<sup>16</sup> The amendment is designed “to eliminate the risk that the reliability requirements set forth in Rule 702 will be evaded through the simple expedient of proffering an expert in lay witness clothing. Under the amendment, a witness' testimony must be scrutinized under the rules regulating expert opinion to the extent that the witness is providing testimony based on scientific, technical, or other specialized knowledge within the scope of Rule 702.”<sup>17</sup>

The Code does not contain this limitation. Though the risk that prompted the amendment to the Federal Rule exists in California, the risk apparently is small. Appellate opinions do not disclose an abuse of the California provision.

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11. *Holland v. Zollner*, 102 Cal. 633, 635-36, 36 P. 930, 931, *aff'd*, 102 Cal. 633, 37 P. 231 (1894).

12. See, e.g., *id.*

13. 6 Cal. L. Revision Comm'n Reports 931-35 (1964).

14. *Id.* at 933.

15. Cal. Evid. Code § 800; Fed. R. Evid. 701.

16. Fed. R. Evid. 701.

17. Fed. R. Evid. 701 advisory committee's note.

## **D. EXPERT OPINION: CONVERGENCE**

When first adopted in 1975, the federal approach to the admissibility of expert opinion was remarkably similar to that of the Evidence Code. To appreciate the changes introduced by the Code and the Rules, it is important to focus first on why the Common Law allowed expert testimony in the first place.

The Common Law recognized that the triers of fact, whether judges or jurors, were sometimes incapable of drawing a necessary inference from the evidence. If the issue, for example, was whether the plaintiff's injury was permanent, the fact finder might not have the training or experience needed to determine that issue from the testimony of percipient witnesses, such as the plaintiff's account of the effects of the injury.

One way to remedy this deficiency was to have a qualified medical expert present in the court room during the examination of the plaintiff and other witnesses called to describe the plaintiff's injuries. The expert would then be called to draw the needed inference from the evidence in the form of an opinion. Convenience gave way to the use of the hypothetical question. No longer was it necessary to have the expert sit in court. Instead, the calling party could supply the critical parts of the percipient witnesses' testimony to the expert in a question in which the calling party asked the expert to assume the existence of the facts supplied by the percipient witnesses.

First the Code and then the Rules introduced a radical change to the use of expert opinion by allowing an expert to offer an opinion that was not necessarily based on the evidence introduced at the trial.<sup>18</sup> Moreover, both permitted the use of the expert's opinion even if it was based on matter that was inadmissible.<sup>19</sup> What matters under the Code and the Rules is that the data used by the expert be of the type reasonably relied upon by experts in the field.<sup>20</sup> Permitting experts to base opinions on matter reasonably relied upon by experts in the field conformed evidentiary practice with the customs and practices of experts themselves. Thus, if sound medical practices allow doctors to reach important health decisions on information provided by patients and specialists, then those decisions should be sufficiently reliable for use in court even if the information provided by the patients and specialists is not admissible.

The use of inadmissible information to support an expert opinion introduced a new danger: the risk that fact finders might use the inadmissible matter for an improper purpose. It might be sound medical practice for a doctor to use a radiologist's report in determining whether the plaintiff's injury is permanent. But over a hearsay objection, it would be improper for the jurors to consider the radiologist's report for the truth of the matter asserted unless the report has been received in evidence. It is one matter for the doctor on direct examination to tell the jurors that she took the radiologist's report into account in reaching her prognosis. It is quite another for the doctor to disclose the radiologist's finding to the jurors.

In California the opposing party may object on hearsay (and other) grounds to the doctor's disclosure of the radiologist's finding. If the judge sustains the hearsay objection but concludes that the probative value of disclosing the finding is not substantially out-

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18. Cal. Evid. Code § 801(b); Fed. R. Evid. 703.

19. Cal. Evid. Code § 801(b); Fed. R. Evid. 703.

20. Cal. Evid. Code § 801(b); Fed. R. Evid. 702.



weighed by its prejudicial effects, the judge may allow the jury to hear the evidence subject to a limiting instruction charging them not to consider the finding for the truth of the matter stated. Because of doubts about whether jurors can abide by this instruction, a 2000 amendment to the Federal Rule prohibits the disclosure of inadmissible facts or data to the jurors unless the judge determines that their probative value in assisting the jurors evaluate the expert's opinion substantially outweighs their prejudicial effects.<sup>21</sup>

The Federal Rule offers the opposing party greater protection than does the Code. Under the Rules' special balancing provision, the judge may not allow the proponent to disclose the inadmissible matter unless the judge finds that the evaluative value of the evidence substantially outweighs its prejudicial effects. Under the California approach, the traditional balancing rule requires the judge to allow disclosure of the inadmissible matter unless its evaluative value is substantially outweighed by its prejudicial effects.<sup>22</sup> Because of the significant risk that jurors might not abide by the limiting instruction, California should consider adopting the Rules' special balancing test.

Other federal provisions governing the use of expert opinion virtually mirror the provisions found in the Code. Both recognize that for expert opinion to be received the fact finders do not have to be wholly ignorant of the subject to which the expert testimony is directed. Under the Code and the Rules, it is enough if the expert opinion assists the fact finders understand evidence or determine an issue that is beyond their common experience.<sup>23</sup> Both provide that an expert may be qualified on the basis of knowledge, skill, experience, training, or education,<sup>24</sup> including the expert's own testimony.<sup>25</sup> Both allow the use of opinions that are otherwise admissible even if they embrace ultimate issues.<sup>26</sup> And both permit experts to give their opinions without first disclosing the basis of their opinions, unless the judge requires otherwise.<sup>27</sup>

California has some special provisions. One addresses the admissibility of expert opinions based on other opinions. The provision makes clear that an expert opinion can be based in whole or in part on opinions by others,<sup>28</sup> even if the other persons are unavailable for examination.<sup>29</sup> But if those persons are available, the adverse party may call and examine them as if under cross-examination concerning their opinions.<sup>30</sup> Nothing in the Rules prohibits the adverse party from calling and examining these witnesses or prohibits the use of opinions based on opinions by individuals who are unavailable for examination. Under the Code and probably under the Rules, the admissibility of expert

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21. Fed. R. Evid. 703. Even where the federal judge makes this finding, the opposing party is still entitled to the limiting instruction.

22. Cal. Evid. Code § 352.

23. Cal. Evid. Code § 801(b); Fed. R. Evid. 702.

24. Cal. Evid. Code § 720(a); Fed. R. Evid. 702.

25. Cal. Evid. Code § 720(a)-(b). An expert's testimony would likewise be admissible in federal court under the Rules' relevance provisions. See Federal Rules of Evidence 401, 402.

26. Cal. Evid. Code § 805; Fed. R. Evid. 704(a).

27. Cal. Evid. Code § 802; Fed. R. Evid. 705. As a matter of effective advocacy, however, lawyers will ask experts to disclose the basis of their opinions on direct examination.

28. Cal. Evid. Code § 804(c).

29. Cal. Evid. Code § 804(d).

30. Cal. Evid. Code § 804(a). See subdivision (b) for exceptions to the cross-examination right.

testimony based on opinions by others depends initially on whether those opinions are of the type reasonably relied upon by experts in the field in reaching their conclusions.<sup>31</sup>

California has a number of provisions governing opinion evidence regarding the value, damages, and benefits in eminent domain and inverse condemnation cases.<sup>32</sup> These provisions should be retained. California also has special provisions on the use of lay and expert opinion on the question of sanity.<sup>33</sup> They too should be retained.

Of particular importance in criminal cases, California has a provision authorizing the use of expert testimony to prove battered women's syndrome, including to explain why a woman suffering from the syndrome perceived a need to kill in self-defense.<sup>34</sup> The provision is designed to end controversy regarding the use of battered women's syndrome evidence and should be retained.

The Rules prohibit an expert from giving an opinion on whether the accused did or did not have a mental state constituting an element of the offense charged or a defense thereto.<sup>35</sup> This provision was added by Congress in 1984. Earlier that year, the California Legislature added a similar provision to the Penal Code prohibiting an expert from testifying about whether an accused's mental illness, disorder, or defect precluded the accused from forming the mental state of the offense charged.<sup>36</sup> Although the California provision is narrower, in both jurisdictions, only the trier of fact is allowed to deduce whether the accused entertained the requisite mental state.<sup>37</sup>

## **E. EXPERT OPINION: DIVERGENCE**

The Code and the Rules, as interpreted, differ on the role the judge should play in excluding some forms of unreliable expert testimony. Although the Code and the Rules began with similar provisions, judicial construction of the California and federal provisions has led to a divergence in the judge's role.

### **(1) California: The General Rule**

Expert opinion will not help fact finders understand evidence or resolve issues beyond their competence unless the expert is qualified to provide them with the help they need. Whether an expert is qualified to provide the needed help is determined under California Evidence Code Section 405.<sup>38</sup> This provision is designed to withhold evidence from the jurors that is unreliable.<sup>39</sup> Combined with other provisions, it requires the party calling

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31. See Cal. Evid. Code § 801(b); Fed. R. Evid. 703.

32. Cal. Evid. Code §§ 810-824.

33. Cal. Evid. Code § 870.

34. Cal. Evid. Code § 1107.

35. Fed. R. Evid. 704(b).

36. Cal. Penal Code § 29.

37. Cal. Penal Code § 29; Fed. R. Evid. 704(b).

38. Cal. Evid. Code § 405 Comment.

39. *Id.*

the expert to persuade the judge by a preponderance of the evidence that the expert is qualified to render the needed assistance.<sup>40</sup>

An opinion even by a qualified expert will not help the fact finders unless it is validly drawn from appropriate data. The Code attempts to exclude unreliable opinions by limiting experts to those opinions based on matter “that is of the type that reasonably may be relied upon” by experts in the field.<sup>41</sup> As the California Law Revision Commission explains, “In large measure, this [provision] assures the reliability and trustworthiness of the information used by experts in forming their opinions.”<sup>42</sup> Over objection, the calling party must persuade the judge by a preponderance of the evidence that the expert’s opinion is predicated on such matter.<sup>43</sup> In *Board of Trustees v. Porini*,<sup>44</sup> for example, expert testimony that a teacher was mentally ill was excluded because the expert improperly relied on opinions by lay persons contained in a dossier on the teacher.<sup>45</sup>

Moreover, the question whether required protocols or methodologies have been followed also should be governed by Section 405. The failure to follow correct procedures can result in invalid conclusions even if the expert is qualified to draw the conclusion and used appropriate data.<sup>46</sup> Accordingly, over objection the calling party should persuade the judge by a preponderance of the evidence that the expert followed the required protocols and methodologies in reaching the opinion.<sup>47</sup> *Smith v. ACandS, Inc.*<sup>48</sup> is an example. Expert testimony regarding the quantity of asbestos at a job site was held inadmissible because the calling party failed to convince the judge that the expert employed the correct method for measuring asbestos levels.<sup>49</sup>

The inadmissibility of expert opinions based on improper matter is reinforced in California by another rule. On its own motion or upon objection, a court is required to “exclude testimony in the form of an opinion that is based in whole or in significant part on matter that is not a proper basis for such an opinion.”<sup>50</sup>

## (2) California: A Special Rule

When the expert opinion is based on novel scientific principles or techniques, the California courts use the *Kelly* test to determine the admissibility of the opinion. Adopting the

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40. See Méndez, *Evidence: The Code and the Federal Rules — A Problem Approach* § 17.04 (2d ed. 1999).

41. Cal. Evid. Code § 801.

42. Cal. Evid. Code § 801 Comment.

43. See Méndez, *supra* note 40, §§ 17.03-17.04. See also Cal. Evid. Code § 405 Comment (“Section 405 deals with evidentiary rules designed to withhold evidence from the jury because it is too unreliable ....”).

44. 263 Cal. App. 2d 784, 70 Cal. Rptr. 73 (1968).

45. *Id.* at 793-94, 70 Cal. Rptr. at 79-80.

46. *People v. Axell*, 235 Cal. App. 3d 836, 862, 1 Cal. Rptr. 2d 411, 427 (1991).

47. *People v. Venegas*, 18 Cal. 4th 47, 78, 954 P.2d 525, 545, 74 Cal. Rptr. 2d 262, 282 (1998).

48. 31 Cal. App. 4th 77, 37 Cal. Rptr. 2d 457 (1994).

49. *Id.* at 92, 37 Cal. Rptr. 2d at 465 (The expert used photographs instead of filtering the air through a membrane and then using an electron microscope to magnify the membrane to count the retained asbestos fibers.).

50. Cal. Evid. Code § 803.

approach taken in *Frye v. United States*,<sup>51</sup> the California Supreme Court held in *People v. Kelly*<sup>52</sup> that the proponent must persuade the judge that the novel scientific principle or technique “has been sufficiently established to have gained general acceptance in the particular field in which it belongs.”<sup>53</sup> General acceptance, not just reasonable reliance as defined in the Code,<sup>54</sup> is the test.

Critics of the *Kelly* approach emphasize the difficulties of distinguishing expert testimony based on novel scientific principles from other expert testimony, of deciding in which particular field the principle belongs, and of determining whether it has been generally accepted by the appropriate members of that field.<sup>55</sup> The California Supreme Court has nonetheless defended the use of the general acceptance test. In the court’s view, the test promotes a degree of uniformity with respect to the admissibility of evidence based on scientific principles: “Individual judges whose particular conclusions may differ regarding the reliability of particular scientific evidence, may discover substantial agreement and consensus in the scientific community.”<sup>56</sup> Of greater importance, the test is designed “to interpose a substantial obstacle to the unrestrained admission of evidence based upon new scientific principles.”<sup>57</sup> In the court’s view, caution is called for because of the risk that jurors might give unwarranted weight to “‘scientific’ evidence when presented by ‘experts’ with impressive credentials.”<sup>58</sup> Finally, the court favors applying stringent standards to the use of scientific evidence based upon a new scientific technique because “once a trial court has admitted evidence based upon a new scientific technique, and that decision is affirmed on appeal by a published appellate decision, the precedent so established may control subsequent trials, at least until new evidence is presented reflecting a change in the attitude of the scientific community.”<sup>59</sup>

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51. 293 Fed. 1013 (D.C. Cir. 1923).

52. 17 Cal. 3d 24, 549 P.2d 1240, 130 Cal. Rptr. 144 (1976).

53. *Id.* at 30, 549 P.2d at 1244, 130 Cal. Rptr. at 148, *quoting* *Frye v. United States*, 293 Fed. 1013, 1014 (D.C. Cir. 1923).

54. See Cal. Evid. Code § 801.

55. See, e.g., C. McCormick, *Handbook of the Law of Evidence* § 203 (E. Cleary 2d ed. 1972). An additional criticism of the *Kelly-Frye* test is that in some fields, especially the forensic sciences, the experts in the field all depend for their living on the viability of their expertise. According to Jennifer Mnookin:

We would hardly expect polygraph examiners to be the most objective or critical observers of the polygraph, or those who practice hair identification to argue that the science was insufficiently reliable. When there is challenge to the fundamental reliability of a technique through which the practitioners make their living, there is good reason to be especially dubious about “general acceptance” as a proxy for reliability ....

J. Mnookin, *Fingerprint Evidence in an Age of DNA Profiling*, 67 *Brooklyn L. Rev.* 13, 62-63 (2001).

56. *People v. Kelly*, 17 Cal. 3d 24, 31, 549 P.2d 1240, 1245, 130 Cal. Rptr. 144, 149 (1976).

57. *Id.*

58. *Id.*

59. *Id.* at 32, 549 P.2d at 1245, 130 Cal. Rptr. at 149. It is not altogether clear why an appellate opinion upholding the use of a particular scientific principle or technique should be given an estoppel effect. Traditional principles of *res judicata* and collateral estoppel simply do not apply because the parties to the appellate case approving the use of the evidence at the trial level are not the parties in the subsequent suit in which the admissibility of the evidence is contested. The doctrine of *stare decisis* may likewise be unavailable. It provides that a point of law determined by an appellate court should be followed by the lower courts within the jurisdiction. *Auto Equity Sales, Inc. v. Superior Court*, 57 Cal. 2d 450, 455, 369 P.2d 937, 939,

The court's defense notwithstanding, the use of the *Kelly* test does pose some problems. As the critics maintain, at times it calls for the difficult task of distinguishing novel scientific evidence from other expert testimony. In *People v. Stoll*,<sup>60</sup> for example, the California Supreme Court was called upon to determine whether the Code's reasonable reliance test or *Kelly* applied to a clinical psychologist's opinion that a defendant charged with committing lewd and lascivious acts upon children displayed no signs of deviance or abnormality. In holding that *Kelly* did not apply, the court discerned two "themes" that should guide judges and lawyers in determining which of the two tests applies.<sup>61</sup>

First, the court emphasized that *Kelly* is limited "to that class of expert testimony which is based, in whole or in part, on a technique, process, or theory which is *new* to science and, even more so, the law."<sup>62</sup> Until the courts are reasonably certain that the pertinent scientific community no longer views such techniques as "experimental or of dubious validity," the courts should forego the use of the evidence.<sup>63</sup> Upon objection, then, the proponent must persuade the judge that the principle or technique either is not new to science or law or, if it is, that it satisfies the *Kelly* test.

Second, the court underscored that *Kelly* should be applied to expert evidence that carries a "misleading aura of scientific infallibility."<sup>64</sup> According to the court, the concern is with "the unproven technique or procedure" which threatens to mislead jurors because they appear "both in name and description to provide some definitive truth which the expert need only accurately recognize and relay to the jury. The most obvious examples are machines or procedures which analyze physical data."<sup>65</sup> Other examples cited by the

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20 Cal. Rptr. 321, 323 (1962). Thus, the California Supreme Court's determination in *Kelly* that evidence based on novel scientific principles or techniques must pass the general acceptance test is binding on the lower courts. But an appellate determination that a particular principle or technique passes the test may be no more than an appellate assessment that the trial judge's ruling admitting the evidence over objection was not incorrect. In essence, the appellate court is merely rejecting the appealing party's claim that the trial judge's assessment of the evidence presented by the opposing parties, including the credibility of the witnesses, was in error.

Irrespective of whether conventional doctrine supports the court's assertion in *Kelly*, lower courts must now resolve which aspects of a favorable *Kelly* appellate determination are entitled to an estoppel effect. The consensus appears to be that only the first determination — that a particular principle or technique has been generally accepted by the pertinent scientific community — is entitled to this effect. See *People v. Morganti*, 43 Cal. App. 4th 643, 658, 50 Cal. Rptr. 2d 837, 846 (1996), and cases cited therein. Whether correct procedures were used in the case at hand and whether the expert called to relate the findings is qualified to give them are not entitled to an estoppel effect. *Id.* at 660-63, 50 Cal. Rptr. 2d at 848-49, and cases cited therein. *Morganti* has been cited with approval by the California Supreme Court. See *People v. Venegas*, 18 Cal. 4th 47, 78, 954 P.2d 525, 545, 74 Cal. Rptr. 2d 262, 282 (1998).

60. 49 Cal. 3d 1136, 783 P.2d 698, 265 Cal. Rptr. 111 (1989).

61. *Id.* at 1156, 783 P.2d at 710, 265 Cal. Rptr. at 123.

62. *Id.* (emphasis in the original). "In determining whether a scientific technique is 'new' for *Kelly* purposes, long-standing use by police officers seems less significant a factor than repeated use, study, testing, and confirmation by scientists or trained technicians. . . . To hold that a scientific technique could become immune from *Kelly* scrutiny merely by reason of long-standing and persistent use by law enforcement *outside* the laboratory or the courtroom, seems unjustified." *People v. Leahy*, 8 Cal. 4th 587, 606, 882 P.2d 321, 332, 34 Cal. Rptr. 2d 663, 674 (1994) (emphasis in the original).

63. *People v. Stoll*, 49 Cal. 3d 1136, 783 P.2d 698, 265 Cal. Rptr. 111 (1989).

64. *Id.* at 1157, 783 P.2d at 711, 265 Cal. Rptr. at 124.

65. *Id.*

court include expert opinions based on polygraphs, truth serum, Nalline tests, human bite marks, microscopic identification of gunshot residue particles, electrophoretic testing of body fluid and blood stains, the hemostick method of presumptive testing for the presence of blood,<sup>66</sup> and penile plethysmographs.<sup>67</sup>

Despite the court's guidelines, it is still difficult at times to determine whether *Kelly* should apply to some expert opinions. Before *Stoll*, for example, reasonable people could disagree on whether *Kelly* applied to an opinion that a person charged with committing lewd and lascivious acts did not exhibit signs of abnormality or deviance. Without question, the uncertainty surrounding *Kelly*'s application is a drawback, as lawyers and judges will not always find guidance in the cases distinguishing circumstances in which *Kelly* applies from those in which only the Code's reasonable reliance test suffices.<sup>68</sup>

Other aspects of *Kelly* have also proved troublesome. One relates to the burden the calling party must discharge when the opponent successfully interposes a *Kelly* objection. Though the application of the Code's provisions seems straightforward, the California courts have struggled to define the burden.

As has been noted, in all cases in which the admissibility of expert opinion is contested, the proponent must convince the judge that the expert testimony would be helpful to the jury and that the expert is qualified to give them that help. If *Kelly* applies, the proponent must also persuade the judge that the scientific principles or techniques underlying the expert testimony meet the general acceptance test.<sup>69</sup> Moreover, if the expert testimony is predicated on the application of specific protocols or methodologies, the proponent must satisfy the judge that the correct procedures were followed.<sup>70</sup>

Since *Kelly* is designed to withhold expert testimony that is too unreliable to be evaluated properly, the question whether the underlying scientific principle or technique has been generally accepted by the relevant scientific community should be governed by California Evidence Code Section 405.<sup>71</sup> Under Section 405, the judge should exclude the expert testimony unless the proponent convinces the judge by a preponderance of the evidence that the principle or technique in question meets the *Kelly* standards of acceptance.<sup>72</sup> If after the hearing it is unclear to the judge whether the required scientific consensus has developed, the judge should exclude the expert evidence.<sup>73</sup>

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66. *Id.*

67. *Id.* at 1160 n.21, 783 P.2d at 713, n.21, 265 Cal. Rptr. at 126, n.21.

68. For a collection and discussion of these cases, see Méndez, *supra* note 40, § 16.04.

69. *People v. Kelly*, 17 Cal. 3d 24, 30, 549 P.2d 1240, 1244, 130 Cal. Rptr. 144, 148 (1976).

70. *Id.* The California Supreme Court has characterized the *Kelly* test as consisting of three prongs. The first is whether the principle or technique underlying the expert opinion has been generally accepted by the relevant scientific community; the second is whether the expert is qualified to testify about the principle's or technique's general acceptance by the pertinent scientific community; the third is whether the expert opinion offered was the result of following correct scientific procedures. *People v. Venegas*, 18 Cal. 4th 47, 78, 954 P.2d 525, 545, 74 Cal. Rptr. 2d 262, 282 (1998).

71. Cal. Evid. Code § 405 & Comment; see also *People v. Ashmus*, 54 Cal. 3d 932, 971, 820 P.2d 214, 235, 2 Cal. Rptr. 2d 112, 132 (1991), *cert. denied*, 506 U.S. 841 (1992).

72. Cal. Evid. Code §§ 115, 405. See also *People v. Brown*, 40 Cal. 3d 512, 533, 726 P.2d 516, 525, 230 Cal. Rptr. 834, 843 (1985).

73. *Brown*, 40 Cal. 3d at 535 n.5, 726 P.2d at 527 n.5, 230 Cal. Rptr. at 845 n.5.

Moreover, the question whether specific protocols or methodologies have been followed also should be governed by Section 405. The failure to follow correct procedures in applying the novel principle or technique involved could give rise to opinions that are as unreliable as opinions based on principles and techniques rejected by the relevant scientific community.<sup>74</sup> Accordingly, the failure to follow the appropriate procedures should result in the exclusion of the expert opinion even if the proponent has demonstrated general acceptance by the pertinent scientific community of the scientific principles or techniques underlying the opinion.<sup>75</sup>

Confusion surrounding this prong of the *Kelly* test stems from the California courts' failure to distinguish between evidence attacking the expert opinion once it has been admitted and evidence offered to prevent the admission of the expert opinion. Sometimes, the evidence attacking the methods of gathering, preserving, or testing the data used to formulate the expert opinion is offered, not at the hearing to determine compliance with *Kelly*, but after the court has held that the *Kelly* standards have been satisfied.<sup>76</sup> Obviously, in such a situation whether or not the appropriate protocols or methodologies have been followed goes to weight and should be considered by the trier of fact.<sup>77</sup> But where the attacking evidence has been offered at the hearing to determine whether the *Kelly* standards have been met, then the court cannot escape its duty to take the evidence into account in making its *Kelly* ruling.<sup>78</sup> Such a duty is consistent with California Evidence Code Section 801(b). This provision requires judges to exclude expert opinion unless based on matter "that is of the type that reasonably may be relied upon" by experts in the field.<sup>79</sup> Whether or not a *Kelly* issue is involved, this command calls for the exclusion of expert opinion whenever based on matter that is inappropriate because of the failure to abide by the protocols or methodologies experts in the field would observe.

In light of a radically different interpretation given to admissibility of expert opinion under the Federal Rules, it is important to note that *Kelly* does not require the judge to determine whether the novel scientific principles underlying the expert testimony are "reliable as a matter of scientific fact."<sup>80</sup> Rather, *Kelly* merely requires the judge to determine "from the professional literature and expert testimony whether ... the new scientific technique is accepted as reliable in the relevant scientific community [or] whether "scientists significant either in number or expertise publicly oppose [a technique] as unreliable."<sup>81</sup> *Kelly*, moreover, "does not demand the impossible — proof of an abso-

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74. *People v. Axell*, 235 Cal. App. 3d 836, 862, 1 Cal. Rptr. 2d 411, 427 (1991).

75. *People v. Venegas*, 18 Cal. 4th 47, 78, 954 P.2d 525, 545, 74 Cal. Rptr. 2d 262, 282 (1998). An exception should be made in the rare case where the credible evidence shows that the failure to follow correct procedures is trivial and does not materially affect the opinion.

76. See, e.g., *People v. Wright*, 62 Cal. App. 4th 31, 41, 72 Cal. Rptr. 2d 246, 252 (1998).

77. Presumably, this is what the California Supreme Court had in mind when it declared, "Careless testing affects the weight of the evidence and not its admissibility, and must be attacked on cross-examination or by other expert testimony." *People v. Farmer*, 47 Cal. 3d 888, 913, 765 P.2d 940, 956, 254 Cal. Rptr. 508, 524 (1989), *cert. denied*, 490 U.S. 1107 (1989).

78. *People v. Venegas*, 18 Cal. 4th 47, 78-79, 954 P.2d 525, 545, 74 Cal. Rptr. 2d 262, 282 (1998).

79. Cal. Evid. Code § 801(b).

80. *People v. Axell*, 235 Cal. App. 3d 836, 854, 1 Cal. Rptr. 2d 411, 421 (1991). In federal courts, however, *Daubert* imposes this role on the judge. See text accompanying note 96 *infra*.

81. *Id.*, quoting *People v. Brown*, 40 Cal. 3d 512, 726 P.2d 516, 230 Cal. Rptr. 834 (1985).

lute unanimity of views in the scientific community before a new technique will be deemed reliable; any such unanimity would be highly unusual .... Rather, the test is met if use of the technique is supported by a clear majority of the members of that community.”<sup>82</sup> “‘General acceptance’ under *Kelly* means a consensus drawn from a typical cross-section of the relevant, qualified scientific community.”<sup>83</sup>

Although the California appellate courts have treated *Kelly* as independent of the Evidence Code, such a view is not necessary. Admittedly, *Kelly* is based on *Frye v. United States*,<sup>84</sup> a case that preceded the adoption of the Code by over sixty years. And, indeed, until the United States Supreme Court’s *Daubert*<sup>85</sup> opinion superseded *Frye*, it was customary for the California courts to refer to the general acceptance test as the *Kelly-Frye* rule. Nonetheless, the Code’s provisions governing expert testimony support the use of *Kelly*. Over objection, expert opinion is inadmissible in California unless it is based on matter that is of a type reasonably relied upon by experts in the field.<sup>86</sup> Clearly, expert opinion based on novel scientific or techniques rejected by the pertinent scientific community fails that test. *Kelly* thus can be viewed as a specialized application of the reasonable reliance test prescribed by the Code.

Neither *Kelly* nor the Code’s reasonable reliance test is limited “to techniques analyzing ‘physical evidence.’”<sup>87</sup> Both also embrace expert opinion based on social science research. Given *Kelly*’s aim of barring the use of evidence based on techniques “which carry an undeserved aura of certainty,”<sup>88</sup> the test applies as well to “less tangible new procedures,”<sup>89</sup> such as “‘a new scientific process operating on purely psychological evidence.’”<sup>90</sup> An example is hypnotically refreshed testimony. In California hypnotically refreshed testimony is excluded because its use fails to satisfy the *Kelly* test.<sup>91</sup>

### (3) The Federal Approach

As originally enacted, Federal Rule of Evidence 703 provided that facts or data used by an expert in reaching an opinion did not have to be admissible if “of a type reasonably relied upon by experts in the particular field in forming opinions or inferences.”<sup>92</sup> Although the rule focused on dispensing with the admissibility of the underlying data, the Advisory Committee’s note suggests that the quoted language might have had another purpose as well — to assure the reliability of the opinion. In its note, the Advisory Committee cites the California Law Revision Commission’s comment to Evidence Code Sec-

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82. *People v. Guerra*, 37 Cal. 3d 385, 418, 690 P.2d 635, 656, 208 Cal. Rptr. 162, 183 (1984).

83. *People v. Leahy*, 8 Cal. 4th 587, 612, 882 P.2d 321, 337, 34 Cal. Rptr. 2d 663, 679 (1994).

84. 293 Fed. 1013 (D.C. Cir. 1923).

85. 509 U.S. 579 (1993).

86. Cal. Evid. Code § 801.

87. *People v. Stoll*, 49 Cal. 3d 1136, 1156, 783 P.2d 698, 710, 265 Cal. Rptr. 111, 123 (1989).

88. *Id.*

89. *Id.*

90. *Id.*, quoting *People v. Shirley*, 31 Cal. 3d 18, 723 P.2d 1354, 181 Cal. Rptr. 243 (1982).

91. *People v. Shirley*, 31 Cal. 3d 18, 723 P.2d 1354, 181 Cal. Rptr. 243 (1982).

92. Fed. R. Evid. 703 (West 1975).



tion 801.<sup>93</sup> Section 801 limits expert opinions to those based on matter “that is of a type that reasonably may be relied upon by an expert in forming an opinion upon the subject to which his testimony relates . . . .”<sup>94</sup> In its comment, the Law Revision Commission stresses that “[i]n large measure, this [limitation] assures the reliability and trustworthiness of the information used by experts in forming their opinions.”<sup>95</sup> If this was the construction the Advisory Committee intended to give to Rule 703, then the rule provided federal judges with a basis for excluding unreliable expert testimony, including opinions based on novel scientific principles or techniques not generally accepted by the pertinent scientific community.

Whatever the intention of the Advisory Committee, in its 1993 *Daubert v. Merrell Dow Pharmaceuticals, Inc.*<sup>96</sup> decision, the United States Supreme Court defined the role of federal judges in screening expert testimony. The issue in *Daubert* was whether the trial judge had properly excluded an expert opinion that failed to meet *Frye*’s general acceptance test.<sup>97</sup> The proponents claimed that the adoption of the Federal Rules of Evidence had displaced *Frye*. The Court agreed. Noting sharp divisions among the circuits on the proper standards for admitting expert testimony, the Court held that under the Federal Rules of Evidence federal trial judges must ensure “that any and all scientific testimony or evidence is not only relevant, but reliable.”<sup>98</sup>

The Court laid down four guidelines to help federal judges assess the evidence’s scientific validity. One is whether the evidence is based on theories or techniques that can be or have been tested.<sup>99</sup> In the Court’s view, the testing of hypotheses is what distinguishes science from other fields.<sup>100</sup> Another guideline is whether the theory or technique has been subjected to peer review and publication.<sup>101</sup> Though publication is not a sine qua non of admissibility (some propositions may be too new or of limited interest to be published), publication “in a peer-reviewed journal” is a relevant consideration “in assessing the scientific validity of a particular technique or methodology on which an opinion is premised.”<sup>102</sup> A judge should also consider the known or potential rate of error as well as

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93. Fed. R. Evid. 801 advisory committee’s note.

94. Cal. Evid. Code § 801.

95. Cal. Evid. Code § 801 Comment.

96. 509 U.S. 579 (1993).

97. *Id.* at 585.

98. *Id.* at 589. At the time, Rule 702 provided that “[i]f 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.” Fed. R. Evid. 702 (West 1975).

In discharging their gatekeeping function to ensure the relevance and reliability of expert testimony, federal trial judges are accorded some protection. In reviewing the propriety of a trial judge’s ruling admitting or excluding scientific evidence, federal appellate courts must apply the abuse of discretion standard. *General Electric Co. v. Joiner*, 522 U.S. 136, 145 (1997).

99. *Daubert*, 509 U.S. at 593.

100. *Id.*

101. *Id.* at 593-94.

102. *Id.*

the existence and maintenance of standards controlling a technique's operation.<sup>103</sup> Finally, a judge should consider whether the techniques or theories employed have been generally accepted or rejected by the pertinent scientific community.<sup>104</sup> Though a finding that the proffered evidence is scientifically valid does not require that the techniques or theories supporting it be generally accepted, widespread acceptance or rejection "can be an important factor" in ruling the evidence admissible.<sup>105</sup>

The Court did not intend the *Daubert* guidelines to be exclusive. Lower federal courts are free to consider other factors in determining the reliability of expert testimony. Examples include whether the expert is proposing to testify on the basis of research conducted independently of the litigation, whether the expert has adequately accounted for obvious alternative explanations, whether the expert has unjustifiably extrapolated from an accepted premise to an unfounded conclusion, and whether the field of expertise claimed by the expert is known to reach reliable results.<sup>106</sup> The latter factor is important because it is designed to foreclose testimony by "experts" who uncritically find that a principle or technique is generally accepted because the experts in the field depend for their living on the viability of the contested principle or technique.

Of significance to the federal bench and bar, *Daubert* is not limited to scientific evidence despite its emphasis on "scientific testimony." In *Kumho Tire Co. Ltd. v. Carmichael*<sup>107</sup> the United States Supreme Court held that the federal judiciary's obligation to ensure that all scientific testimony is not only relevant but reliable extends to all "expert" testimony. Emphasizing the inclusion in Rule 702 of such categories as "technical" and "other specialized knowledge" in addition to "scientific knowledge," the Court held that *Daubert* applied to the testimony of a tire failure expert called by the plaintiffs to establish that their injuries were caused by a defective tire manufactured by the defendant.<sup>108</sup>

In response to *Daubert* and *Kumho* Federal Rule of Evidence 702 was amended in 2000. It now calls for the exclusion of expert opinion based on scientific, technical or other specialized knowledge unless the judge finds that "(1) the testimony is sufficiently based upon reliable facts or data, (2) the testimony is the product of reliable principles and methods, and (3) the witness has applied the principles and methods reliably to the facts of the case."<sup>109</sup> In the Advisory Committee's opinion, the "standards set forth in the amendment are broad enough to require consideration of any or all of the specific *Daubert* factors where appropriate."<sup>110</sup> In its note, the Advisory Committee makes clear

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103. *Id.*

104. *Id.*

105. *Id.* The Court underscored that in assessing the reliability of scientific evidence the judge should also apply other rules, such as Rule 703. *Id.* This rule provides that facts or data used by an expert need not be admissible in order for the expert's opinion to be admitted, if the underlying matter is of a type reasonably relied upon by experts in the field.

106. See generally Fed. R. Evid. 702 advisory committee's note.

107. 526 U.S. 137 (1999).

108. *Id.* at 152.

109. Fed. R. Evid. 702.

110. Fed. R. Evid. 702 advisory committee's note.

that under the amended rule the proponent must establish the admissibility requirements of expert testimony and other scientific evidence by a preponderance of the evidence.<sup>111</sup>

Has *Daubert* promoted or discouraged the use of expert testimony in federal trials? Thus far, *Daubert* appears to have restrained the use of expert testimony in federal civil cases. According to Professor George Fisher:

A Rand Institute report released early in 2002 concludes that for several years after *Daubert*, challenges to expert evidence in federal civil actions prevailed more often than before. Focusing on cases from the Third Circuit, the authors found that among those cases in which expert evidence was challenged, “the exclusion rate ... for evidence based on physical science in a product liability case jumped from 53 percent during the two years before *Daubert* to 70 percent between mid-1995 and mid-1996” — though the rate subsided after that. LLOYD DIXON & BRIAN GILL, *CHANGES IN THE STANDARDS FOR ADMITTING EXPERT EVIDENCE IN FEDERAL CIVIL CASES SINCE THE DAUBERT DECISION* xvi (2001).

A tangible result of this increasing scrutiny of expert evidence appears to have been an increase in both summary judgment motions and their success rate. “[S]ummary judgments were granted in 21 percent of challenges during the four years preceding *Daubert*, compared to 48 percent between July 1995 and June 1997.” *Id.* at xvi, 56. Noting that the success rate of *Daubert* challenges declined after 1997, the authors speculate that litigants “either did not propose ... [expert] evidence not meeting the new standards, or better tailored the evidence they did propose to fit the new standards.” *Id.* at xvii.

The Rand study’s most surprising discovery is how little *Daubert* seems to have changed the significance of *Frye*’s old “general acceptance” test. Before *Daubert* a judge’s finding that an expert’s methods were generally accepted always or almost always assured a judgment that the evidence was reliable. After *Daubert* a favorable finding on general acceptance secured such a judgment ninety percent of the time. Conversely, an *unfavorable* finding on general acceptance resulted in a finding of unreliability in an overwhelming majority of cases before *Daubert* — and if anything made exclusion of the evidence even more certain afterward. *See id.* at 44.<sup>112</sup>

#### (4) *Daubert* and California

In *People v. Leahy*<sup>113</sup> the California Supreme Court declined to adopt *Daubert* as the standard to be used to determine the admissibility of expert testimony in California. Instead, the court chose to adhere to the *Kelly* test.<sup>114</sup> Although the court conceded that the Evidence Code sections governing expert testimony do not expressly sanction the use of the general acceptance test, the court found the test compatible with those provisions.<sup>115</sup> More importantly, the court concluded that, despite its weaknesses, *Kelly* was effective in excluding expert opinion based on novel scientific principles or techniques not generally accepted by the pertinent scientific community.<sup>116</sup>

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111. *Id.*

112. G. Fisher, *Evidence* (2002 ed.), at 638 (emphasis in the original). *Cf.* Fed. R. Evid. 702 advisory committee’s note (“A review of the caselaw after *Daubert* shows that the rejection of expert testimony is the exception rather than the rule.”).

113. 8 Cal. 4th 587, 882 P.2d 321, 34 Cal. Rptr. 2d 663 (1994).

114. *Id.* at 599-04, 882 P.2d at 328-31, 34 Cal. Rptr. 2d at 670-73.

115. *Id.*

116. *Id.* The court was also impressed by the Legislature’s failure to abrogate the general acceptance test despite ample opportunity to do so. *Id.*

California's rejection of *Daubert* should not be overstated, however. *Kelly* is of limited application. California judges are required to apply *Kelly* only when the admissibility of an expert's opinion is challenged on the ground that it is based on novel scientific principles or techniques that lack the required acceptance by experts in the field. Still, a California judge's screening role can differ sharply from a federal judge's when *Kelly* does apply. While *Daubert* forces federal judges to determine the scientific validity of all expert testimony grounded in science, *Kelly* merely requires California judges to determine whether the contested principle or technique has been accepted as reliable by the relevant scientific community. The role of the California judge is not to determine reliability as a scientific matter but only whether the relevant scientific community has reached the prescribed consensus. The head counting burden *Kelly* places on California judges is obviously much less onerous than the burden *Daubert* imposes on federal judges.

On the other hand, California judges do play a role similar to that of federal judges when expert opinion is challenged on non-*Kelly* grounds. Over objection the proponent must still persuade the judge by preponderance of the evidence that (1) the expert's opinion is based on the type of matter relied upon by experts in the field and (2) the expert followed accepted protocols or methodologies in reaching his or her opinion.<sup>117</sup> Opinions based on matter experts would ignore or on incorrect procedures are unlikely to produce valid conclusions. Accordingly, ruling on these objections requires California judges to assess the scientific validity of the proffered opinion.

Does *Kelly* really matter? It is impossible to determine whether California trial judges are called upon to decide *Kelly* challenges more often than other challenges to the introduction of expert testimony. Trial courts are not required to keep these data. Moreover, appellate opinions disposing of expert testimony claims may not be representative. Still, appellate decisions do shed some light on the kinds of challenges California trial judges have to resolve. In the last 20 or so years, of about 30 cases presenting expert questions on appeal, 15 raised *Kelly* issues.<sup>118</sup> The figure suggests that in a substantial number of cases California judges are relieved from determining the scientific validity of the principle or technique underlying expert opinion.

## F. SUGGESTED CHANGES

*Daubert's* re-examination of the role of judges in screening expert evidence offers an opportunity to reconsider the role judges should play. Should judges be empowered to withhold the opinion from the jury unless they are satisfied by a preponderance of the evidence that the opinion satisfies the reasonable reliance, general acceptance or other tests? Or should judges let the jury evaluate the worth of the opinion once they find that the proponent's evidence satisfies the applicable test by a sufficiency standard? Under the latter standard, judges would let the jury hear the expert testimony if judges conclude that a reasonable jury could find that the opinion satisfies the pertinent test if the proponent's evidence is believed. Although a reconsideration of the judge's screening role raises important fundamental questions about the proper allocation of power between judge and

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117. See text accompanying note 39 *supra*.

118. See Méndez, *supra* note 40, § 16.04.

jury, the history of the rules of evidence as enacted and interpreted suggests a continuing commitment to retaining the present balance. As some judges have stressed, jurors are not to be trusted to evaluate the validity of expert evidence, especially when the evidence appears to judges to carry “an undeserved aura of scientific infallibility”.<sup>119</sup>

Nonetheless, something can be learned from *Daubert*. Precisely because *Kelly* is limited to assessing the admissibility of evidence based on novel scientific principles or techniques, California trial judges, like their federal counterparts, must determine the validity of other expert testimony. In discharging this function, it would be more useful to provide California judges and practitioners with the kind of checklist provided by amended Federal Rule 702 than the simple and somewhat incomplete principle of Section 801(b). Limiting expert opinions to those based on matter “that is of a type that reasonably may be relied upon by an expert in forming an opinion upon the subject to which his testimony relates” does not embrace the universe of objections that could be raised. It would be much more useful if Section 801(b) were rewritten to include also challenges to the validity of the principles as well as the propriety of the methods experts use in reaching their opinions.

The 1999 version of Uniform Rule of Evidence 702 includes these grounds as well as challenges to the need for the expert testimony, the qualifications of the witness to provide the evidence, and the propriety of the data used by the expert in his or her testimony.<sup>120</sup> Grouping the most common objections in one section would help judges and lawyers grasp quickly the standards for admitting expert testimony in California.

The amended section or its comment should make clear that the grounds listed are not exclusive.<sup>121</sup> Scientific and technical knowledge is dynamic, and it would be unwise to attempt to include all possible substantive objections to expert evidence in a single rule.<sup>122</sup> Moreover, to dispel confusion about the burden the proponent must discharge, the comment should be rewritten to clarify that objections based on the use of inappropriate matter, invalid principles, or incorrect methods should be determined under Section 405.<sup>123</sup>

The limited applicability of *Kelly* also needs to be reconsidered. Despite its flaws, its saving virtue is that it precludes saddling judges — many of whom have no scientific training — with the difficult burden of determining the scientific validity of opinions in those instances where the opponent merely claims rejection by the pertinent scientific community of the principle or technique underlying the opinion. Head counting might be a better way of excluding unreliable expert evidence contested on this ground than an

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119. *People v. Stoll*, 49 Cal. 3d 1136, 1157, 783 P.2d 698, 711, 265 Cal. Rptr. 111, 124 (1989).

120. Uniform Rule of Evidence 702, Federal Rules of Evidence (2001-2002 ed.).

121. For an example of how this can be accomplished, see Uniform Rule of Evidence 702(e): “In determining the reliability of a principle or method, the court shall consider all relevant additional factors ....”

122. As the California Law Revision Commission observed:

It is not practical to formulate a detailed statutory rule that lists all of the matters upon which an expert may properly base his opinion, for it would be necessary to prescribe specific rules applicable to each field of expertise. This is clearly impossible; the subjects upon which expert opinion may be received are too numerous to make statutory prescriptions of applicable rules a feasible venture.

Cal. Evid. Code § 801 Comment.

123. The comment to Section 405 already provides that this section governs whether an expert is qualified to testify.

individual judge's determination of the scientific validity of the principle or technique involved. But there appears to be no convincing reason for limiting *Kelly* to those cases in which the principle or technique is "novel." While *Kelly* might be especially useful in those cases, any expert opinion predicated on principles or techniques rejected by experts in the field should likewise be excluded. The Federal Rules, as amended, and the Uniform Rules of Evidence do not limit the general acceptance test to novel scientific principles or techniques.<sup>124</sup> The comment to an amended Section 801(b) should make this clear.

### G. CROSS-EXAMINING EXPERTS

The Code has a number of provisions regulating the cross-examination of expert witnesses. A general provision allows the adverse party to cross examine an expert to the same extent as any other witness, including the expert's qualifications, the subject to which the expert's testimony relates, the matter upon which the expert's opinion is based, and the reasons for the expert's opinion.<sup>125</sup> Another allows the adverse party to question an expert about the compensation and expenses the calling party paid or will pay to the expert.<sup>126</sup> The Rules do not have specific provisions on these matters, but all are within the federal definition of relevant matter, since evidence relating to the credibility of witnesses is of consequence to the determination of the action.<sup>127</sup>

The Code, but not the Rules, prohibits cross examining an expert "in regard to the content or tenor of any scientific, technical, or professional text, treatise, journal, or similar publication unless ... (1) the witness referred to, considered, or relied upon such publication in arriving at or forming his or her opinion, (2) the publication has been admitted in evidence, or (3) the publication has been established as reliable authority by the testimony or admission of the witness or by other expert testimony or by judicial notice."<sup>128</sup> The Law Revision Commission justifies limitation (1) on the following grounds:

If an expert witness has relied on a particular publication in forming his opinion, it is necessary to permit cross-examination in regard to that publication in order to show whether the expert correctly read, interpreted, and applied the portions he relied on. Similarly, it is important to permit an expert witness to be cross-examined concerning those publications referred to or considered by him in forming his opinion. An expert's reasons for not relying on particular publications that were referred to or considered by him while forming his opinion may reveal important information bearing upon the credibility of his testimony. However, a rule permitting cross-examination on technical treatises not considered by the expert witness would permit the cross-examiner to utilize this opportunity not for its ostensible purpose — to test the expert's opinion — but to bring before the trier of fact the opinion of absentee authors without the safeguard of cross-examination. ... [T]he statements in the text might be based on inadequate background research, might be subject to unexpressed qualifications that would be applicable to the case before the

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124. Fed. R. Evid. 702; Uniform Rule of Evidence 702, Federal Rules of Evidence (2001-2002 ed.).

125. Cal. Evid. Code § 721(a).

126. Cal. Evid. Code § 722(b).

127. See Fed. R. Evid. 401, 402.

128. Cal. Evid. Code § 721(b).

court, or might be unreliable for some other reason that could be revealed if the author were subject to cross-examination.<sup>129</sup>

Despite these admonitions, the California Supreme Court has ignored the Code's prohibition on crossing experts on treatises they did not consider. According to the court, "[A] party seeking to attack the credibility of [an] expert may bring to the attention of the jury material relevant to the issue on which the expert has offered an opinion [and] of which the expert was *unaware* or which he did *not* consider."<sup>130</sup>

Though the material may be called to the expert's attention on cross-examination, upon request the jury must be told not to consider the material for the truth of the matter asserted unless it has been received in evidence or qualifies under a hearsay exception such as the one for learned treatises.<sup>131</sup> Thus, while a mental health expert may be asked whether he is aware that a particular researcher has found that "psychiatrists are unable to accurately diagnose schizophrenia and paranoia,"<sup>132</sup> the jurors should be warned not to consider the researcher's finding for the truth of the matter asserted.<sup>133</sup>

The limits on the cross examiner are inapplicable if the publication has been received in evidence.<sup>134</sup> No risk then exists that inadmissible evidence will be brought before the jury.<sup>135</sup> The problem is getting such publications into evidence. Judicial notice is unlikely to help since statements in technical treatises are hardly the kind of "universally known" facts and propositions within the grasp of persons of average intelligence.<sup>136</sup> The California hearsay exception for learned treatises is likewise unavailing; it provides an excep-

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129. Cal. Evid. Code § 721 Comment.

130. *People v. Bell*, 49 Cal. 3d 502, 532, 778 P.2d 129, 145, 262 Cal. Rptr. 1, 17 (1989) (emphasis added), *cert. denied*, 495 U.S. 963 (1990).

In criminal cases, the Right to Truth-in-Evidence provision of Proposition 8, if literally construed, would repeal the Code limitation on crossing experts. Evidence that an expert is unaware of important works in his field of expertise is relevant to the expert's lack of credibility. But *Bell* did not rely on Proposition 8 to defend the departure from the Code. For an extended discussion of the effects of Proposition 8 on evidence attacking or supporting the credibility of witnesses, see Méndez, *supra* note 40, § 15.03.

Perhaps what the *Bell* court had in mind is the distinction between identity and substance. It is one matter to ask an expert on cross to identify those publications the expert did not consider or rely on; it is quite another to use the expert to get the substance of those publications before the fact finder.

131. As a practical matter, such cross-examination is not fruitful unless the expert concedes that the author of the material is an expert in the area in which the testifying expert offered an opinion. If the testifying expert refuses to concede the author's expertise, the cross-examiner will have to establish it through some other source.

The hearsay problem will disappear if the testifying expert adopts the assertions in the material as his or her own. This can be done by asking the testifying expert if he or she agrees with the assertions in the material. If the expert declines to adopt the assertions, then the cross examiner will have to rely on a hearsay exception. For a discussion of the learned treatise exception to the hearsay rule, see Méndez, *supra* note 40, § 12.01.

132. *People v. Visciotti*, 2 Cal. 4th 1, 80-81, 825 P.2d 388, 434, 5 Cal. Rptr. 2d 495, 541-42 (1992), *cert. denied*, 506 U.S. 893 (1992), *reh'g denied*, 506 U.S. 1016 (1992).

133. *Id.*

134. Cal. Evid. Code § 721(b) & Comment.

135. Cal. Evid. Code § 721 Comment.

136. Cal. Evid. Code § 451(f) & Comment.

tion only for “facts of general notoriety and interest,”<sup>137</sup> that is, facts and propositions that are not subject to dispute.<sup>138</sup>

The Federal Rules are more generous than the Code with respect to the cross-examination of experts. First, they permit the cross examiner to inquire about statements in treatises, irrespective of whether the expert relied on them or considers them authoritative.<sup>139</sup> The Rules are designed to avoid “the possibility that the expert may at the outset block cross-examination by refusing to concede reliance or authoritativeness.”<sup>140</sup> Second, the Rules provide that the statements may be admitted for the truth of the matter asserted if (1) the statements are established as reliable authority by expert testimony or judicial notice and (2) the treatise was relied upon by an expert witness on direct examination or was called to the expert’s attention on cross-examination.<sup>141</sup> Thus, when a treatise has been established as authoritative, appropriate passages may be read in evidence, so long as an expert is on the stand and available to explain and assist in applying the treatise.<sup>142</sup>

Consideration should be given to adopting the federal approach to the cross-examination of expert witnesses and the federal definition of the hearsay exception for statements in learned treatises and similar publications.

#### H. COURT APPOINTED EXPERTS

Both the Code and the Rules allow judges to appoint experts on their own or a party’s motion if in the judge’s discretion expert assistance is necessary.<sup>143</sup> The Code authorizes judges to appoint experts to investigate and report as well as to testify.<sup>144</sup> The Rules are not as specific; they simply require the judge to inform the experts of their duties.<sup>145</sup> Experts appointed by federal judges, however, are required to inform the parties of their findings, if any.<sup>146</sup> The Code is silent on this point, but nothing in the Code precludes a California judge from ordering court appointed experts to disclose their findings to the parties.

The Rules expressly allow the parties to depose a court appointed expert.<sup>147</sup> The Code does not contain an equivalent provision.<sup>148</sup>

The Code and the Rules empower the judge to fix the compensation to be paid to court appointed experts and, in civil actions, to apportion the compensation among the par-

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137. Cal. Evid. Code § 1341.

138. See Méndez, *supra* note 40, § 12.01.

139. Fed. R. Evid. 803(18) advisory committee’s note.

140. *Id.*

141. Fed. R. Evid. 803(18).

142. Fed. R. Evid. 803(18) advisory committee’s note.

143. Cal. Evid. Code § 730; Fed. R. Evid. 706.

144. Cal. Evid. Code § 730.

145. Fed. R. Evid. 706.

146. *Id.*

147. *Id.*

148. Deposing experts is governed generally by California Code of Civil Procedure Section 2034.



ties.<sup>149</sup> In California criminal and juvenile cases and in federal criminal and unjust compensation cases special provisions are made for compensating experts.<sup>150</sup>

In federal court, each party may cross-examine a court appointed expert, including the party calling the expert.<sup>151</sup> In California, each party may cross-examine the expert if the court calls and examines the expert.<sup>152</sup> But if a party calls the court appointed expert, the calling party may not examine the expert as if on cross-examination.<sup>153</sup>

Both the Code and the Rules allow the judge to inform the jurors of the fact that an expert witness was appointed by the court.<sup>154</sup> In both jurisdictions, the calling of court appointed experts does not preclude the parties from calling their own experts to testify on the same matters.<sup>155</sup>

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149. Cal. Evid. Code § 731(c); Fed. R. Evid. 706(b).

150. Cal. Evid. Code § 731 (a); Fed. R. Evid. 706(b). The Code also has special provisions for compensating medical experts appointed by the court. See Cal. Evid. Code § 731(b).

151. Fed. R. Evid. 706(a).

152. Cal. Evid. Code § 732.

153. *Id.*

154. Cal. Evid. Code § 722; Fed. R. Evid. 706(c).

155. Cal. Evid. Code § 733; Fed. R. Evid. 706(d).