WITNESSING THE WITNESS: THE CASE FOR EXCLUSION OF EYEWITNESS EXPERT TESTIMONY

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Introduction

[A]t about 11:30 p.m. on July 24, 1966, [Casey Reynolds, a white man,] was engaged in changing a tire when three men approached from across the highway. One of them shot him from a short distance away. The three then ran up to within three or four feet. Reynolds arose from his stooped position and held on to his wife, who had left the car to watch him as he worked. One of the men put his hand on Mrs. Reynolds' shoulder. Reynolds testified that this was Coleman [who was black]. Within a few seconds a car with its lights on approached, and the three men turned and "ran across the road" As they turned to go, Reynolds was shot a second time. He identified petitioner Stephens [also black] as the gunman, stating that he saw him "in the car lights" while "looking straight at him."

In the two weeks that followed, Reynolds was only able to vaguely describe his attackers and unable to identify them from a series of mugshots. Three months later, Reynolds was called to the police station, where he was presented with a lineup of six men. Reynolds suddenly remembered, immediately identifying Stephens and Coleman as his assailants.

At trial, Reynolds again identified the two men and "repeated on cross-examination his testimony on direct; he said he saw Coleman

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¹ Coleman v. Alabama, 399 U.S. 1, 4-5 (1970) (fourth alteration in original).

'face to face,' 'I looked into his face,' 'got a real good look at him.'"² Coleman and Stephens were both convicted.³

At trial, Reynolds was asked to the take the stand and testify regarding the events of that tragic evening. During his testimony he indicated that, despite the short duration of the events, he could clearly identify the two shooters. He sat in the witness box and told his story to a jury of his peers entrusted with the task of determining whether or not he was telling the truth. How, though, can a jury be certain that he was right? Our criminal system requires the jury to find the accused "guilty beyond a reasonable doubt," but even such a high standard of culpability cannot ensure that the jury is right every time. When the freedom of two men is at stake, is Reynolds's accuracy not crucial? Only Casey Reynolds, his wife, and his three assailants knew exactly what happened that night, and even then each may have had a different recollection, but Reynolds was certain that he recognized the two men. It was nighttime and he had his back turned as they approached, catching a glance of them after being shot. In the course of a few seconds, his wife was threatened, and he was surely stressed. He was shot a second time. In the proceeding weeks he was unable to clearly describe his attackers. Yet, during a lineup and again at trial he picked out the two men at whom he said he "got a real good look."4 These extreme circumstances must cast significant doubt on his ability to not only see, but also to remember, the men from that night. Situations such as this have given rise to calls for reform in the criminal justice system to ensure that innocent people are not sent to jail on the basis of inaccurate eyewitness testimony.

The Innocence Project, a "national litigation and public policy organization dedicated to exonerating wrongfully convicted people," estimates that eyewitness identification was a factor in seventy-five percent of convictions overturned through DNA testing, making it the "single greatest cause of wrongful convictions" in the United States. "More than 4250 Americans per year are wrongfully convicted due to

² Id. at 4.

³ *Id.* at 11. Their conviction was vacated by the Supreme Court, but on other grounds. *Id.* (vacating and remanding for the absence of counsel for defendants at preliminary hearings).

⁴ Id. at 4.

 $^{5\,}$ Innocence Project, http://www.innocence project.org (last visited Oct. 27, 2010).

⁶ Understand the Causes: Eyewitness Misidentification, INNOCENCE PROJECT, http://www.innocenceproject.org/understand/Eyewitness-Misidentification.php (last visited Oct. 27, 2010); see also Elizabeth F. Loftus, Ten Years in the Life of an Expert Witness, 10 Law & Hum. Behav. 241, 243 (1986) (estimating over fifty percent of wrongful convictions were due to faulty eyewitness testimony).

sincere, yet woefully inaccurate eyewitness identifications."⁷ These numbers reveal two problems with eyewitness identification. First, it demonstrates a shortcoming in the cognitive ability of the human brain to process, store, and recall memories. Second, in trial situations, juries may be unduly receptive to this mode of unreliable testimony.

Over the last thirty years, the field of cognitive psychology has made dramatic strides in understanding the way the brain encodes and stores memories. Researchers have come to realize that, for example, expressed confidence in the memory of identification is not a reliable indicator of accuracy; high levels of stress impair—rather than enhance—the ability of individuals to form memories; and individuals of one race are not well equipped to remember the faces of another race. Many of these conclusions are counterintuitive and not generally understood by the public at large.

It is, of course, the general public that comprises juries. "[I]n general, juries are unduly receptive to identification evidence and are not sufficiently aware of its dangers." This view is rhetorically shared by former Justice Brennan: "[T]here is almost *nothing more convincing* than a live human being who takes the stand, points a finger at the defendant, and says 'That's the one!'"12

In the face of these two difficulties, lawyers have increasingly turned to experts to explain to juries shortcomings in memory and to correct common misconceptions. However, the use of experts is often met with resistance in some courts finding that expert testimony of this nature cuts to the heart of the jury's function and usurps their role as the sole determiners of witness credibility. The vast majority of the literature on the subject focuses on the psychological studies regarding eyewitness identification. They involve analysis of studies aimed at determining whether individuals are able to accurately store and recall memories and what factors affect the reliability of those memories. Furthermore, the legal literature debates these studies in terms of their effectiveness in the courtroom, narrowing in on the way juries perceive eyewitnesses and whether or not expert testimony can

⁷ $\,$ Andre A. Moenssens et al., Scientific Evidence in Civil and Criminal Cases $\S~22.03,$ at 1373~(5th~ed.~2007)~(emphasis~added).

⁸ See infra Part III.A.

⁹ See infra Part III.B. But see United States v. Downs, 230 F.3d 272, 275 (7th Cir. 2000) ("Although 50 seconds may not sound like much, under conditions of great stress they can pass quite slowly.").

¹⁰ See infra Part III.C.

¹¹ Patrick M. Wall, Eye-witness Identification in Criminal Cases 19 (1965).

¹² Watkins v. Sowders, 449 U.S. 341, 352 (1981) (Brennan, J., dissenting) (quoting Elizabeth F. Loftus, Eyewitness Testimony 19 (1979)).

alter that perception. However, these contributions, valuable as they may be in attempting to understand the human mind, beg the question of the appropriateness of their use in the American jury system. Even if expert testimony "works," it does not follow that it is appropriate. The aim of this Note is to explore the issue of expert testimony on eyewitness testimony and procedural alternatives to experts. I begin by reviewing the recent decision in United States v. Smith, 13 where the Middle District of Alabama addressed a circuit split regarding the admissibility of expert testimony under Federal Rule of Evidence 403. Part II then examines the history of the admissibility of expert testimony generally, focusing on Supreme Court mandates and the Federal Rules of Evidence. Part III looks specifically at the way courts have dealt with these mandates in the context of eyewitnessidentification experts and the relevant research presented therein. Finally, Part IV details an argument against the use of experts to educate juries about the shortcomings of eyewitness testimony and examines procedural safeguards to prevent unreliable identifications.

I. United States v. Smith—A Case Study

The facts in *Smith* are not unusual. Smith was arrested in connection with a bank robbery and several eyewitnesses placed him at the scene.¹⁴ The defense presented Dr. Solomon Fulero as an expert witness to testify on the reliability of eyewitness testimony.¹⁵ After the jury convicted Smith, the court wrote an opinion detailing its reasons for allowing Dr. Fulero to testify, in part, because of a ten-year silence by the Eleventh Circuit on the issue.¹⁶

The district court began its discussion by detailing the "vast lacuna between jurors' perceptions of the power of eyewitness testimony and this testimony's accuracy."¹⁷ Citing a trend away from the exclusion of expert testimony aimed to bridge that "lacuna,"¹⁸ the court analyzed Dr. Fulero's proffer under the guidelines set by the

^{13 621} F. Supp. 2d 1207 (M.D. Ala. 2009), aff'd, 370 F. App'x 29 (11th Cir. 2010).

¹⁴ Id. at 1209.

¹⁵ *Id*.

¹⁶ Id. at 1210.

¹⁷ *Id.* at 1209–10. In making this conclusion, the court only cites studies of convicts exonerated by DNA testing and points out that they were convicted, at least in part, by eyewitness testimony. This line of argument is fallacious, however, as it is backward looking—it merely describes instances where identifications were wrong to prove that juries are generally wrong. The former does not necessarily imply the latter.

¹⁸ *Id.* at 1210–11.

Supreme Court in Daubert v. Merrell Dow Pharmaceuticals, Inc. 19 First, the court determined Dr. Fulero's methods were highly reliable and generally accepted in the scientific community.²⁰ Second, the court responded to the government's objection that the testimony would not "aid the jury" by noting that Eleventh Circuit precedent²¹ never addressed whether or not a district court abuses its discretion by admitting the testimony.²² Specifically, Dr. Fulero testified regarding four "specific factors that, according to well-established social science research, impact witness accuracy and, as a result, might assist [the trier of fact]" and were relevant to the facts of the case.²³ Those factors are: reduced accuracy in cross-racial identifications, ways in which stress can impair perception and memories, influences of postevent information (two witnesses conversed after the incident), and the relationship between confidence in identification and its accuracy.²⁴ Finally, the court had to address whether the probative value of the testimony was outweighed by other considerations. It was at this stage in the inquiry that the court discovered a split among the circuits as to whether eyewitness-identification expert testimony would violate the Federal Rule of Evidence²⁵ requiring exclusion of evidence that would confuse the jury, mislead the jury, or waste time.²⁶ Satisfied that it sufficiently limited Dr. Fulero's testimony to the areas where it would "correct misguided intuitions and thereby prevent jurors from making common errors,"27 the court determined admission would be "quite helpful in some cases."28

II. EVOLUTION OF STANDARDS GOVERNING THE ADMISSIBILITY OF EXPERT TESTIMONY

The first major articulation of the standard used to judge the admissibility of expert testimony was *Frye v. United States*.²⁹ In that case, government counsel sought to introduce evidence from a "sys-

^{19 509} U.S. 579 (1993). For a full discussion of this case, see infra Part II.

²⁰ Smith, 621 F. Supp. 2d at 1212-13.

²¹ See United States v. Smith, 122 F.3d 1355, 1357 (11th Cir. 1997); United States v. Thevis, 665 F.2d 616, 641 (5th Cir. Unit B 1982).

²² Smith, 621 F. Supp. 2d at 1214.

²³ Id. at 1215.

²⁴ Id. at 1215–18.

²⁵ Fed. R. Evid. 403. For a full discussion of this Rule, see *infra* notes 55–58 and accompanying text.

²⁶ Smith, 621 F. Supp. 2d at 1219-20.

²⁷ Id. at 1221.

²⁸ Id. at 1222.

^{29 293} F. 1013 (D.C. Cir. 1923).

tolic blood pressure deception test"³⁰ that would be used to indicate the level of truthfulness of the defendant. The court upheld the exclusion of the testimony, articulating the standard that "the [scientific principle or discovery] from which the deduction is made must be sufficiently established to have gained general acceptance in the particular field in which it belongs."³¹ This principle set the standard for evaluating the admissibility of expert testimony for the next seventy years.

In 1993, however, the Supreme Court explicitly rejected the Frye test for expert witnesses in Daubert.³² There, the parents of minors born with serious birth defects sued Merrell Dow alleging the mother's ingestion of their drug—Bendectin—while pregnant caused the defects.³³ The defense submitted an affidavit from a "well-credentialed" physician and epidemiologist claiming that the drug was not connected with the alleged birth defects and moved for summary judgment.³⁴ To survive the motion, the parents countered with eight experts who argued that, based on studies done on animals and with drugs containing a similar molecular structure, it was possible that the drug could have caused the defects.³⁵ The Court of Appeals for the Ninth Circuit upheld the district court's grant of summary judgment under the Frye standard, concluding that Daubert's experts were inadmissible as the science behind their conclusions was not "generally accepted" in this context.36 The Supreme Court reversed, however, holding that the Federal Rules of Evidence superseded the common law standards for the admission of evidence and the Ninth Circuit's reliance on the Frye test was inappropriate.³⁷

In rejecting *Frye*, the Supreme Court emphasized the critical role of the district court judge in admitting the testimony and the significant degree of deference those decisions are to be given.³⁸ Specifically, the Supreme Court grounded its framework in three Federal Rules of Evidence: 104(a), 702, and 403. As an initial matter, pursu-

³⁰ *Id.* at 1013. The theory behind this test, a crude precursor to the modern lie detector test, it was explained, is that "truth is spontaneous, and comes without conscious effort, while the utterance of a falsehood requires a conscious effort, which is reflected in the blood pressure." *Id.* at 1014.

³¹ Id. at 114.

³² Daubert v. Merrell Dow Pharm. Inc., 509 U.S. 579, 586-87 (1993).

³³ Id. at 582.

³⁴ Id.

³⁵ Id. at 583.

³⁶ Daubert v. Merrell Dow Pharm. Inc., 951 F.2d 1128, 1129–30 (9th Cir. 1991).

³⁷ Daubert, 509 U.S. at 589.

³⁸ Id. at 593.

ant to his or her authority under Federal Rule of Evidence 104(a), ³⁹ a district court judge is given the power to make an initial determination of the proposed witness's qualifications. In exercising that power, the judge, per Rule 702, is to evaluate two factors: (1) whether or not the testimony pertains to "scientific knowledge" 40 and (2) whether it will "assist the trier of fact." In resolving the first prong of the test, the Court explicitly abandoned Frye's "general acceptance" test and made the inquiry much more flexible.⁴² To ensure that there were some cognizable limits on the admission of expert testimony, the Court listed four inquiries to serve as a guide for lower court judges: whether a theory or technique (1) uses the scientific method,⁴³ (2) was subjected to peer review or publication,44 (3) had a known or potential error rate, 45 and (4) its reached a general level of acceptance in the community.46 These four criteria are not intended to represent an exhaustive list of considerations, but only a baseline of guidance.47

The determination that an expert's subject of testimony meets a standard of evidentiary reliability⁴⁸ does not resolve the issue, as there

41 The Rule currently reads in full:

If 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, if (1) the testimony is based upon sufficient 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.

Fed. R. Evid. 702.

- 42 Daubert, 509 U.S. at 594.
- 43 Id. at 593.
- 44 Id. at 593-94.
- 45 Id. at 594.

³⁹ *Id.* at 592 n.10 ("Preliminary questions concerning the qualification of a person to be a witness, the existence of a privilege, or the admissibility of evidence shall be determined by the court, subject to the provisions of subdivision (b). In making its determination it is not bound by the rules of evidence except those with respect to privileges." (quoting Fed. R. Evid. 104(a))).

⁴⁰ While the rule applies to "scientific, technical, or other specialized knowledge," the Court limited its discussion only to the "scientific" component, leaving other areas for future litigation. *Id.* at 589.

⁴⁶ *Id.* The survival of the "general acceptance" test is hardly surprising as it is a very useful measure in evaluating the level of skepticism that should be accorded to a given theory. However, what is critical is that it is not the *only* consideration. *See id.*

⁴⁷ *Id.* at 593; *see also* Kumho Tire Co. v. Carmichael, 526 U.S. 137, 149–50 (1999) (listing the factors from *Daubert* that a court may consider in determining admissibility).

⁴⁸ Daubert, 509 U.S. at 590.

must also be a fit with the facts of the case. In other words, there must be a "valid scientific connection to the pertinent inquiry as a precondition to admissibility."49 In evaluating fit, the requirement is "'not intended to be a high one' . . . and . . . unless otherwise specified, '[a]ll relevant evidence is admissible' and '[e]vidence which is not relevant is not admissible.' "50 However, this does not mean that any tenuous connection to the facts of the case warrant admission, as the Rule "clearly contemplates some degree of regulation." 51 Specifically, "when the layman juror would be able to make a common sense determination of the issue without the technical aid of such an expert, the expert testimony should be excluded as superfluous."52 Exclusion would also be justified in the case of evidence that wastes time or with "'opinions which would merely tell the jury what result to reach.'"53 Even in instances where juries may not have the "best possible knowledge" of a subject, "to be a proper subject of expert testimony, proof offered to add to their knowledge must present them with a system of analysis that the court, in its discretion, can find reasonably likely to add to common understanding of the particular issue before the jury."54

Finally, even if the testimony is found to be both scientifically reliable and it fits the facts of the case, a trial judge may opt for exclusion under Federal Rule of Evidence 403 on the grounds that "its probative value is substantially outweighed by the danger of unfair prejudice, confusion of the issues, or misleading the jury, or by considerations of undue delay, waste of time, or needless presentation of cumulative evidence." In determining whether to exclude evidence under this Rule, the court is to look at the testimony in the light most favorable to the proponent. 60 Courts have interpreted this rule to generally

⁴⁹ *Id.* at 591–92. The Court uses an apt analogy: while the study of the phases of the moon is useful in determining whether or not it is dark outside, it is not relevant science in establishing whether or not an individual was unusually unlikely to behave irrationally on that night. *Id.* at 591.

⁵⁰ United States v. Mathis, 264 F.3d 321, 335 (3d Cir. 2001) (third and fourth alterations in original) (citing Fed. R. Evid. 402; *Kumho Tire Co.*, 526 U.S. 137).

⁵¹ Daubert, 509 U.S. at 589.

⁵² United States v. Kime, 99 F.3d 870, 884 (8th Cir. 1996).

⁵³ *Id.* (citing Fed. R. Evid. 702).

⁵⁴ United States v. Fosher, 590 F.2d 381, 383 (1st Cir. 1979) (referring specifically to lay jurors' "knowledge of the organic and behavioral mechanisms of perception and memory").

⁵⁵ Fed. R. Evid. 403.

⁵⁶ See United States v. Brady, 595 F.2d 359, 361 (6th Cir. 1979).

favor admissibility.⁵⁷ The Supreme Court indicated as much when they noted that exclusion is not necessarily the best method: "Vigorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof are the traditional and appropriate means of attacking shaky but admissible evidence."⁵⁸

The last component of the current jurisprudence on expert testimony admissibility was formulated in Kumho Tire Co. v. Carmichael.⁵⁹ The right rear tire of Patrick Carmichael's minivan blew out, killing one passenger and injuring several others.⁶⁰ In a diversity action against the tire manufacturer, Carmichael submitted a deposition of Dennis Carlson, an expert in tire-failure analysis.⁶¹ The district court granted summary judgment to Kumho, holding that under the flexible Daubert factors Carlson's proposed testimony was unreliable.⁶² The Eleventh Circuit reversed, finding that *Daubert* explicitly applied only to "scientific context[s]" and that Carlson's testimony instead relied "on skill- or experience-based observation" which rendered Daubert inapplicable.⁶³ In resolving this disagreement, the Supreme Court began by pointing out that the language of Rule 702 makes no distinction between "scientific" knowledge and "technical" or "other specialized" knowledge.64 The thrust of the Daubert decision, they found, was that the critical word in establishing reliability was "knowledge" and not the modifying words.⁶⁵ The Court indicated it was the

⁵⁷ See, e.g., United States v. Hankey, 203 F.3d 1160, 1172 (9th Cir. 2000) ("[Rule] 403 favors admissibility, while concomitantly providing the means of keeping distracting evidence out of the trial."); United States v. Dennis, 625 F.2d 782, 797 (8th Cir. 1980) ("In weighing the probative value of evidence against the dangers and considerations enumerated in Rule 403, the general rule is that the balance should be struck in favor of admission."); United States v. McRae, 593 F.2d 700, 707 (5th Cir. 1979) ("Unless trials are to be conducted on scenarios, on unreal facts tailored and sanitized for the occasion, the application of Rule 403 must be cautious and sparing. Its major function is limited to excluding matter of scant or cumulative probative force, dragged in by the heels for the sake of its prejudicial effect.").

⁵⁸ Daubert v. Merrell Dow Pharm. Inc., 509 U.S. 579, 596 (1993). For a discussion of the viability of this statement, see *infra* Part IV.F.

^{59 526} U.S. 137 (1999).

⁶⁰ Id. at 142.

⁶¹ Id.

⁶² Carmichael v. Samyang Tires, Inc., 923 F. Supp. 1514, 1521–22 (S.D. Ala. 1996).

⁶³ Carmichael v. Samyang Tires, Inc., 131 F.3d 1433, 1435–36 (11th Cir. 1997).

⁶⁴ Kumho Tire Co., 526 U.S. at 146.

⁶⁵ *Id.* at 147. This is supported by the Court's observation that "it would prove difficult, if not impossible, for judges to administer evidentiary rules under which a gatekeeping obligation depended upon a distinction between 'scientific' knowledge and 'technical' or 'other specialized' knowledge." *Id.* at 148.

relationship between the knowledge of the expert and the knowledge of the jury that mattered most:

And whether the specific expert testimony focuses upon specialized observations, the specialized translation of those observations into theory, a specialized theory itself, or the application of such a theory in a particular case, the expert's testimony often will rest "upon an experience confessedly foreign in kind to [the jury's] own." 66

Having extended the *Daubert* criteria to all types of specialized knowledge, the Court went on to emphasize the importance of the role of the district court judge as "gatekeeper." The primary job of the district court judge in these cases is to ensure that the expert "employs in the courtroom the same level of intellectual rigor that characterizes the practice of an expert in the relevant field." While it is extremely important that the district court have wide latitude in determining *what* is reliable, they too must have the freedom to determine *how* to test that reliability. In accord with this mandate, the appellate courts are to review decisions to exclude expert testimony under an "abuse of discretion" standard.

Daubert did away with the "general acceptance" test, raising the bar for the admission of expert testimony. To be admitted, counsel must, under the Federal Rules of Evidence, convince the judge, acting as "gatekeeper," that the science or other specialized knowledge behind the expert testimony is both valid and will be helpful to the jury. Even if the judge is satisfied both of these requirements are met, the testimony may still be excluded if its probative value is outweighed by other considerations of prejudice, undue delay, or waste of time. Since *Daubert*, judges have been more likely to scrutinize expert testi-

⁶⁶ Id. at 149 (quoting Learned Hand, Historical and Practical Considerations Regarding Expert Testimony, 15 HARV. L. REV. 40, 54 (1901)).

⁶⁷ Id. at 148.

⁶⁸ Id. at 152.

⁶⁹ Id.

⁷⁰ See Gen. Elec. Co. v. Joiner, 522 U.S. 136, 146 (1997) ("We hold, therefore, that abuse of discretion is the proper standard by which to review a district court's decision to admit or exclude scientific evidence."). "It is well-established that 'the trial judge has broad discretion in the matter of the admission or exclusion of expert evidence, and his action is to be sustained unless manifestly erroneous.'" Boucher v. U.S. Suzuki Motor Corp., 73 F.3d 18, 21 (2d Cir. 1996) (quoting Salem v. U.S. Lines Co., 370 U.S. 31, 35 (1962)). This level of deference also applies to review of decisions grounded in Rule 403: "[A] trial court is in a far better position than an appellate court to strike the sensitive balance dictated by Rule 403. When a trial court engages in such a balancing process and articulates on the record the rationale for its conclusion, its conclusion should rarely be disturbed." Virgin Islands v. Pinney, 967 F.2d 912, 917–18 (3d Cir. 1992) (citations omitted).

mony before trial and then limit or exclude the testimony.⁷¹ Whether or not this has improved the quality of expert testimony remains to be seen.⁷²

III. Eye Doctors: Expert Testimony on Eyewitness Identifications

While *Frye, Daubert, Kumho*, and their progeny all deal with the admissibility of expert witnesses generally, the focus of this Note is the subset of cases dealing specifically with the application of these rules to issues surrounding eyewitness identification. This Part will begin by reviewing the history of appellate jurisprudence on this issue. Then, using three of the phenomenon identified in *United States v. Smith*⁷³ as a backdrop, I will examine the current split among the circuits, focusing on the concerns courts have expressed in favor of and against admission.

Defense attorneys first introduced expert testimony regarding eyewitness identifications in the 1970s as a way to counter the perceived misunderstandings juries had about the functioning of human perception.⁷⁴ The first case to squarely address this issue was the 1973 case of *United States v. Amaral.*⁷⁵ The defendant was convicted of bank robbery, in part due to testimony from eyewitnesses placing him at the scene.⁷⁶ On appeal, Amaral argued that the district court erred in refusing to admit testimony from Dr. Bertram Raven, who was to testify about the effects of stress and the general unreliability of eyewitness testimony.⁷⁷ Specifically, the district court excluded the evidence because "it would not be appropriate to take from the jury their own determination as to what weight or effect to give to the evidence of the eye-witness and identifying witnesses and to have that determination put before them on the basis of the expert witness testimony as proffered."78 Noting that the "basic purpose of any proffered evidence is to facilitate the acquisition of knowledge by the triers of fact

⁷¹ See Margaret A. Berger, What Has a Decade of Daubert Wrought?, 95 Am. J. Pub. Health S59, S64–65 (Supp. I 2005) (noting increased scrutiny); Carol Krafka et al., Judge and Attorney Experiences, Practices, and Concerns Regarding Expert Testimony in Federal Civil Trials, 8 Psychol. Pub. Pol'y & L. 309, 310 (2002) (comparing results of surveys of the beliefs and practice of attorneys and judges before and after Daubert).

⁷² See Berger, supra note 71, at S64 (citing the need for more research).

⁷³ See discussion supra Part I.

⁷⁴ See United States v. Smithers, 212 F.3d 306, 311 (6th Cir. 2000).

^{75 488} F.2d 1148 (9th Cir. 1973).

⁷⁶ Id. at 1150-51.

⁷⁷ Id. at 1153.

⁷⁸ Id. (internal quotation marks omitted).

thus enabling them to reach a final determination,"⁷⁹ the Ninth Circuit upheld the district court's decision to exclude the testimony.⁸⁰ Indicating strong disfavor concerning the use of expert evaluation of witnesses, the court specifically pointed to the power of cross-examination as the primary mechanism for the "ascertainment of truth."⁸¹ Cross-examination, the court argued, can readily be used to uncover stressful aspects of the encounter and cast doubt on the ability of the witness to truly remember the identity of the criminal.⁸² Ruling on these grounds, the court declined to address whether or not the science was "generally accepted"⁸³ or if the testimony would confuse the jury or lead to undue delays.⁸⁴ The skepticism regarding expert testimony was widely held by courts during the 1970s and early 1980s.⁸⁵

Since *Amaral*, courts have explored a variety of justifications for the admission or denial of expert testimony, yielding mixed results. An often discussed factor in ruling on admissibility is the scientific validity of the theories.⁸⁶ Some courts have found there is agreement in the field as to the validity of the theories,⁸⁷ while others have not.⁸⁸ In an attempt to resolve the question of "general acceptance," a survey was conducted in 1989 of sixty-three experts in the field to determine

⁷⁹ Id. at 1152.

⁸⁰ Id. at 1153.

⁸¹ Id

⁸² *Id. But see* United States v. Langford, 802 F.2d 1176, 1183 (9th Cir. 1986) (Ferguson, J., dissenting) ("The key to the *Amaral* holding is that panel's conclusion this information may be obtained by cross-examination. However, cross-examination cannot uncover the reasons for misidentification because the witness honestly does not believe he or she has misidentified the defendant."); People v. Smith, 743 N.Y.S.2d 246, 252 (Sup. Ct. 2002) ("Cross-examination, as suggested by *Amaral*... [is] not [a] substitute[] for expert testimony offered by the defense.").

⁸³ Amaral, 488 F.2d at 1153.

⁸⁴ *Id.* at 1154. These factors cited by this case would become codified two years later in the Federal Rules of Evidence. *See* FED. R. EVID. 403; *supra* notes 25–28 and accompanying text.

⁸⁵ See United States v. Smithers, 212 F.3d 306, 311 (6th Cir. 2000).

⁸⁶ While there are numerous "theories" advanced by cognitive psychologists, the appellate courts often deal generally with the expert's testimony, rather than dealing with the validity of each individual theory. This Note, however, will address many of them specifically. *See infra* Part III.A–C.

⁸⁷ See, e.g., United States v. Smith, 736 F.2d 1103, 1107 (6th Cir. 1984) ("The day may have arrived . . . when Dr. Fulero's testimony can be said to conform to a generally accepted explanatory theory.").

⁸⁸ See, e.g., United States v. Fosher, 590 F.2d 381, 383 (1st Cir. 1979) (finding offer of proof did not make clear that "[the] testimony . . . would be based upon a mode of scientific analysis that meets any of the standards of reliability applicable to scientific evidence").

their views on a variety of factors present in eyewitness identification.⁸⁹ The researchers asked the experts for their evaluation of twenty-one different topics.90 Then they used these responses to determine whether or not that topic was reliable enough to be presented in a courtroom, if they themselves would feel comfortable testifying, if they have testified, and if they believed the subject was "common sense" for a jury.⁹¹ Given that the Frye test for general acceptance did not contain a baseline of exactly what percentage constituted acceptance, the researchers broke the findings into categories. Specifically, if an agreement rate of eighty percent were required, they concluded that the following areas were admissible: "the wording of questions, lineup instructions, the effects of misleading postevent information, the accuracy-confidence correlation, attitudes and expectations, exposure time, unconscious transference, showups, and the forgetting curve."92 However, "the effects of stress, hypnosis, weapon focus, trained observers, event violence, and the cross-racial bias among Black witnesses did not elicit high degrees of consensus."93 However, the existence of some level of agreement does not necessarily imply that the expert should be allowed to testify to that point. In United States v. Rincon,94 the court was presented with this study in defense counsel's motion to allow an expert witness.⁹⁵ Despite the study's conclusions, the court upheld the exclusion of testimony on the grounds that the study merely presented the communities' opinions on each topic but did not satisfactorily demonstrate the reliability underlying the conclusions to meet the Daubert requirements.96 In fact, even the authors of the study did not necessarily believe expert witnesses were the right solution: "Finally, our results should not be taken to imply that using psychological experts is the best possible solution for the problems arising from eyewitness testimony."97

Despite the uncertainty previously exhibited, the trend is moving toward recognition of the validity of the cognitive sciences. Kassin et

⁸⁹ Saul M. Kassin et al., The "General Acceptance" of Psychological Research on Eyewitness Testimony: A Survey of the Experts, 44 Am. Psychologist 1089, 1090 (1989).

⁹⁰ For a complete discussion of their methodology, see id. at 1090–92.

⁹¹ Id. at 1094 tbl.4.

⁹² Id. at 1095.

⁹³ *Id.* at 1096. A "high degree of consensus" refers to an approval rate of seventy-five percent or higher. *See id.* at 1095.

^{94 28} F.3d 921 (9th Cir. 1994).

⁹⁵ The article was submitted to buttress their original motion, which was littered with unsupported claims and phrases like "[t]here is a wealth of knowledge supporting this point" and "[t]he research is clear." Id. at 924 (quoting defendant's motion).

⁹⁶ Id. at 924-25.

⁹⁷ Kassin et al., supra note 89, at 1097.

al.'s survey was updated in 2001, expanding the number of phenomenon to thirty.⁹⁸ This time, with an agreement rate of at least eighty percent,⁹⁹ the experts agreed upon the reliability of all of the same topics, plus: confidence malleability, mug shot–induced bias, child witness suggestibility, hypnotic suggestibility, alcoholic intoxication, the cross-race bias, and weapon focus.¹⁰⁰ Faced with significant support in the scientific community for the reliability of studies indicting the reliability of eyewitness testimony and nearly forty years of research post-*Amaral*, courts have increasingly relied on justifications other than "reliability" when excluding expert testimony.¹⁰¹

Even if cognitive psychology research into eyewitness testimony is generally found to be reliable, the critical question is what topics specifically courts have allowed the experts to discuss. In performing their role as gatekeeper, the district court judge is required to ensure that reliable testimony is given only in so far as it "assists the trier of fact." The primary point of disagreement among the circuits is the extent to which the assistance expert testimony may provide to the jury is outweighed by other considerations. On one extreme, the Seventh Circuit holds: "[E]xpert testimony regarding the potential hazards of eyewitness identification—regardless of its reliability—'will not aid the jury because it addresses an issue of which the jury already

⁹⁸ Saul M. Kassin et al., On the "General Acceptance" of Eyewitness Testimony Research: A New Survey of the Experts, 56 Am. Psychologist 405, 408 (2001).

⁹⁹ For a criticism of the methodology of this study, see Daniel B. Wright, *Causal and Associative Hypothesis in Psychology*, 12 PSYCHOL. PUB. POL'Y & L. 190, 206–08 (2006). Wright argues that many of the experts responding to the survey may not have appreciated the differences between phenomena framed in "causal" terms rather than "associative" terms, resulting in a risk of confusion. "Therefore, caution is advised before using these results to argue that each of their survey statements is generally accepted unless there is certainty that the respondents interpreted that particular survey statement appropriately." *Id.* at 208.

¹⁰⁰ See Kassin et al., supra note 98, at 412 tbl.4. The last two phenomena (the cross-race bias and weapon focus) previously did not command a high degree of consensus. See supra note 92 and accompanying text.

¹⁰¹ See United States v. Hall, 165 F.3d 1095, 1103 (7th Cir. 1999) (recognizing the Seventh Circuit's "presumption against admission of expert testimony on eyewitness identification stemmed from our concerns about whether such expert testimony would actually assist the trier of fact, rather than about its reliability"); see also, e.g., United States v. Smithers, 212 F.3d 306, 311–12 (6th Cir. 2000) ("This jurisprudential trend is not surprising in light of modern scientific studies which show that, while juries rely heavily on eyewitness testimony, it can be untrustworthy under certain circumstances."); United States v. Smith, 621 F. Supp. 2d 1207, 1212 (M.D. Ala. 2009) ("[O]ther courts have specifically reviewed Dr. Fulero's methods and found that they 'easily' satisfy the first Daubert inquiry.").

¹⁰² Fed. R. Evid. 702.

generally is aware, and it will not contribute to their understanding' of the particular factual issues posed."¹⁰³ At the other end is the Third Circuit:

The court was convinced at trial that the psychological research supporting the above four subjects is both reliable and helpful and that the constantly increasing knowledge social scientists are obtaining about the inner workings of the human animal are likely not commonly understood or obviously apparent to jurors (or, for that matter, judges). Therefore, educating the jury about this research does not (and, in this case, did not) run afoul of Rule 702, and, indeed, it is an important step along the road to using improved scientific knowledge to create more accurate and fair legal proceedings. It would be anachronistic to categorically bar courts from employing the latest reliable scientific evidence in their effort to make sure that the trials that they administer resemble as closely as possible a search for truth; such a search requires diligently pursuing better understandings of human decisionmaking, including the flaws, weaknesses, and biases that characterize human life. Particularly for cases like this one, in which the reliability of eyewitness testimony is so important and so linked to well-established flaws in human perception and memory, such testimony may be crucial to fair, thorough, informed, and rigorous decisionmaking. It can only help to make factfinders more informed. Applying this research to the facts of this case, however, is within the sole province of the jury. 104

To resolve this dispute, it is necessary to look to the specific theories advanced by experts and how the circuits have treated them.

A review of cases from the courts of appeals reveals three specific eyewitness identification phenomena¹⁰⁵ that experts have been allowed to testify about with increasing frequency: the correlation between confidence in identification and accuracy, the effect of stress on identification, and cross-racial identifications. The confidence/accuracy relationship and cross-racial identifications have been deemed reliable enough to be presented in court, as determined by experts in the field.¹⁰⁶ However, there is certainly no consensus among the circuits on any of these issues.

¹⁰³ United States v. Larkin, 978 F.2d 964, 971 (7th Cir. 1992) (quoting United States v. Hudson, 884 F.2d 1016, 1024 (7th Cir. 1989)).

¹⁰⁴ Smith, 621 F. Supp. 2d at 1218-19.

¹⁰⁵ Other phenomena have been admitted by courts: the impact of postevent phenomena, the impact of prior photographic identification, and weapon focus. The emphasis here, however, will be on the most commonly raised areas of expert testimony.

¹⁰⁶ See Kassin et al., supra note 98, at 412 tbl.4.

A. The Relationship Between Confidence and Accuracy

The area of expert testimony most commonly raised by defense counsel is the relationship between confidence in an identification and the probability that it is accurate. Research on the issue overwhelmingly reveals that the confidence exhibited by an individual in identifying someone correlates very poorly with the probability that the identification is, in fact, accurate.¹⁰⁷ Furthermore, those who make up juries are arguably unduly persuaded by an eyewitness's expression of confidence. 108 In United States v. Mathis, 109 the Third Circuit addressed the issue of allowing an expert to testify to "rebut the natural assumption that [the witness's] strong expression of confidence indicates an unusually reliable identification."¹¹⁰ In evaluating the prongs of the Daubert test, the court first noted that the government had conceded the qualifications of the expert and the reliability of his conclusions.111 Turning their attention to the "fit" requirement, the court responded to the government's objection that the testimony was "nothing more than a general thesis," 112 by looking to the cross-examination of the witness, where he explicitly indicated he was "positive" he saw the defendant. 113 There was, the court found, unquestionably a fit between the witness's expression and expert testimony that would appropriately rebut the facts.¹¹⁴ In contrast, when

¹⁰⁷ See Steven G. Fox & H.A. Walters, The Impact of General Versus Specific Expert Testimony and Eyewitness Confidence upon Mock Juror Judgment, 10 LAW & HUM. BEHAV. 215, 224–27 (1986).

¹⁰⁸ See Watkins v. Sowders, 449 U.S. 341, 352 (1981) (Brennan, J., dissenting) ("[T]here is almost *nothing more convincing* than a live human being who takes the stand, points a finger at the defendant, and says 'That's the one!'" (quoting Loftus, supra note 12, at 19)).

^{109 264} F.3d 321 (3d Cir. 2001).

¹¹⁰ United States v. Stevens, 935 F.2d 1380, 1400 (3d Cir. 1991).

¹¹¹ Mathis, 264 F.3d at 335.

¹¹² *Id.* at 337 (quoting Brief of Appellee at 44, *Mathis*, 264 F.3d 321 (No. 99-5940)).

¹¹³ The cross-examination went as follows:

Q: [A]s we sit here today, is it even possible that the identification you made of Mr. Mathis in that photo array was based not on seeing him exiting that Jeep but on the previous opportunity to observe that photograph.

A: No, I'm positive by him getting out of the vehicle

Q: Your answer is it's not even a possibility?

A: I guess there is a remote possibility, but I'm positive of the identification when he exited the vehicle.

Id. (alterations in original).

¹¹⁴ However, despite finding an abuse of discretion in failing to admit the testimony, the court did not remand because a variety of other types of evidence rendered the abuse harmless error. *Id.* at 343–44.

faced with the same proffer, the Seventh Circuit has routinely upheld district courts' determinations that the evidence would not assist the trier of fact, 115 even while granting its reliability. 116

B. The Relationship Between Stress and Memory Storage

Similar in frequency to the confidence/accuracy phenomena are attempts to admit testimony regarding the relationship between stress and accuracy in identification. In most instances, eyewitnesses in federal trials were present at the time of the alleged crime, either as the victims or bystanders. During these encounters, the witness was potentially endangered by the criminal and was under conditions of great stress. Some courts have found that this element of eyewitness testimony is appropriate for elucidation by an expert¹¹⁷ because most jurors believe that stress heightens a person's sense and memory recall,¹¹⁸ while studies show the opposite effect.¹¹⁹ Numerous other courts, however, continue to exclude the evidence, trusting that the jury is aware of any possible implications of stress¹²⁰ and even if they are not, that utilizing cross-examination¹²¹ or limiting jury instructions will correct misconceptions.¹²² It is, however, worth noting, that

¹¹⁵ See, e.g., United States v. Hall, 165 F.3d 1095, 1106 (7th Cir. 1999) ("[T]his Court has consistently affirmed district court decisions rejecting expert testimony pertaining to the reliability of eyewitness identifications on the basis that it will not 'assist the trier of fact' under Rule 702"); United States v. Curry, 977 F.2d 1042, 1051 (7th Cir. 1992) (noting the same).

¹¹⁶ See, e.g., Hall, 165 F.3d at 1104–05 (upholding the district court's exclusion of expert testimony even while observing its potential helpfulness); Curry, 977 F.2d at 1051–52 ("The district court also apparently had no quarrel with [the expert's] competency to testify or with the reliability of her scientific testimony.").

¹¹⁷ See, e.g., United States v. Stevens, 935 F.2d 1380, 1397 (3d Cir. 1991) (noting the district court's decision to allow stress-related expert testimony); United States v. Smith, 621 F. Supp. 2d 1207, 1216–19 (M.D. Ala. 2009) (noting the utility of expert testimony on the effect of stress on eyewitness).

¹¹⁸ See generally D.S. Greer, Anything but the Truth? The Reliability of Testimony in Criminal Trials, 11 Brit. J. Criminology 131, 134–35 (1971) (relating simulation experiment).

¹¹⁹ See C. Neil Macrae et al., Creating Memory Illusions: Expectancy-Based Processing and the Generation of False Memories, 10 Memory 63, 72 (2002).

¹²⁰ See, e.g., United States v. Hudson, 884 F.2d 1016, 1024 (7th Cir. 1989) ("Such expert testimony will not aid the jury because it addresses an issue of which the jury generally is aware.").

¹²¹ See, e.g., Hall, 165 F.3d at 1107 ("[A]ny weakness in eyewitness identification testimony ordinarily can be exposed through careful cross-examination of the eywtinesses.").

¹²² See, e.g., id. ("[T]he district court properly gave the jury an instruction on the reliability of eyewitness identification to aid the jury in evaluating the eyewitness iden-

in neither survey conducted by Kassin et al.¹²³ was stress rated with a high level of agreement as reliable enough to be presented in court.¹²⁴ Furthermore, of experts surveyed in 2001, only half said they would even testify on the subject.¹²⁵

C. The Relationship Between Race and Identification

Ninety percent of experts agreed that research regarding errors in cross-racial identifications were reliable enough to be presented. ¹²⁶ In situations where an individual of one race is asked to identify members of another race, that person is 1.56 times more likely to be mistaken than if the identification was of an individual of the same race. ¹²⁷ Because of these problems, the Third and Sixth Circuits have admitted expert testimony to educate the jury. ¹²⁸ For the same rationale as the exclusion of expert testimony regarding stress, ¹²⁹ the Seventh and Ninth have specifically excluded the testimony. ¹³⁰

The number of phenomena circuit courts have either affirmed the admission of or found abuse of discretion in denying is far outnumbered by the number of instances they have had the occasion to affirm the exclusion. For example, courts have consistently excluded expert testimony regarding the ways in which memory is formu-

tification testimony introduced at trial."); United States v. Rincon, 28 F.3d 921, 925 (9th Cir. 1994) (noting the sufficiency of the district court's limiting instruction). The decision to exclude in *Rincon* was based primarily on the failure of defense counsel to present robust scientific findings supporting their conclusion. *See id.* at 924–25.

¹²³ See supra notes 93, 99-100 and accompanying text.

¹²⁴ In fact, the level of support decreased from seventy-one percent in 1989 to sixty percent in 2001. Kassin et al., *supra* note 98, at 413 tbl.5.

¹²⁵ Id. at 412 tbl.4.

¹²⁶ Id.

¹²⁷ Christian A. Meissner & John C. Brigham, *Thirty Years of Investigating the Own-Race Bias in Memory for Faces: A Meta-Analytic Review*, 7 PSYCHOL. PUB. POL'Y & L. 3, 15 (2001).

¹²⁸ See United States v. Stevens, 935 F.2d 1380, 1401 (3d Cir. 1991) (holding that the district court abused its discretion for not allowing such testimony); United States v. Smith, 736 F.2d 1103, 1106 (6th Cir. 1984) (finding problems associated with cross-racial identifications outside of jury's "ken," but ultimately concluding that the exclusion was harmless).

¹²⁹ See, e.g., United States v. Smith, 122 F.3d 1355, 1359 (11th Cir. 1997) ("Smith \dots was successful in getting the district court to instruct the jury about cross-racial identification \dots ").

¹³⁰ See supra notes 101, 103 and accompanying text.

lated,¹³¹ the suggestiveness of pretrial procedures,¹³² the impact of drugs and alcohol on perception,¹³³ and the effect of viewing time.¹³⁴

There are several conclusions that can be drawn from the way the courts of appeals have dealt with each individual identification phenomenon. First, appellate courts uniformly grant a great degree of deference to the district court regardless of whether the testimony is admitted or excluded.¹³⁵ In only one case has an appellate court found an abuse of discretion that was not harmless error. 136 Second, the common theme running through the theories courts have admitted is that they are based upon "an experience confessedly foreign . . . to [the jury's] own."137 Rather than admitting anything that may possibly be of some use to the jury, courts instead focus on those areas where juries are believed to have incorrect biases and where an expert may present findings that the jury can then apply to the facts more accurately. Third, the relatively counterintuitive nature of a particular conclusion is a strong indicator of its likelihood of admission. Finally, the magnitude of the eyewitness's testimony in the overall case against the defendant is one of the most important factors in deciding whether or not to allow experts to testify. While the existence of other incriminating evidence does not necessarily lead to the exclusion of expert testimony, 138 in instances where the government's entire case rested upon identification by an uncorroborated eyewitness made under suspect conditions, then expert testimony may be relevant.¹³⁹

¹³¹ See, e.g., United States v. Mathis, 264 F.3d 321, 340 (3d Cir. 2001) (holding the jury needed no illumination); United States v. Blade, 811 F.2d 461, 465 (8th Cir. 1987) (holding that such testimony could prejudice the jury).

¹³² See, e.g., United States v. Hall, 165 F.3d 1095, 1104 (7th Cir. 1999) (finding that "a district judge has broad discretion to exclude relevant evidence that is confusing or redundant").

¹³³ See, e.g., United States v. Curry, 977 F.2d 1042, 1051–52 (7th Cir. 1992) ("The intrusion of an expert to comment on . . . minor [eyewitness] testimony was not necessary.").

¹³⁴ See, e.g., Hall, 165 F.3d at 1104 (excluding expert testimony on the effect of viewing time on memory).

¹³⁵ See supra note 38 and accompanying text.

¹³⁶ See United States v. Smithers, 212 F.3d 306, 318 (6th Cir. 2000) (remanding for failure to conduct a clear *Daubert* analysis).

¹³⁷ See Hand, supra note 66, at 54.

¹³⁸ Failure to admit the expert testimony on several topics was found to be an abuse of discretion in *United States v. Mathis*, 264 F.3d 321 (3d Cir. 2001), despite evidence of a high speed chase, which ended in a passenger dropping a black bag containing money, testimony from the defendant's cohort in the bank robbery, and video footage from the bank. *Id.* at 321, 325, 341–42.

¹³⁹ See United States v. Blade, 811 F.2d 461, 465 (8th Cir. 1987).

IV. THE CASE FOR EXCLUSION OF EXPERT TESTIMONY

In spite of the frailties of the human mind exhibited in memory recall and the potential for illumination by experts, this Part argues that the use of expert testimony is a legally inappropriate solution. First, I discuss the theoretical value of expert testimony and its practical effect on juries. Next, I review the possible grounds for exclusion, identifying the strongest support for the argument. Finally, alternative, procedural methods of caution will be explored.

A. The Ecological Fallacy

The cornerstone of our system remains our belief in the wisdom and integrity of the jury system and the ability of twelve jurors to determine the accuracy of witnesses' testimony. 140

Numerous psychologists argue that expert testimony is a necessary tool to counteract incorrect jury assumptions. ¹⁴¹ By explaining to juries the ways, according to research, that human brains store and recall memories and by debunking common misconceptions about that process, these psychologists believe that juries will be better equipped to make determinations about the reliability of individual eyewitness identifications. The end result, they argue, will be fewer wrongful convictions and more reliable jury verdicts. Whether or not this is the case, however, remains an open question. Several assumptions behind this argument cast doubt on its validity.

Consider an analogy from baseball. Billy Butler of my beloved Kansas City Royals is up to bat. The count is three balls and two strikes. On the next pitch, the umpire calls a strike and after expressing his disagreement with a few choice expletives, Billy storms off to the dugout. Without video review or instant replay to undoubtedly prove if the pitch was a ball or a strike, how can we determine who was right—the batter who claims he saw the pitch go outside, or the umpire who swears it was right down the middle? In 2009, approximately eighteen percent of all major league plate appearances ended in a called strike three and the walk rate was just under nine percent. One might assume that, in attempting to ascertain the true location of a single pitch, the fact that eighteen percent of all plate appearances ended with strike three called is a relevant piece of infor-

¹⁴⁰ People v. Plasencia, 189 Cal. Rptr. 804, 807 (Ct. App. 1983).

¹⁴¹ See supra notes 6-12 and accompanying text.

¹⁴² I calculated these figures using the calculator on *Custom Statistic Report: League Batting*, Baseball Prospectus, http://www.baseballprospectus.com/statistics/sortable/index.php?cid=75007 (last visited Nov. 6, 2010).

mation that can be used to discount the probability that the umpire was right. However, that would be incorrect.

This assumption falls victim to the ecological fallacy. First introduced in 1950 by statistician W.S. Robinson, the ecological fallacy is a statistical error of interpretation where a particular characteristic of the population as a whole is applied to an individual.¹⁴³ Rather than providing valuable insight into the actions of an individual, "the only reasonable assumption is that an ecological correlation is almost certainly not equal to its corresponding individual correlation."144 Robinson's theory has been used in a variety of ways: to show that while there was a positive correlation between the illiteracy rate and the proportion of a population of individuals born outside of the United States, the individual immigrant was actually *more* literate than his or her America-born counterpart;¹⁴⁵ to demonstrate that while Democratic candidates often won wealthier states, wealthier individuals were more likely to vote Republican; 146 and to help in challenging Washington state's 2004 gubernatorial election.¹⁴⁷ In the baseball scenario, attempting to discern whether or not the "sweet swing [ing]" 148 Butler was truly struck out by reference to the number of strikeouts in the population of baseball players is fallacious. Robinson is careful to caution: "While it is theoretically possible for the two to be equal, the conditions under which this can happen are far removed from those ordinarily encountered in data."149

In the context of eyewitness-identification testimony, the same argument holds true. As in baseball, there is no instant replay in real life. Even assuming the studies are entirely reliable and scientifically accurate, placing an expert on the stand and presenting the findings to a jury runs the risk of the ecological fallacy. Presenting testimony that humans typically have a hard time remembering faces under conditions of great stress or in the presence of a weapon tells the jury

¹⁴³ W.S. Robinson, Ecological Correlations and the Behavior of Individuals, 15 Am. Soc. Rev. 351, 357 (1950).

¹⁴⁴ Id.

¹⁴⁵ Id. at 354-57.

^{146~} See Andrew Gelman, Red State, Blue State, Rich State, Poor State 25~(2008).

¹⁴⁷ See Transcript of Oral Decision at 15–17, Borders v. King Cnty., No. 05-2-00027-3 (Wash. Sup. Ct. 2005).

¹⁴⁸ Kevin Kaduk, *Spring Snapshot: Royals Resting All of Their Hopes on Three Kings*, Big League Stew (Mar. 21, 2010, 10:07 PM), http://sports.yahoo.com/mlb/blog/big_league_stew/post/Spring-Snapshot-Royals-resting-all-of-their-hop?urn=mlb-229216.

¹⁴⁹ Robinson, supra note 143, at 357.

nothing about the *individual case of each witness in the trial.*¹⁵⁰ Not only that, but such expert testimony runs the very real risk that juries will take that testimony to mean precisely what it does not—that the witnesses they are asked to evaluate are identically susceptible to frailties of memory.

A likely response to this argument is that the expert is not commenting on an individual, but rather educating the jury about the latest psychological literature. The court made this argument in *Smith*, clarifying that "the expert was not permitted to testify about the credibility and believability of the witnesses in this case." ¹⁵¹ The court approves of this process because it is designed solely to educate the jury, not to tell them how to evaluate a witness's credibility. The expert is testifying not about people, per se, but rather about the functioning of the brain. In this sense, the expert is the proper subject for examination because testimony regarding brain functioning is no less foreign than drug interactions or other similarly complex and specialized knowledge. This argument is entirely disingenuous. While the expert is technically precluded from speaking directly about any particular witness, they are doing exactly that—their testimony is akin to asking the jury to consider an ecologically fallacious conclusion.

B. The Usurpation of the Role of the Jury

In a criminal trial, because they have the burden of proof, the prosecution presents its case first. During this portion of the trial, the prosecution will present one or more eyewitnesses to persuade the jurors that the defendant committed the crime. *After* this testimony, the defense will call an expert to comment on preapproved areas of research. The expert will testify about all of the factors present in the case, such as stress, confidence, and cross-racial issues, because all other factors that do not "fit" will have been specifically excluded in the pretrial *Daubert* hearing. The Second Circuit eloquently explained:

Fundamental to the role of juror as trier of fact is the task of assessing witness credibility. And, a witness's demeanor on the stand,

¹⁵⁰ Similarly, studies about the knowledge and biases of jurors say nothing about the knowledge and biases of individual jurors.

¹⁵¹ United States v. Smith, 621 F. Supp. 2d 1207, 1218 (M.D. Ala. 2009).

^{152~} See Paul Bergman & Sarah J. Berman, The Criminal Law Handbook 469--70 (Richard Stim ed., 11th ed. 2009).

¹⁵³ Daubert v. Merrell Dow Pharm. Inc., 509 U.S. 579, 591–92 (1993) (requiring a "valid scientific connection to the pertinent inquiry as a precondition to admissibility").

including his or her confidence, impacts the assessment of credibility. By testifying that confidence bears little or no relationship to accuracy in identifications, [the expert witness] would effectively have inserted his own view of the officers' credibility for that of the jurors, thereby usurping their role. 154

Allowing expert testimony usurps this fundamental role of the jury. The "ultimate issue" rule refers to allowing a witness the latitude to answer a question that would indicate that witness's opinion of the final determination to be made in the trial. 155 In other words, a pharmacology expert may testify regarding her research into drug interactions, but she is barred from taking the final step and testifying that the particular drug in a particular instance caused the alleged injury. The last step, so the argument goes, is the "ultimate issue" and the sole province of the jury. Despite the critics' response that the ultimate issue argument has been "specifically abolished" by the Federal Rules of Evidence, 156 this abolition is not applicable. Expert testimony, as here conceptualized, is distinguishable because it allows one witness to tell the jury how they should evaluate another witness, as opposed to their giving their opinion on the outcome of the case. In criminal cases involving eyewitnesses, the "ultimate issue" is whether the defendant perpetrated the crime. Allowing a witness to speak about general studies, and using this information to later imply that another witness is unbelievable and unreliable, is a different issue altogether. The testimony is forbidden because "[i]t is the exclusive province of the jury to determine the believability of [a] witness. An expert is not permitted to offer an opinion as to the believability or truthfulness of a victim's story."157 Forbidding the expert from discussing the particular witnesses in a case, as happened in *Smith*, does not avoid usurping the role of the jury. In the course of the trial, the eyewitness will have testified before the expert, and the jurors will have each listened to her testimony, observed her demeanor, and individually passed judgment about her credibility. The expert then

¹⁵⁴ United States v. Lumpkin, 192 F.3d 280, 289 (2d Cir. 1999).

¹⁵⁵ See, e.g., People v. Wilson, 153 P.2d 720, 724 (Cal. 1944) (whether abortion was necessary to save life of patient); Clifford-Jacobs Forging Co. v. Indus. Comm'n, 166 N.E.2d 582, 585 (Ill. 1960) (medical causation); Dowling v. L.H. Shattuck, Inc., 17 A.2d 529, 532 (N.H. 1941) (proper method of shoring ditch); Schweiger v. Solbeck, 230 P.2d 195, 203 (Or. 1951) (cause of landslide).

¹⁵⁶ See Fed. R. Evid. 704(a); United States v. Langford, 802 F.2d 1176, 1183 (9th Cir. 1986) (Ferguson, J., dissenting); 7 John Henry Wigmore, Evidence in Trials at Common Law § 1920, at 18 (James H. Chadbourn ed., rev. ed. 1978) (dismissing claim as a "mere bit of empty rhetoric").

¹⁵⁷ Bachman v. Leapley, 953 F.2d 440, 441 (8th Cir. 1992) (citation omitted).

testifies about no one in particular, but only about studies of the way the mind works. If the expert is to have any impact at all, the jurors will necessarily reduce their perception of the believability of individual witnesses based on the expert's general testimony. ¹⁵⁸ "When an expert undertakes to tell the jury what result to reach, this does not *aid* the jury in making a decision, but rather attempts to substitute the expert's judgment for the jury's." ¹⁵⁹

C. Battle of the Experts

Testimony by dueling experts can result in a jury that is worse off than if no expert were presented. As the results of the most recent surveys taken by Kassin et al. indicate, it is evident that there is not universal agreement as to the reliability or admissibility of any of the surveyed phenomena of identification. 160 If expert testimony is proffered by the defense to expose certain phenomena, it stands to reason that there will be experts who disagree with the study's methodology or conclusions that could be presented by the prosecution. Conflicting testimony from two experts creates significant potential for jury confusion about the science behind identification and results in their improperly discounting the entire line of testimony.¹⁶¹ A recent study conducted by Lora M. Levett and Margaret Bull Kovera buttressed the conclusion that "[t]he defense expert witness sensitized the jurors to the factors that affect eyewitness reliability; however, adding the opposing expert caused jurors to become more skeptical of the eyewitness identification than jurors who heard no opposing expert, regardless of the condition under which the witness viewed the crime."162 When juries are presented with complicated scientific evidence that they may not understand, they engage in heuristic processing in which they begin to weigh other, less complicated factors rather than the

¹⁵⁸ Compare Michael McCloskey & Howard E. Egeth, Eyewitness Identification: What Can a Psychologist Tell a Jury?, 38 Am. Psychologist 550, 550 (1983) (arguing that while jurors need help, they do not need to be made more skeptical of eyewitnesses), with Edith Greene & Elizabeth Loftus, Solving the Eyewitness Problem, 2 Behav. Sci. & L. 395, 404 (1984) (concluding that use of experts is beneficial, if not necessary).

¹⁵⁹ United States v. Duncan, 42 F.3d 97, 101 (2d Cir. 1994).

¹⁶⁰ Kassin et al., supra note 98, at 412 tbl.4.

¹⁶¹ See Lora M. Levett & Margaret Bull Kovera, The Effectiveness of Opposing Expert Witnesses for Educating Jurors About Unreliable Expert Evidence, 32 Law & Hum. Behav. 363, 370 (2008).

¹⁶² Id. (emphasis added).

quality of the argument.¹⁶³ Furthermore, jurors may view a battle of the experts as indicating the science is not generally accepted, even if that is not the reality.¹⁶⁴ The judge, acting as gatekeeper,¹⁶⁵ has the obligation to ensure that any expert that is permitted to testify is doing so regarding science that is generally reliable, helpful to the jury, and not overly prejudicial. As seen in the lack of universal agreement amongst experts in the field, a theory's general acceptance does not necessarily imply its correctness or universal acceptance. "Unlike opposing clinical testimony, in which a conclusion is in debate . . . , opposing-eyewitness expert testimony more typically debates the value and relevance of research on eyewitness memory." ¹⁶⁶ When there are not valid grounds for wholesale exclusion of opposing expert testimony, there is a risk that the battle of the experts will leave the witness by the wayside and result in the jury incorrectly discounting the entire body of testimony. ¹⁶⁷

D. Undue Influence of Experts

Even assuming jurors are generally unaware of the frailties of the mind, there is a significant risk that they will place undue weight on the testimony of an individual labeled an "expert." This view has been expressed on numerous occasions by the circuit courts: "Given the powerful nature of expert testimony, coupled with its potential to mislead the jury, we cannot say that the district court erred in concluding that the proffered evidence would not assist the trier of fact and that it was likely to mislead the jury." In a study of 128 university stu-

¹⁶³ See id. at 365 ("An opposing expert could act as a heuristic cue that makes jurors skeptical of all scientific evidence, regardless of whether the expert attempts to educate the jury about scientific concepts.").

¹⁶⁴ See id. at 371.

¹⁶⁵ See Fed. R. Evid. 104(a).

¹⁶⁶ Brian L. Cutler & Steven D. Penrod, Mistaken Identification 246 (1995).

¹⁶⁷ This argument presents somewhat of a catch-22. On the one hand, if the opposing expert testimony is really very strong, then there may be grounds for excluding *all* expert testimony, as the science is not very reliable. On the other, if both sides present viable arguments, grounded in good science—as appears to be most often the case—the court would be obliged to allow both sets of testimony, resulting in a battle of the experts.

¹⁶⁸ United States v. Rincon, 28 F.3d 921, 926 (9th Cir. 1994); see also United States v. Mathis, 264 F.3d 321, 335 (3d Cir. 2001) ("The aura of reliability that's attached to an expert witness, I believe, is significant. Listening to this expert, it seems to me, that the testimony itself has the potential, if not controlling probability of confusing the jury."); United States v. Lumpkin, 192 F.3d 280, 289 (2d Cir. 1999) ("Indeed, by our estimation, the added aura of reliability that necessarily surrounds expert testimony would have placed the officers' credibility here in jeopardy."); United States v.

dents¹⁶⁹ it was determined that mock jurors viewing expert testimony gave the defendant lower guilt ratings and estimated a lower general percentage of accurate eyewitness testimony.¹⁷⁰ However, the study varied the presentation of the eyewitness by levels of confidence.¹⁷¹ Thus, these conclusions say nothing about whether or not the expert was helpful in tempering jurors' beliefs of a witness *when that witness was incorrect*. Despite increased scrutiny in deliberations¹⁷² and reduced guilt ratings it would be incorrect to assume that this scrutiny leads to more just results or that expert testimony is the only way to achieve more accurate convictions. Juror skepticism elicited through expert testimony results in injustice in instances where the original eyewitness was correct and the skepticism was unwarranted.

The extent to which expert testimony in this regard is "juror education" is also highly debatable. Evidence introduced by experts in this context is designed not to educate the jury on a topic about which they know nothing, but to both correct their knowledge and increase their skepticism. The cases discussed above favoring expert admission do not contend that juries are unable to evaluate the credibility of a witness on the stand—to deny so would be to deny the essence of the entire system—but rather that an expert is needed to guide their knowledge. In many cases, this is a correct assumption. In *Daubert*, a juror would not be expected to know the way a particular medication interacts with a fetus. The jury in *Kumho* was not expected to know how a tire is constructed and the ways it could be faulty. The "systolic

Purham, 725 F.2d 450, 454 (8th Cir. 1984) (explaining that an expert witness would not have assisted the jury in evaluating the witness's perception and identification and could result in unfair prejudice because of aura around experts). *Contra Mathis*, 264 F.3d at 339 ("There is no suggestion, however, that such an aura of reliability was unwarranted in this case or, to be more precise, that it was unfairly prejudicial. From the record, it seems that Dr. Loftus was an extremely qualified, experienced academic presenting opinions on topics near the heart of his expertise.").

The population of university students in this study, and indeed most studies discussed in this Note, is markedly different than the population at large. Students tend to be more educated and younger than the rest of the population at large. However, a comparative study reveals that differences between the general population and students acting as jurors were negligible. See Brian H. Bornstein, The Ecological Validity of Jury Simulations: Is the Jury Still out?, 23 Law & Hum. Behav. 75, 78–80 (1999) (noting that most studies find little difference between student and nonstudent juries); see also Harmon M. Hosch et al., Influence of Expert Testimony Regarding Eyewitness Accuracy on Jury Decisions, 4 Law & Hum. Behav. 287, 294 (1980) ("[O]ne cannot conclude that college students differ significantly from more typical jurors.").

¹⁷⁰ Fox & Walters, supra note 107, at 224-27.

¹⁷¹ Id. at 218-29.

¹⁷² See Harmon M. Hosch, A Comparison of Three Studies of the Influence of Expert Testimony on Jurors, 4 Law & Hum. Behav. 297, 297 (1980).

blood pressure deception test" in Frye, though crude and unreliable, was designed to test the objective fact of whether or not a person was lying, a deliberate act subject to artful concealment.¹⁷³ The common theme in these cases is that the subject of expert testimony was something that was entirely outside of the scope of knowledge of the common person. The case presented for eyewitness-identification expert testimony is entirely different. Both courts and commentators frame the discussion regarding memory storage and recall as one of which jurors are aware, but are simply incorrect. Thus, rather than attempting to inform, experts here aim to correct. However, with eyewitnesses, the expert testimony is not about the individual on the stand or the particular likelihood that the individual identified the right person;¹⁷⁴ it is about general conclusions drawn from a random sampling of humans. The rationale behind allowing this type of "education" can potentially justify any expert to testify regarding an area that the common person may misconceive, risking inefficiency without necessarily realizing tangible gains in justice. 175

E. Federal Rules of Evidence as Grounds for Exclusion

Federal Rules of Evidence 702 and 403 provide two rule-based grounds on which a district court can base its exclusion of expert testimony. To exclude under Rule 702, the district court must either find that the science is unreliable and invalid or that the proffered testimony does not fit the facts of the case. If neither of these are met, the judge may still rule that the probative value of the evidence is outweighed by "the danger of unfair prejudice, confusion of the issues, or misleading the jury, or by considerations of undue delay, waste of time, or needless presentation of cumulative evidence."

The overwhelming opinion in the scientific community is that eyewitness identifications are generally unreliable. Over twenty years ago a judge on the Ninth Circuit concluded that "[c]ourts and scholars have long recognized the untrustworthiness of eyewitness tes-

¹⁷³ For further discussion of these cases, see *supra* notes 29–37, 59–69 and accompanying text.

¹⁷⁴ If it were, the ecological fallacy would apply.

¹⁷⁵ See generally Elaine D. Ingulli, Trial by Jury: Reflections on Witness Credibility, Expert Testimony, and Recantation, 20 Val. U. L. Rev. 145, 152–54 (1986) (detailing judicial reluctance to introduce experts commenting on witness credibility and expressing a desire to protect the jury's role).

¹⁷⁶ Fed. R. Evid. 702.

¹⁷⁷ Id. R. 403.

¹⁷⁸ See supra note 85 and accompanying text. For a thorough review of the literature, see Elizabeth F. Loftus et al., Eyewitness Testimony 11–112 (4th ed. 2007).

timony."¹⁷⁹ Exclusion of testimony on the grounds that it is unreliable does not seem to be a viable strategy. District courts, post-*Daubert*, conduct extensive pretrial hearings in which all facets of the proposed expert's testimony are reviewed and approved by the court if they meet a threshold level of scientific validity. However, as discussed above, the specific phenomena that are admitted are varied and inconsistent. In fact, the only cases in recent history where proffered testimony was excluded on the grounds that it was unreliable were simply cases where the experts failed "to provide sufficient articles or data."¹⁸⁰ The studies and support are in ample supply—it is merely a matter of the expert and counsel presenting it properly.¹⁸¹ Despite the lack of consistency across courts, the argument that expert testimony is based on unreliable science is weak.

The "fit" requirement of Rule 702 provides a stronger ground for exclusion. In finding a clear fit between Dr. Fulero's theories and the facts of the case, the judge in *Smith* concluded that the second prong of the *Daubert* test was met.¹⁸² The court, rather crudely, treated this requirement as a simple checklist. If the witness was of a different race than the offender, then there was fit with the cross-racial phenomenon. Similarly, if the witness was stressed, there was fit with the stress phenomenon.¹⁸³ This, however, is not the correct way to interpret the requirement. Rule 702, which *Daubert* interpreted,¹⁸⁴ requires the testimony to "assist the trier of fact."¹⁸⁵ The extent to which this evidence may "assist" the trier of fact is questionable. In fact, given problems with the ecological fallacy, expert testimony actually impairs the trier of fact by essentially requiring them to force conclusions made about a large population onto individuals.¹⁸⁶

¹⁷⁹ United States v. Langford, 802 F.2d 1176, 1182 (9th Cir. 1986) (Ferguson, J., dissenting).

¹⁸⁰ See United States v. Brien, 59 F.3d 274, 277 (1st Cir. 1995); United States v. Rincon, 28 F.3d 921, 923–25 (9th Cir. 1994)); United States v. Smith, 621 F. Supp. 2d 1207, 1212 (M.D. Ala. 2009) (citing United States v. Kime, 99 F.3d 870, 883 (8th Cir. 1996)).

¹⁸¹ Smith, 621 F. Supp. 2d at 1212 ("[O]ther courts have specifically reviewed Dr. Fulero's methods and found that they 'easily' satisfy the first Daubert inquiry." (quoting United States v. Moonda, No. 1:06CR0395, 2007 WL 1875861, at *1 (N.D. Ohio June 28, 2007))).

¹⁸² See supra notes 19-28 and accompanying text.

¹⁸³ This is the same rationale discussed by the Third Circuit in finding an abuse of discretion in the exclusion of testimony. *See* United States v. Stevens, 935 F.2d 1380, 1398–1401 (3d Cir. 1991).

¹⁸⁴ See supra notes 41-42 and accompanying text.

¹⁸⁵ Fed. R. Evid. 702.

¹⁸⁶ See supra notes 142–51 and accompanying text.

Additionally, this ground for exclusion can most easily be used to weed out all testimony that is about areas clearly in the common understanding of the jury—phenomena described by the Third Circuit as in need of no illumination.¹⁸⁷ These topics include the ways in which memory is formulated, the suggestiveness of pretrial procedures, the impact of drugs and alcohol on perception, and the effect of viewing time.

Finally, expert testimony on those areas that are both reliable and fit the facts can still be excluded if it risks interfering with the efficiency of the trial or the role of the jury. One way this can happen is through a battle of the experts, resulting in undue costs, delay, and juror confusion.¹⁸⁸ Another ground is that the bias the testimony—and opposing expert testimony, if any—can instill into the jury by unjustifiably making them untrustworthy of all eyewitness testimony.¹⁸⁹ Rule 403 is where *Smith* identified the split among the circuits,¹⁹⁰ and is where the most conflict lies surrounding admission. The risk of invading the province of the jury by presenting testimony that leads to discrediting a witness—even if it is a matter of degree—is another strong reason for exclusion.

F. Alternative Methods of Juror Education

In spite of this position, there are cognizable risks that accompany eyewitness testimony. As in *Coleman v. Alabama*,¹⁹¹ discussed in the Introduction, when an eyewitness takes the stand, only he or she and the perpetrator—whether the defendant or someone else entirely—know what happened. The risk of wrongful conviction based on sincere yet inaccurate testimony is one that requires vigilance.¹⁹² Due to the questionable nature of expert testimony in our system of justice, other methods must be utilized and refined to protect against miscarriages of justice. This subpart briefly outlines three such methods: voir dire, cross-examination, and jury instructions. None of these are necessarily sufficient in and of themselves, but working together they provide procedural safeguards. The purpose of this subpart is not to review the efficacy of each procedural safeguard. There is an ample supply of jury studies and psychology experiments

¹⁸⁷ See United States v. Mathis, 264 F.3d 321, 340 (3d Cir. 2001) (citing United States v. Gibbs, 190 F.3d 188, 212 (3d Cir. 1999)).

¹⁸⁸ See supra Part IV.C.

¹⁸⁹ See supra Part IV.D.

¹⁹⁰ United States v. Smith, 621 F. Supp. 2d 1207, 1219 (M.D. Ala. 2009).

^{191 399} U.S. 1 (1970); see text accompanying notes 1-4.

¹⁹² See 4 WILLIAM BLACKSTONE, COMMENTARIES *352 ("[I]t is better that ten guilty persons escape, than that one innocent suffer.").

studying the way people process information and the way juries receive testimony and there will be more. Those studies, however, go more to the strategic choices of trial lawyers and not the formalities of what may or may not be presented in a trial. ¹⁹³ Instead, I intend to briefly present each of these methods as potential alternatives in need of further study.

Voir dire provides an opportunity to truly gauge the biases of the jury pool. Rather than relying on abstract studies of college students, voir dire allows attorneys to ask specific, targeted questions tailored to the facts of the case. ¹⁹⁴ Further, this process provides the opportunity for the jury to be primed for the issues that might arise in the case. Counsel, who would otherwise rely on an expert, can vet potential jurors to determine their individual perceptions and biases in order to protect against incorrect assumptions in deliberations. This was even utilized in *Smith*. During jury selection, counsel for the defense queried: "Does anyone believe that eyewitness perception and identification are always accurate?" ¹⁹⁵ At the very least, this and additional follow-up questions can sensitize the jury to the forthcoming issues from the start.

Once a witness takes the stand, opposing counsel has a full opportunity for cross-examination. In upholding the exclusion of expert testimony, the Seventh Circuit relied on cross-examination as an effective safeguard:

Additionally, all of the witnesses who identified defendants were thoroughly cross examined about the reliability of their identification, the length of time they saw the defendant, the conditions under which they saw the defendant, the length of time which elapsed between the witness seeing the defendant and the photos or the defendant in person, the number of times the witness saw the photo arrays, and when the witness was shown the photo array. Thus, the jury was made aware of many of the factors which may effect [sic] perception, retention and recall. . . . Thus, although the jury may not understand the intricacies of perception, recall and

¹⁹³ See Jennifer L. Overbeck, Note, Beyond Admissibility: A Practical Look at the Use of Eyewitness Expert Testimony in the Federal Courts, 80 N.Y.U. L. Rev. 1895, 1896 (2005) (suggesting "concrete ways of harnessing psychological research to formulate effective trial strategies").

¹⁹⁴ *See, e.g.*, United States v. Curry, 977 F.2d 1042, 1051 (7th Cir. 1992) ("In the present controversy the jury was questioned during *voir dire* about recall and the ability to identify persons they had seen only briefly, or had not seen for a period of time.").

 $^{195\,}$ Defendant's Requested Voir Dire at 4, Smith, 621 F. Supp. 2d 1207 (No. 2:07cr165-MHT).

retention, the jury is generally aware of the problems with identification. 196

However, cross-examination, while reliable in uncovering inconsistencies in testimony, does nothing to combat a confident, but incorrect, witness. In dissent, Judge Ferguson on the Ninth Circuit disagreed: "The key to the *Amaral* holding is that panel's conclusion [that] this information may be obtained by cross-examination. However, cross-examination cannot uncover the reasons for misidentification because the witness honestly does not believe he or she has misidentified the defendant." Even if there is a risk that the jury does not use the information correctly, courts have still relied on cross-examination. In one study, when mock juries were shown a cross-examination in which the eyewitness presented conflicting testimony, they were "significantly less likely to convict and perceived the defendant as less culpable and the eyewitness as less effective." While this is only one study, it indicates that cross-examination is another route to achieve similar goals of expert testimony.

Finally, jury instructions can be used as a means to convey the proper weight that should be placed on eyewitness testimony. These instructions are theoretically stronger than expert testimony because they reflect the opinion of the court as a matter of law. Rather than running the risk of being viewed as an advocate for one side, 202 jury instructions presented by the judge instead can communi-

¹⁹⁶ Curry, 977 F.2d at 1051 (alterations in original) (quoting the district court); see also United States v. Kime, 99 F.3d 870, 884 (8th Cir. 1996) ("This line of testimony intrudes into the jury's domain. Bell's defense counsel was capable of exposing to the jury any potentially unreliable bases underlying Jojola's identification through cross examination, assuming they were not already apparent.").

¹⁹⁷ United States v. Langford, 802 F.2d $1176,\,1183$ (9th Cir. 1986) (Ferguson, J., dissenting).

¹⁹⁸ See, e.g., United States v. Mathis, 264 F.3d 321, 335 (3d Cir. 2001) ("Whether the jury accepts it or not, how the jury accepts it is clearly within their province.").

¹⁹⁹ Garrett L. Berman & Brian L. Cutler, Effects of Inconsistencies in Eyewitness Testimony on Mock-Juror Decision Making, 81 J. APPLIED PSYCHOL. 170, 174 (1996).

²⁰⁰ See generally Stacey L. Wagner, The Right to a Jury of One's Peers: An Analytical Review of Juror Biases and Their Implications for the Legal System 25–27 (May 2009) (unpublished B.S. thesis, Depauw University) (on file with author) (detailing studies concluding juries give less weight to witnesses discredited through cross-examination).

²⁰¹ The Supreme Court of New Jersey, in fact, requires jury instructions on the potential unreliability of cross-racial identifications for that reason. *See* State v. Cromedy, 727 A.2d 457, 458–59 (N.J. 1999).

²⁰² See Wagner, supra note 200, at 37 (referring to expert witnesses as "hired guns").

cate the risks of placing too much emphasis on eyewitnesses neutrally. An illustrative set of instructions was utilized in *United States v. Hall*²⁰³:

[T]he district court properly gave the jury an instruction on the reliability of eyewitness identification to aid the jury in evaluating the eyewitness identification testimony introduced at trial. Specifically, the district court cautioned the jury to consider: (1) the opportunity the witness had to observe the offender at the time in question and later to make a reliable identification; (2) the influences and circumstances under which the witness has made the identification; (3) the credibility of each identification witness; (4) whether the witness is truthful; and (5) whether the witness had the capacity and opportunity to make a reliable observation on the matter covered in the witness's testimony. These instructions adequately focused "the jury's attention on the reliability of the witness identifications and . . . acquainted[ed] the jury with factors relevant in evaluating those identifications." ²⁰⁴

In combination, these three procedural mechanisms address the identical concerns expressed in favor of expert testimony. The primary justification made in defense of the use of experts is that the jury is generally either unaware of how the mind works or is incorrect in understanding the factors that affect memory recall. An expert, the argument goes, can testify to correct those misconceptions and fill in the gaps. Voir dire, cross-examination, and jury instructions, at least in theory, accomplish the same goals. At the beginning, middle, and end, the trial defense counsel and the judge have the opportunity to prime the jury to the frailties of the mind. Even if an expert may be "more" effective—a battle better suited for the laboratory—the risks associated with the expert are too high.

CONCLUSION: THE EYES HAVE IT

Science is replication. It attempts to ascertain truth through the replication of controlled experiments that, when conducted carefully and consistently, can illuminate truth. Jurors are asked to evaluate history. They are asked to sit quietly through a trial and listen to every piece of evidence about something that happened in the past. They listen to each side's version of the incident and render a verdict based on credibility assessments, without explaining how they arrived at their decision, before returning to their lives. The facts of the case cannot be replicated, only retold by those involved. In calling for

^{203 165} F.3d 1095 (7th Cir. 1999).

²⁰⁴ *Id.* at 1107 (alterations in original) (citation omitted) (quoting United States v. Anderson, 739 F.2d 1254, 1258 (7th Cir. 1984)).

expert testimony, attorneys and psychologists attempt to use science to explain history. This is inappropriate. It is the juror's role in determining history to use their experience to determine if that identification is credible. Utilizing an expert, in effect, to substitute their credibility judgment for that of the jury increases the likelihood that the ecological fallacy will influence the jury's verdict. The testimony does not provide the jury additional facts to aid them in determining history. It instead confuses, misleads, and oversteps its bounds.

Given the way our system of justice functions, the proper mechanisms for ensuring innocent people are not wrongfully convicted are procedural. Controlling the makeup of the jury through voir dire, discrediting eyewitnesses in cross-examination, and limiting the jury through cautionary instructions are the proper ways to control the version of history the jury is to understand. By focusing on these mechanisms, courts can strike a proper balance between judicial efficiency, protecting the innocent, and convicting the guilty.