A RECOGNITION INTENTIONALLY EVOKED: 
EXTENDING DAUBERT TO EYEWITNESS IDENTIFICATIONS

SARAH L. GRUSIN*

ABSTRACT

Courts have grappled with the persistent problem of unreliable eyewitness identifications. In response, empirical studies have identified methods to improve the accuracy of identifications. But the Supreme Court has repeatedly missed opportunities to incorporate the results of these scientific studies because the Court is unwilling to let go of the now antiquated view that eyewitness evidence is part of the “common knowledge.” I propose a novel approach to the admissibility of eyewitness evidence: recognize that lineups are a scientific tool used to produce eyewitness identifications and subject eyewitness identifications to a Daubert hearing before presenting the evidence to the jury.

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* Yale Law School, JD 2014. Law clerk to the Hon. Rebecca Pallmeyer. This article represents solely the author’s views. Special thanks to Tom Tyler and the participants of the “Reforming Eyewitness Identification: The Role of Social Science in Criminal Law,” panel at the Rebellious Lawyering 2013 conference.
I. INTRODUCTION

The U.S. Supreme Court and several state supreme courts have been grappling with how to address unreliable eyewitness evidence. But the Supreme Court has repeatedly missed opportunities to effectively incorporate these scientific findings because the Court is unwilling to let go of the now antiquated view that eyewitness evidence is part of “common knowledge.” States have more ambitiously incorporated new scientific findings into their eyewitness doctrine, but only through the rare and expensive use of Special Masters, whose findings are difficult to update as they become entrenched in the state’s precedent.¹ I propose a novel approach to the admissibility of eyewitness evidence: Recognize that lineups are a scientific tool used to produce eyewitness identifications and subject eyewitness identifications to a Daubert hearing before presenting the evidence to the jury. Unlike the states’ approach, treating eyewitness identifications as scientific evidence would allow flexibility among lower courts to adjust the admissibility of eyewitness evidence as the science continues to develop.

My proposal is based on a recognition that scientific fields emerge and develop over time. In Daubert, the Court explicitly acknowledged that new technologies and fields might emerge where none existed before.² But eyewitness identification is a field that has transitioned from lay knowledge to expert knowledge. Courts applying Daubert have been unable to recognize longstanding, but

¹. State v. Henderson, 27 A.3d 872 (N.J. 2011), recently decided by the Supreme Court is a landmark case for the admissibility of eyewitness identification, and a significant step in the right direction. The decision, which incorporates a huge swath of the scientific literature, requires admissibility hearings whenever a defendant can show some evidence of suggestiveness in the police procedures used. Id. at 919–20.

transitioned, fields of knowledge. There are several other proposals to increase the reliability of eyewitness evidence, but these alternative proposals suggest eliminating the distinction between lay and expert evidence, and simply requiring a reliability hearing for all evidence. My proposal, on the other hand, maintains the important divide between lay and expert evidence, but acknowledges that, over time, evidence may shift from one category to another.

III. THE PERSISTENT PROBLEM OF INACCURATE EYEWITNESS IDENTIFICATIONS: EYEWITNESS IDENTIFICATIONS ARE NOTORIOUSLY UNRELIABLE.

The Innocence Project has shown that mistaken identifications are “the single greatest cause of wrongful convictions nationwide, playing a role in nearly 75% of convictions overturned through DNA testing.” In fact, this is nothing new; mistaken identifications have been the leading cause of wrongful convictions for nearly 100 years. In an attempt to respond to this persistent problem, numerous empirical studies have revealed that factors within the control of the police, such as whether a lineup is double-blind, whether the witness has been informed that the suspect may not be in the lineup, and the similarity of the people selected as fillers to the witness’s description of the suspect, can influence the accuracy of the identification procedure. However, despite this wealth of empirical knowledge

5. See Edwin M. Borchard, Convicting the Innocent: Errors of Criminal Justice xii (1932) (identifying 29 out of 65 cases of wrongful conviction caused by mistaken eyewitness identification, making mistaken identification the leading cause of wrongful convictions).
9. Gary Wells has termed factors, such as these, that are within the control of the investigators “system variables.” See Gary L. Wells, Applied Eyewitness Testimony Research: System Variables and Estimator Variables, 36 J. PERSONALITY & SOC. PSYCHOL. 1546, 1548 (1978). System variables are distinct from estimator variables, which are factors beyond the control of the police, such as conditions under which the witness viewed the culprit and the characteristics of the culprit. Id.
about how investigators could structure lineups to improve the accuracy of identifications, the precautions currently in place in our legal system are ineffective at filtering out the worst identification procedures.\(^{10}\)

Presently, the only way to exclude an identification at trial in federal court is for a defendant to file a motion to suppress because the identification was so unnecessarily suggestive that introducing it would violate the defendant’s due process protections.\(^{11}\) But, these motions to suppress routinely fail, even when challenging the most suggestive procedures.\(^{12}\) This failure can be attributed to the fact that the due process doctrine surrounding eyewitness identification has not incorporated the findings from the evolving science of lineup procedures.\(^{13}\)

The Supreme Court first addressed the problem of unfair or suggestive identification procedures in 1967 in the \textit{Wade-Gilbert-Stovall} trilogy.\(^{14}\) The Court acknowledged the problems inherent in eyewitness identification and outlined some protections for defendants guaranteed by the due process clause.\(^{15}\) \textit{Wade} created a

\(^{10}\) See Eyewitness Identification, \textsc{Innocence Project}, http://www.innocenceproject.org/fix/Eyewitness-Identification.php (last visited Dec. 20, 2012) (“Despite solid proof of the inaccuracy of traditional methods – and the availability of simple measures to reform them – eyewitness IDs remain among the most common and compelling evidence brought against criminal defendants”).

\(^{11}\) See Gary L. Wells, Sarah M. Greathouse, & Laura Smalarz, \textit{Why Do Motions To Suppress Suggestive Eyewitness Identifications Fail?}, in \textsc{Conviction of the Innocent: Lessons From Psychological Research} 167, 167 (Brian Cutler ed., 2012).

\(^{12}\) Id. (“These pretrial motions to suppress eyewitness identification evidence are filed routinely, and yet they almost never succeed, even when the identification procedures are profoundly suggestive”).


\(^{14}\) United States v. Wade, 388 U.S. 218 (1967); Gilbert v. California, 388 U.S. 263 (1967); Stovall v. Denno, 388 U.S. 293 (1967). For a more in depth analysis of these cases and the dismantling of these protections in the following years see David E. Paseltiner, \textit{Twenty-Years of Diminishing Protection: A Proposal to Return to the Wade Trilogy’s Standards}, 15 \textsc{Hofstra L. Rev} 583 (1986).

\(^{15}\) \textit{Wade}, 388 U.S. at 228 (“The vagaries of eyewitness identification are well-known; the annals of criminal law are rife with instances of mistaken identification. Mr. Justice Frankfurter once said: ‘What is the worth of identification testimony even when uncontradicted? The identification of strangers is proverbially untrustworthy. The hazards of such testimony are established by a formidable number of instances in the records of English and American trials.’ . . . A major factor contributing to the high incidence of miscarriage of justice from mistaken identification has been the degree of suggestion inherent in the manner in which the prosecution presents the suspect to witnesses for pretrial identification.””) (Internal
defendant’s right to counsel at a post-indictment lineup. If counsel had not been present at the lineup, a prosecutor would be required to show in a pre-trial hearing that the in-court identification had a sufficient basis independent of the illegal lineup. Gilbert established that if the prosecution had already introduced evidence of a lineup where counsel was not present, a new trial would be automatic. That is, the prosecution would not have an opportunity to go back and show the independent basis for the identification on remand. Stovall articulated the possibility of a substantive limit on the procedures available to the police regardless of the presence of counsel. However, the Court provided no clear guidelines for locating this substantive limit, noting only that “unnecessarily suggestive” procedures would be prohibited.

These due process protections have not been effective at screening unreliable identifications and were weakened by the cases that followed. Even in Stovall, when the Court examined the identification procedure to determine whether it was “suggestive,” this safeguard did little to promote accuracy or to provide clear guidelines to police investigators. As Justice Black points out in his dissent:

The concept of due process under which the Court purports to decide this question . . . is that this Court looks at ‘the totality of the circumstances’ of a particular case to determine in its own judgment whether they comport with the Court’s notions of decency, fairness, and fundamental justice, and, if so, declares they comport with the Constitution, and, if not, declares they are forbidden by the Constitution.


citations omitted).

16. Id. at 236–37.
17. Id. at 241.
19. Id. 273.
21. Id. at 302.
24. Id. at 305 (Black, J., dissenting).
Under the “totality of the circumstances” test, the Court then approved the use of a highly suggestive show-up procedure, where the police brought the suspect to the witness’ hospital room, because the serious medical condition of the witness made the procedure necessary.\textsuperscript{25} Five years later in \textit{Neil v. Biggers} the Court provided police with clearer guidance by specifically articulating the five factors to be considered when examining the “totality of the circumstances,”

\begin{itemize}
\item [1] the opportunity of the witness to view the criminal at the time of the crime,
\item [2] the witness’ degree of attention,
\item [3] the accuracy of the witness’ prior description of the criminal,
\item [4] the level of certainty demonstrated by the witness at the confrontation, and
\item [5] the length of time between the crime and the confrontation.\textsuperscript{26}
\end{itemize}

These factors were later affirmed in \textit{Manson v. Brathwaite}\textsuperscript{27} and are still generally the law today.\textsuperscript{28} But the factors were developed by reference to the Court’s previous cases, with no discussion of relevant psychological principles or scientific studies.\textsuperscript{29} Reliability assessments in eyewitness identification cases, therefore, continue to be based on “notions of decency, fairness, and fundamental justice” distinguishing their treatment from that of scientific evidence, the reliability of which was determined by reference to “general acceptance” among the relevant scientific community.\textsuperscript{30} Unsurprisingly, these five factors, developed without reference to scientific studies, do not comport well with the factors that have been identified as affecting accuracy in the empirical literature.\textsuperscript{31}

\begin{footnotes}
\item[25] Id. at 302 (majority opinion).
\item[27] 432 U.S. 98, 114 (1977).
\item[28] See \textit{Nicholas A. Kahn-Fogel, Manson and Its Progeny: An Empirical Analysis of American Eyewitness Law}, 3 ALA. C.R. & C.L.L. REV. 175, 177 (2012) (noting that \textit{Manson} is still the current framework for determining admissibility of eyewitness identification). Some jurisdictions have acknowledged the flaws in the current framework and are altering their analysis based on scientific findings. \textit{Id.} at 194–95 (identifying New York, Massachusetts, Utah, Kansas, Wisconsin, and New Jersey as having deviated from the \textit{Manson} factors).
\item[29] \textit{See Biggers}, 409 U.S. at 199.
\item[31] \textit{See Horry, Palmer, Brewer, & Cutler, supra} note 13, at 150–51; Wells, Greathouse,
Most recently, in *Perry v. New Hampshire*, the Supreme Court missed an important opportunity to incorporate the scientific findings about eyewitness evidence. The defendant argued that the Due Process Clause requires subjecting eyewitness evidence to reliability hearings before admitting them at trial because identifications are inherently unreliable. The Court rejected this argument concluding “[t]he fallibility of eyewitness evidence does not, without the taint of improper state conduct, warrant a due process rule requiring a trial court to screen such evidence for reliability before allowing the jury to assess its creditworthiness.” This holding was premised “in large part, on our recognition that the jury, not the judge, traditionally determines the reliability of evidence.” That is, because the Court asserts that lay jurors have historically been tasked with evaluating the reliability of eyewitness evidence the Court concluded that additional reliability screening by the judge is unnecessary. This reveals the Court’s continued misimpression that eyewitness identifications are not scientific evidence. The result is that poor lineup procedures remain in use by police, the results of these substandard procedures continue to be admitted at trial, and misidentifications frequently result in innocent people being convicted.

Some state courts have been more proactive in incorporating the scientific findings. For example, *State v. Henderson*, recently decided by the New Jersey Supreme Court, is a landmark case for the admissibility of eyewitness identification, and a significant step in the right direction. The decision, which incorporates a huge swath of the scientific literature, requires admissibility hearings whenever a defendant can show some evidence of suggestiveness in the police procedures used. But “the ultimate burden remains on the defendant to prove a very substantial likelihood of irreparable misidentification.” If the defendant makes such a showing, the

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33. Id. at 728.
34. Id.
35. Id.
37. 27 A.3d 872 (2011).
38. Id. at 919–20.
39. Id. at 920.
court is instructed to suppress the identification evidence. By creating a more significant possibility of exclusion, the New Jersey Supreme Court has created an incentive for the police to change their practices in order to ensure the admissibility of identification evidence. While this approach is commendable, it still places the burden of production and proof on the defendant. Furthermore, the standard of proof is relatively high: “substantial likelihood.” Additionally, although it is commendable that the New Jersey Supreme Court conducted an extensive literature review, the scientific knowledge is likely to continue evolving. Any new recommendations for improving eyewitness identifications will not receive legal recognition until the New Jersey Supreme Court revisits the issue, which could delay the adoption of improved procedures among police departments. Finally, in order to achieve national reform, this effort would need to be duplicated within each state in the highest courts and again in the United States Supreme Court. Applying Daubert hearings to eyewitness identifications, on the other hand solves these remaining problems. It not only places the burden on the prosecution to prove the reliability of their procedures, but lower courts in federal and state systems already have the authority to conduct these hearings, and it removes the need for repeat action by appellate courts as the scientific standards evolve. However, most states have not gone as far as New Jersey and therefore in state courts, like federal courts, the overwhelming trend is routine admission of eyewitness identifications.

IV. HARMONIZING THE TREATMENT OF EYEWITNESS IDENTIFICATION EVIDENCE WITH FORENSIC SCIENCE EVIDENCE

This routine admission of eyewitness identification evidence is surprising when compared with how other scientific evidence is treated in most courts. Take polygraph evidence as an example. Eyewitness identifications and polygraph evidence have roughly the same error rates. Yet, polygraphs are routinely excluded at trial,

40. Id.
41. Compare COMMITTEE TO REVIEW THE SCIENTIFIC EVIDENCE ON THE POLYGRAPH, NATIONAL RESEARCH COUNCIL, THE POLYGRAPH AND LIE DETECTION 124 (2003) (reviewing scientifically valid polygraph studies and finding accuracy rates between 43% and 100%, when false positive cutoff is limited to 10% and accuracy rates between 64% and 100% when false positive cutoff is 30%) with Nancy Steblay et al., Eyewitness Accuracy Rates in Police Showup and Lineup Presentations: A Meta-Analytic Comparison, 27 L. HUM. BEHAV. 523, 530 (2003) (finding correct identifications in 47% of showups and 45% of lineups when
while identifications from lineups are routinely admitted. The reason for this discrepancy is that polygraphs are considered scientific evidence and are therefore subject to a Daubert hearing, a pre-trial hearing to determine the validity of the polygraph evidence. During Daubert hearings judges act as “gatekeepers” of scientific evidence, with the goal of discerning valid science from junk science.

Polygraph evidence is typically excluded at Daubert hearings because it does not meet the standards of reliability that are required for the admission of scientific and expert evidence. However, despite having similar error rates as polygraph evidence, eyewitness identifications are not subject to Daubert screening because eyewitness identifications are considered part of lay knowledge rather than requiring expertise. Courts do not recognize lineups as a form of scientific experiment or expert or technical process, and therefore do not identify eyewitness evidence as scientific, expert, or technical evidence. The categorization of eyewitness evidence is a threshold question, which means the reliability of eyewitness identifications is never considered prior to admitting the evidence.

the target is present and correct rejections in 85% of showups and 57% of lineups when the target is absent).

43. Daubert v. Merrell Dow Pharms., 509 U.S. 479, 585–86. Daubert is the standard for scientific evidence in federal courts. States generally treat scientific and expert evidence separately from lay evidence. The majority of states have adopted something akin to the Daubert test, others use an older test, the Frye general acceptance test, and a handful use something else entirely. See George Vallas, A Survey of Federal and State Standards for the Admission of Expert Testimony on the Reliability of Eyewitnesses, 39 Am. J. Crim. L. 97, 110 (2011). For the purposes of this paper, I will refer to Daubert for simplicity. But the argument that eyewitness identifications should be treated as scientific evidence applies regardless of the particular test a given jurisdiction applies to scientific and expert evidence.
44. Daubert, 509 U.S. at 597. See also George Fisher, Evidence 738 (2d ed. 2008) (“In the legal lore, Daubert stands today as the Court’s counterstrike against the invasion of ‘junk science’ into the nation’s courtrooms” (quoting 1 David L. Faigman et al. Modern Scientific Evidence §§ 1.3–4.1 (1997))).
45. See United States v. Henderson, 409 F.3d 1293, 1303 (11th Cir. 2005) (affirming district court’s exclusion of polygraph because “the error rate for polygraph testing ‘is not much more reliable than random chance and does not meet the stricter standards of scientific methods required by Rule 702 and Daubert.”). See also United States v. Younes, 194 F. App’x 302, 314–15 (6th Cir. 2006); United States v. Scarborough, 43 F.3d 1021, 1026 (6th Cir. 1994); United States v. Pitner, 969 F. Supp. 1246, 1252 (W.D. Wash. 1997). Cf. United States v. Scheffer, 523 U.S. 303, 309–11 (1998) (“To this day, the scientific community remains extremely polarized about the reliability of polygraph techniques . . . . This lack of scientific consensus is reflected in the disagreement among state and federal courts concerning both the admissibility and the reliability of polygraph evidence.”).
Courts should re-visit this threshold determination and recognize that eyewitness identifications have become the subject of a new scientific field. Despite important similarities, the admissibility of eyewitness evidence is governed by a different standard than other police investigation techniques grounded in scientific knowledge, such as blood analysis and ballistics. Daubert hearings require judges to assess four factors when evaluating whether scientific evidence meets the higher standard of reliability to justify admission. The four factors are: falsifiability, error rate, peer reviewed literature, and general acceptance.\(^46\) When reviewing evidence such as blood-typing or DNA matching, courts look to whether the procedures used meet the four Daubert standards. That is, are the results falsifiable? Do the procedures have a sufficiently low error rate? Are the procedures peer-reviewed in the relevant literature? Are the procedures that were used generally accepted among practitioners in the field?

Although Daubert hearings provide a robust screening of evidence already identified as “science,” and judges have the power to require certain testimony to undergo a Daubert screening,\(^47\) there is no test or standard to make the initial threshold determination about which evidence is scientific and therefore subject to pre-trial Daubert hearings and which evidence is lay-evidence. Currently, eyewitness identifications are introduced solely through the testimony of a witness, who is a layperson not an expert.\(^48\) There is often minimal or no discussion of the procedures used to obtain the identification. As a result, prosecutors are free to introduce eyewitness identifications, which are the result of a lineup procedure, with no checks on the scientific validity of the lineup protocol used to obtain the identification. Unlike other police investigation techniques that are

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\(^{46}\) Daubert, 509 U.S. at 593–94.

\(^{47}\) See, e.g., United States v. Yu, 411 F. App’x 559, 567 (4th Cir. 2010) (“We have explicitly rejected attempts to make an end-run around the Federal Rules of Evidence by blurring the distinction between expert and lay testimony. The district court did not abuse its discretion by preventing such an effort here.”) (internal citations omitted); United States v. Gainer, 468 F.3d 920, 925–26 (6th Cir. 2006) (characterizing witness’ testimony about specialized computer searches conducted with forensic software as expert rather than lay testimony and requiring that expert be properly qualified); Roach v. Middleton Auto Sales, Inc., 623 F. Supp. 2d 139, 145 (D. Mass. 2009) \(\text{at id sub nom. Roach v. CUNA Mut. Ins. Co., Inc.}, 385 F. App’x 2 (1st Cir. 2010) (determining that proposed testimony was that of an expert and requiring the affidavit of the witness stricken because it had been introduced as lay testimony).

\(^{48}\) See MICHAEL SENG & WILLIAM CARROLL, EYEWITNESS TESTIMONY: STRATEGIES AND TACTICS § 6:1 (2d ed. 2012) (“The presentation of the direct testimony of an eyewitness differs little from the presentation of the direct testimony of most other types of witnesses.”).
grounded in scientific knowledge, eyewitness identifications are not currently subjected to reliability and relevance screening.

If a *Daubert* hearing was required before the prosecution could introduce an eyewitness identification, prosecutors could meet this burden by having the police officer who conducted the lineup testify to what procedures were used to obtain the identification, the same way that lab technicians testify to the procedures used to test blood or DNA, before admitting the results of the tests themselves. Some police departments utilize specially trained officers in separate units devoted solely to conducting lineups. 49 Courts should require the police officer who conducted the lineup to testify regarding the reliability of the procedures used. If the police officer who conducted the lineup is not qualified to discuss the reliability of those procedures, prosecutors could supplement the testimony by introducing a lineup expert to validate the procedures used.

The police officer would be required to testify about (1) what procedures were used when conducting the lineup and (2) how the particular procedures used in the lineup meet the *Daubert* factors (falsifiability, sufficiently low error rate, peer reviewed, and generally accepted among eyewitness identification experts). Specifically, these standards might include testimony indicating the lineup was double-blind so that neither the police officer nor the witness knew who the suspect was. The police officer should also testify that the witness was informed the suspect might not be in the lineup, preserving the option for a no-identification result. 50 Additionally, the prosecutor would introduce evidence that the people selected as fillers were sufficiently similar in appearance to the witness’s description of the suspect. 51 Defense counsel would then have the opportunity to present evidence challenging the reliability of the particular lineup procedures used. In the context of a blood or DNA test, defense counsel might, for example, present evidence that the sample was contaminated. In the context of eyewitness identification evidence, defense counsel might challenge the lineup on the basis that it was not double blind, that is, that the officer administering the

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49. See, e.g., Erica Goode & John Schwartz, *Police Lineups Start to Face Facts: Eyes Can Lie*, N.Y. TIMES, Aug. 29, 2011 at A1 (discussing Dallas police department where “[w]itnesses are sent to a special unit of the Police Department devoted entirely to lineups, where they are read instructions and shown photographs by trained lineup officers who have no relationship to the cases.”).

50. Wells, supra note 7, at 560.

51. Luus & Wells, supra note 8, at 55–56.
A lineup knew who their suspect was, and may have “contaminated” the witness through non-verbal cues. Alternatively, defense counsel could seek to exclude evidence if the police used fillers who looked significantly different than the suspect, or used no fillers at all (called a “show-up” where police show a witness one picture or one person and ask “is this the guy?”). Only after the judge had determined that the lineup procedures were scientifically valid under the Daubert standard would the actual witness be allowed to testify.

The crucial concept for appropriately implementing this proposal is to recognize that the lay-witness who testifies at trial is actually testifying about the result of a scientific test, while the Daubert screening would be aimed at the reliability of the lineup procedures used. The witness, who is essentially the subject of the scientific experiment (the lineup), should not be used to prove the scientific validity of the lineup procedure. Therefore, using the police officer is appropriate, since the police officer is more analogous to the experimenter or lab technician. If the procedures used by the police officer were sufficiently valid under the Daubert criteria, the testimony of the actual eyewitness could be presumed to be reliable, since it was obtained using scientifically valid procedures. Juries could then evaluate the witness using normal indicators of credibility. This approach would routinely subject eyewitness identifications to an admissibility test based on the reliability of the lineup procedures used and shift the burden onto prosecutors to prove that the procedures used by the police are supported by scientific findings.

Adopting Daubert hearings for eyewitness identification would bring the admissibility of eyewitness identification in line with the admissibility of other forensic sciences by shifting the burden onto the prosecution to prove the reliability of the procedures used before introducing the evidence to the jury. It would also allow the standards for determining admissibility to evolve naturally with the scientific knowledge, rather than ossifying the criteria in court cases or statutes.

While it would require some changes to the way that eyewitness evidence is introduced at trial, this proposal has an important advantage over similar proposals. My proposal does not require any change to the rules of evidence or the Daubert test itself. Professor Sandra Guerra Thompson suggests a substantial overhaul to the rules of evidence to increase the reliability of eyewitness evidence, what
she calls adopting a “reliability paradigm” for the rules of evidence as a whole.\textsuperscript{52} Thompson’s argument is that trial courts should serve a “reliability gatekeeping” role for \textit{all} evidence, not just scientific and expert evidence.\textsuperscript{53} What Thompson calls a “holistic approach” would eliminate the distinction between expert and lay evidence that is embedded in the Federal Rules of Evidence and \textit{Daubert}. My proposal, on the other hand, is more limited. I would maintain the important distinction between the treatment of lay evidence and scientific evidence and simply introduce the possibility of re-evaluating how eyewitness identifications are categorized during that threshold determination. If litigants and judges recognize the scientific nature of lineups and eyewitness evidence, that would enable judges to serve as reliability gatekeepers for eyewitness identifications without fundamental changes to the Rules of Evidence.

\textbf{V. EYEWITNESS EVIDENCE SHOULD BE RE-CATEGORIZED AS SCIENTIFIC EVIDENCE}

The dramatic resurgence of attention from legal scholars, advocates, and psychologists on the science of eyewitness identification in recent years is putting increasing pressure on the legal system to go back and re-evaluate how the problems of eyewitness identification are addressed. In order for \textit{Daubert} screenings to be routinely applied to eyewitness identification evidence, judges and litigants must first recognize eyewitness identification evidence as a type of scientific evidence. Currently, courts are automatically characterizing eyewitness evidence as non-expert evidence without any deliberation or explanation. This is in part because the non-scientific classification of eyewitness identification seems intuitive to most people. It somehow seems easy and natural to think of polygraphs as a type of science and to classify eyewitness identifications as non-science. But this intuition is just that: an intuition. And it is an intuition that should not be trusted, since a closer examination reveals that eyewitness evidence fits clearly into the category of evidence that \textit{Daubert} intended to govern. First, classifying eyewitness identification evidence as lay-evidence is at odds with the extensive amount of scientific research that has been done on the psychology of identification and specifically on the best

\begin{itemize}
\item \textsuperscript{52} Sandra Guerra Thompson, \textit{Daubert Gatekeeping for Eyewitness Identities}, 65 SMU L. REV. 593, 596 (2012).
\item \textsuperscript{53} \textit{Id.}
\end{itemize}
methods of conducting lineups, which provide a clear set of standards for trial judges to apply in their "gatekeeping" role. Second, it ignores the strong influence that eyewitness identifications have on juries, an undue influence which Daubert screening was intended to eliminate.

A. Extensive Research has Transformed Lineups into a Scientific Procedure

In the 1970s psychologists began to carefully study eyewitness identification, and the nature of eyewitness identification has changed dramatically since then. The attention from psychologists has resulted in hundreds of studies aimed at understanding the effects of various eyewitness identification procedures on the accuracy of identifications. Research on the structural and statistical properties of lineups and photospreads has greatly enhanced our ability to specify sets of procedures that minimize false identification rates and maximize accurate identification rates. Gary Wells introduced a distinction between system variables and estimator variables that enable psychologists to focus on two different sets of factors that can lead to misidentifications. System variables are those factors that are within the control of investigators, such as the number of fillers, the structure of the procedure (sequential vs. simultaneous), and whether the lineup is double blind. Estimator variables are those factors that are beyond the control of the police, such as the conditions under which the witness viewed the culprit and the characteristics of the culprit (e.g., the witness's age, the distance at which the witness viewed the culprit, etc.).

In the 1970s psychologists began to carefully study eyewitness identification in the courtroom, and they have made important advancements in the field. The science of eyewitness identification has become a more systematic and standardized field, and the methods of conducting lineups have been refined to provide a clear set of standards for judges to apply in their "gatekeeping" role.

[15:1]
Specific attention to system variables has produced a body of research that focuses explicitly on how to reform identification procedures employed by police to increase the accuracy of eyewitness identifications.

The intense attention on the science of eyewitness identification—and specifically on how to improve the procedures used by police—is placing ever-increasing pressure on the legal system to go back and re-evaluate the way we treat eyewitness identification. The legal precedents, originally established in the 1960s, are no longer adequately responding to the problems created by unreliable eyewitness identification because the opinions were crafted during a period when eyewitness identification procedures did not have the scientific grounding that they do today. Psychologists and police departments, however, have been explicit about the scientific nature of the lineup procedure and it is time for the legal system to take notice.

Psychologists, in the new wave of research starting in the 1970s, developed an analogy between a lineup and a scientific experiment. Wells and Luus introduced the concept in 1990 with their paper “Police lineups as experiments: Social methodology as a framework for properly conducted lineups.” Essentially, the police investigator is the experimenter and the witnesses are the subjects. The police have a hypothesis about who the perpetrator is and the identification procedure is designed to test that hypothesis. The concept has been an important building block for other researchers and has helped

59. Id.

60. See Kahn-Fogel, supra note 28, at 177 (“Since [Manson] scholars and scientists studying eyewitness identification have uniformly criticized the Manson test as doctrinally flawed and inconsistent with what psychological research has taught us about the nature of human memory. Legal academics and practitioners have denounced Manson as insufficient to deter police from using unreliable procedures to elicit eyewitness identifications and have suggested reforms ranging from automatic exclusion of evidence from tainted procedures to curative jury instructions. Psychologists have drawn on decades of experimental data to reveal the most and least reliable methods for conducting eyewitness identification procedures and to show that the reliability factors Manson adopted to evaluate evidence from suggestive procedures are actually poor indicators of the quality of eyewitness evidence.”).


62. Id. Wells and Luus describe the analogy in more detail including analogies between “instructions to the eyewitness can be likened to an experimenter’s protocol, the suspect is a stimulus and the selection of lineup members and the positioning of the suspect in the lineup are part of the design.” Id.
identify areas where systemic bias might be introduced in the lineup procedure. For example, if an officer only asks questions that confirm that the suspect resembles the perpetrator, but does not ask questions that disconfirm the hypothesis (confirmation bias), or if officers use less stringent criteria for a positive identification than for no identification (response bias), or if the officers simply use a small sample size. With this framework in mind, it becomes clear that “actual police lineups typically lack the kinds of controls that are essential to making clear inferences from data.”

But that is now changing. Increasingly, police departments are recognizing the scientific nature of identification procedures and are issuing guidelines that incorporate procedures designed to make identifications more scientifically sound. Many police departments now acknowledge that the application of scientific principles to identification procedures can improve the quality of their investigations. For example, the Wisconsin Model Policy and Procedure for Eyewitness Identification states that the “policy is designed to ensure that the highest quality evidence possible is obtained from eyewitnesses.” New Jersey’s identification guidelines “incorporate more than 20 years of scientific research on memory and interview techniques,” and ensure that the procedures

63. Greathouse & Kovera, supra note 6, at 71 (listing factors that may introduce systemic bias into lineup procedures).
64. Wells, supra note 7, at 558.
will “elicit accurate and reliable eyewitness evidence.”\textsuperscript{67} The aim of these policies, for the police, is to apply scientific principles to improve the efficacy of police investigations and identify more guilty suspects.\textsuperscript{68}

The new scientific research is leading police departments to treat eyewitness evidence as another form of forensic evidence that must be properly identified and preserved from the crime scene. The Wisconsin model policy makes the analogy between forensic science and eyewitness identification explicit:

Recent studies of eyewitnesses and human memory have suggested that eyewitness evidence is much like trace evidence left at a crime scene. Like trace evidence, eyewitness memory is an imprint left in the mind of the witness. But also like trace evidence, it is susceptible to contamination if not handled properly. The result can be failure to identify the true perpetrator or erroneous identification of an innocent person.\textsuperscript{69}

Boston’s Task Force on Eyewitness Evidence relied on a similar analogy to justify the adoption of “a more scientific approach to collecting and analyzing eyewitness evidence:”

Physical trace evidence, such as fingerprints, fibers or blood, can help determine the facts of a crime and the identity of the perpetrator. The observations of an eyewitness are items of trace evidence contained in the witness’ memory. Like physical evidence, memory trace evidence can be contaminated, lost, destroyed or otherwise made to produce inaccurate results. Like physical trace evidence, the manner in which memory trace evidence is collected can have important consequences for the

\textsuperscript{67} New Jersey Guidelines, supra note 65, at 1.

\textsuperscript{68} See North Carolina Actual Innocence Commission, Recommendations for Eyewitness Identification (Oct. 2003), available at http://www.innocenceproject.org/docs/NC_eyewitness.pdf (stating objective of commission was to “identify practices that will produce more reliable and accurate eyewitness evidence while improving or eliminating practices that can undermine eyewitness reliability and accuracy”). See also North Hampton [Mass.] Police Department, Eyewitness Identification Procedure in Administration and Operations Manual O-408, available at http://www.innocenceproject.org/docs/Northampton_eyewitness.pdf; Santa Clara County Line Up Protocol, available at http://www.innocenceproject.org/docs/Santa_Clara_eyewitness.pdf (“[T]hese new procedures will make our eyewitness identifications more reliable. If they are more reliable, we’re going to apprehend more guilty criminals.”).

\textsuperscript{69} Model Policy and Procedure, supra note 66, at 2.
While reforms of police practices are by no means universal, the availability of standardized procedures grounded in scientific research justifies rethinking the legal system’s approach to evaluating eyewitness identifications offered at trial. Eyewitness identification procedures are fundamentally rooted in the psychology of memory. The use of a lineup (or a “showup”71) is therefore an application of those scientific principles to test the hypothesis that the suspect is actually the perpetrator. It follows that the eyewitness testimony at trial is the result of that test, just as a DNA match would be the result of DNA sequencing test. An even closer analogy is the introduction of an identification produced by facial recognition technology. If a prosecutor were to introduce evidence that a technology had matched a picture of the culprit taken at the crime scene with a picture of the defendant, courts certainly would require the facial matching technology to pass scrutiny under Daubert.72 Eyewitness identification procedures, which accomplish the same task, should be no less subject to scrutiny for scientific validity. And as with all scientific tests, there are better and worse procedures that can produce more accurate or less accurate results. Some police stations are routinely using procedures that are backed up by peer-reviewed scientific studies, have lower error rates, and are generally accepted among psychologists as the most reliable methods, while others are not. These are precisely the factors that a trial judge could use to evaluate the quality of eyewitness identification evidence when conducting Daubert screenings. Therefore, the prosecution should be required to justify the use of the particular scientific procedures used under the Daubert standard in order to avoid the admission of “junk” lineups.

71. A showup is the name for an identification procedure in which prosecutors show a witness only one suspect and ask the person to determine whether that person is the culprit. Id. at 13.
B. Eyewitness Identifications Mislead Jurors

Another reason to think of eyewitness identification evidence as scientific is that it has the same effect on jurors as scientific and expert evidence. The Court in Daubert sought to establish judges as “gatekeepers,” discerning valid science from junk science. 73 Daubert essentially defined what “scientific” evidence is for the purposes of the legal proceeding. Whether evidence is “scientific” in nature turns on the effect it has on the jury. The Court cited two characteristics of evidence that require trial judges to exercise extra caution before letting a jury hear it. These two characteristics are that scientific evidence “can be both powerful and quite misleading because of the difficulty in evaluating it.” 74 These characteristics are the hallmarks of scientific evidence that necessitate judicial gatekeeping. But, it has been widely acknowledged that eyewitness identifications, when introduced at trial, actually display both characteristics. 75 Therefore, eyewitness evidence falls within the category of “scientific” evidence that Daubert established.

First, eyewitness evidence is “powerful.” That is, juries overvalue this evidence. Empirical studies have consistently revealed that jurors overestimate the accuracy of eyewitness identifications and frequently believe in myths that are unsupported by scientific literature. 76 Therefore, jurors routinely place too much weight on

73. Daubert, 509 U.S. at 597. See also Fisher, supra note 44, at 738 (“In the legal lore, Daubert stands today as the Court’s counterstrike against the invasion of ‘junk science’ into the nation’s courtrooms.” (quoting 1 David L. Faigman et al. Modern Scientific Evidence §§ 1.3–4.1)).
74. Daubert, 509 U.S. at 594–95.
75. See, e.g., Edwin Borchard, Convicting the Innocent: Errors of Criminal Justice xii (1932) (“Juries seem disposed more readily to credit the veracity and reliability of the victims of an outrage than any amount of contrary evidence by or on behalf of the accused, whether by way of alibi, character witnesses, or other testimony.”); Patrick M. Wall, Eyewitness Identification in Criminal Cases 19 (2d ed. 1971) (“[I]n general, juries are unduly receptive to identification evidence and are not sufficiently aware of its dangers.”); Hon. D. Duff Mckee, Challenge to Eyewitness Identification Through Expert Testimony, 35 Am. Jur. Proof of Facts 3d §1 (2012) (“[T]here are significant indications that the average juror tends to believe such identifications, even in the face of other evidence which appears more credible. Eyewitness testimony may be the least reliable, and yet the most compelling.”).
76. See Jennifer L. Devenport, Steven D. Penrod, & Brian L. Cutler, Eyewitness Identification Evidence: Evaluating Commonsense Evaluations, 3 Psychol. Pub. Pol’y & L. 338, 347–48 (1997) (“[R]esearch . . . has found that laypersons often predict higher identification accuracy rates than are generally found among participants of eyewitness research. The laypersons in those studies appeared to be insensitive to the influence of crime seriousness, instruction bias, and the impact of cross-racial identifications on eyewitness identification accuracy. Furthermore, postdiction studies reveal that laypersons appear to
eyewitness identifications. 77

Second, the more controversial proposition is that jurors have “difficulty in evaluating” eyewitness identification. Some courts have been quick to assert that eyewitness identification is akin to the experience of recognition in a layperson’s day-to-day life and therefore within the jury’s capacity to evaluate. 78 But this is an unfounded assertion. While it is true that recognition is a part of daily life, identifying a suspect from a lineup is not. There are many differences between recognition in daily life and recognition in a lineup that render the life experience of the jurors of little value when weighing identification testimony. 79 First, most individuals have

77. See Peter Miene et al., Juror Decision Making and the Evaluation of Hearsay Evidence, 76 MINN. L. REV. 683, 688 (1992) (noting that “eyewitness studies support the argument that people intuitively accord considerable information value to eyewitness information even when various factors should undermine the accuracy of the eyewitness identifications”); Wayne T. Westling, The Case for Expert Witness Assistance to the Jury in Eyewitness Identification Cases, 71 OR. L. REV. 93, 95 (1992) (“The problem of unreliability is compounded because jurors tend to give unjustified weight to in-court eyewitness identification. Several authors have chronicled cases which show that juries have ignored overwhelming proof of a defendant’s innocence and returned guilty verdicts on the basis of questionable eyewitness identification.”). See also Watkins v. Sowders, 449 U.S. 341, 352 (1981) (Brennan, J., dissenting) (“[D]espite its inherent unreliability, much eyewitness identification evidence has a powerful impact on juries. Juries seem most receptive to, and not inclined to discredit, testimony of a witness who states that he saw the defendant commit the crime.”).

78. See, e.g., Perry v. New Hampshire, 132 S. Ct. 716, 728 (2012) (“The fallibility of eyewitness evidence does not, without the taint of improper state conduct, warrant a due process rule requiring a trial court to screen such evidence for reliability before allowing the jury to assess its creditworthiness. Our unwillingness to enlarge the domain of due process . . . rests, in large part, on our recognition that the jury, not the judge, traditionally determines the reliability of evidence.”); United States v. Langan, 263 F.3d 613, 624 (6th Cir. 2001) (“[T]he hazards of eyewitness identification are within the ordinary knowledge of most lay jurors.”); United States v. Lumpkin, 192 F.3d 280, 289 (2d Cir. 1999) (“[P]roposed testimony intrudes too much on the traditional province of the jury to assess witness credibility.”); United States v. Daniels, 64 F.3d 311, 315 (7th Cir. 1995) (quoting United States v. Larkin, 978 F.2d 964, 971 (7th Cir. 1992)) (“[B]ecause [expert testimony] addresses an issue of which the jury already generally is aware . . . it will not contribute to their understanding of the particular factual issue posed.”).

79. Richard A. Wise, Kirsten A. Dauphinais, & Martin A. Safer, A Tripartite Solution to Eyewitness Error, 97 J. CRIM. L. & CRIMINOLOGY 807, 824–25 (2007) (“Using a variety of methods to test jurors’ knowledge of eyewitnesses, researchers have found that: (1) jurors have limited knowledge of the factors that influence eyewitness accuracy, such as the effects of the perpetrator wearing a hat or using a weapon on identification accuracy; (2) jurors rely on factors which are not good indicators of eyewitness accuracy, such as eyewitness confidence,
never attempted to identify an individual from a lineup. Second, “[i]t is stressful for victims and eyewitnesses to identify a perpetrator,” whereas day-to-day recognition is typically not so stressful. Third, lineups are divorced from their original setting and context, whereas daily recognitions are usually aided by context-clues that facilitate recognition. Finally, a crucial distinction, acknowledged as early as 1930, is that recognition in a lineup situation is “intentionally evoked” and therefore differs fundamentally from recognition in daily life. That is, a lineup takes place in a structured setting where a witness is forced to match an image to memory, whereas day-to-day recognition is almost always spontaneous.

All of these differences mean that a juror’s reliance on their intuitions “may lead them astray” because many factors that a juror might conventionally rely on to evaluate the quality of an identification, such as the confidence of the witness, have been empirically shown to be poor indicators of accuracy. Juries react in the same way to eyewitness identifications admitted at trial as to the junk science that courts try to keep from them. The Daubert test was the Court’s solution to bad science that jurors would otherwise overvalue, so it seems only natural to apply it as the solution to the problem of bad lineups as well.

This approach seems especially compelling in light of the Court’s decision in Kumho Tire Co., Ltd v. Carmichael. Kumho
Tire sought to close a loophole left open after Daubert. The Daubert decision only explicitly referenced scientific knowledge, so, in the immediate aftermath, there was uncertainty as to whether judges’ new role as gatekeepers would extend to all expert knowledge or simply to the “sciences.” In this time of confusion, many fields that had trouble satisfying the new Daubert standard simply refashioned themselves as “non-sciences.” Fields like handwriting analysis and arson investigation “discovered that the easiest way to remain expert witnesses in a post-Daubert world was to admit—indeed, to insist—that they are not the science they long pretended to be.”

Kumho Tire extended the Daubert test to all expert evidence in an attempt to prevent this kind of evasion. The reasons the Court gave for imposing the heightened standard for admissibility to all expert evidence depended on the shared characteristics of science and other expert evidence. Importantly for the Court, “the expert’s testimony often will rest upon an experience confessedly foreign in kind to the jury’s own.” Therefore, the “trial judge’s effort to assure that the specialized testimony is reliable and relevant” is necessary to “help the jury evaluate that foreign experience, whether the testimony reflects scientific, technical, or other specialized knowledge.”

Eyewitness identification is essentially still operating within the pre-Kumho Tire loophole. It is not considered a science, so courts do not appropriately screen eyewitness identifications based on the available scientific evidence pertaining to reliability. This simply

86. See id. at 141.
88. See Saks, supra note 87, at 237 (“[T]he weakest fields, with the most tenuous commitment to real science, offered to recategorize themselves as nonsciences.”).
89. Id.
90. Kumho Tire, 526 U.S. at 141.
91. Id. at 149 (internal quotation omitted).
92. Id.
93. Id.
94. Id. (internal citations omitted).
reccreates the problem that *Kumho Tire* attempted to solve: admitting the least scientifically sound evidence by allowing the entire field to be characterized as non-scientific. As Michael Saks stated, “[t]o hold that those who cannot pass the test are exempted from taking it, precisely because they are unable to pass, insures that the best expert evidence will be subjected to the most demanding test and the poorest expert evidence to virtually no test at all.”95 Given that eyewitness identifications display the same potentially dangerous characteristics as expert evidence, it is exactly the kind of evidence that *Daubert* screening was intended to catch and review before the evidence is presented to the jury.

VI. HOW EYEWITNESS EVIDENCE FIRST BECAME “COMMON KNOWLEDGE”: THE HISTORY OF EYEWITNESS IDENTIFICATION

Recognizing eyewitness identification evidence as a form of scientific evidence may seem like a radical change, in part because there is a strong and widespread intuition that eyewitness evidence is lay knowledge. But it turns out, the conception of eyewitness identification as non-scientific is actually a relatively new development, one that emerged in the mid-1930s. This concept came about as the boundaries of emerging forensic crime labs, and corresponding forensic sciences, were being debated. However, before the forensic lab became firmly established, eyewitness identification procedures had historically been the subject of scientific experimentation. As primary sources reveal, police reformers and evidence scholars also clearly understood the importance of grounding identification procedures in principles of psychology.96 But the power struggle that occurred between “old-school” police and the reformers interested in applying science to criminal investigations resulted in a compromise that left eyewitness identification within the purview of the police and out of the newly minted, scientific crime lab.97 Therefore, the fact that eyewitness identification procedures today are not considered a scientific tool has more to do with the political and social context in which forensic laboratories emerged than with any intrinsic feature of eyewitness identification itself. That is, the intuition that leads courts to treat eyewitness identification evidence as lay-evidence is simply a historical accident.

95. Saks, supra note 87.
96. See discussion infra Part V.A–B.
97. See discussion infra Part V.B.
This article re-examines the historical context in which eyewitness identification procedures were separated from the field of “police science” to illuminate an alternative way of thinking about identification procedures and allow us to question the continuing utility of distinguishing between eyewitness identification and other forensic sciences in admissibility questions today. Recognizing that the history could have gone another way and that eyewitness identification science could have emerged as a full-fledged science in the 1930s shows us that there was nothing inevitable or necessary about treating eyewitness identification evidence as lay-evidence. Finally, the historical analysis reveals the fluidity of the “scientific” or “lay knowledge” characterization, in particular how one type of evidence, eyewitness identifications, can transition from scientific to lay knowledge and back to scientific knowledge over time.

A. Early Conceptions of Eyewitness Identification Procedures

Experiments on the ability of an eyewitness to identify an individual seem to have begun in France around 1809 when “Desgranges of Lyons . . . made experiments under varying conditions, from which he concluded that on a very dark night a person who had fired a gun might be identified provided the distance was not very great, the flash not very bright, and the smoke not too dense.”98 Similar experiments were conducted throughout the 1800s, in order to determine whether or not an individual could identify a person based on the flash of light from a gun.99 These experiments were frequently conducted specifically to determine the validity of identifications introduced at trial, and at least once the experiment so dramatically discounted the evidence that the defendant was acquitted.100

These French experiments were cited in British textbooks written for police investigators to assist the police in evaluating the strength

98. C. A. Mitchell, The Expert Witness and the Applications of Science and of Art to Human Identification, Criminal Investigation, Civil Actions & History 22 (1923).

99. However, the results were not conclusive. An experiment conducted in 1840 reached the conclusion that “all stories of recognition from the flash of a gun or pistol must be founded upon a fallacy.” Id. But then in 1844 “Dr. Taylor, in his Medical Jurisprudence summarizing the evidence on this question, concluded that ‘there can be no doubt that an assailant may by this be occasionally identified.’” Id.

100. George E Harris, A Treatise on the Law of Identification: A Separate Branch of the Law of Evidence 27–28 (1892) (stating that an experiment conducted as part of a trial in 1833 proved that identification would be impossible, so “the condemned was acquitted”). See also Mitchell, supra note 98, at 22–23.
and quality of eyewitness evidence that they encountered. For example, C.A. Mitchell included the French experiments regarding eyewitness identification among a discussion of other “indirect evidence of identification” like footprints, clothing, laundry marks, and photographs in his instructive text entitled *The Expert Witness and the Applications of Science and of Art to Human Identification, Criminal Investigation, Civil Actions & History*.\(^{101}\) Norman Kendal’s textbook, *Criminal Investigation, A Practical Textbook for Magistrates, Police Officers and Lawyers* cautioned investigators that eyewitness identification is considered important “only when the witness has frequently seen the person he is supposed to recognize.”\(^{102}\) And further, when he “has seen him only once . . . [h]is recognition will inspire more confidence when the witness is able to pick out the person from a number of similar photographs . . . ”\(^{103}\) To underscore the different quality of an identification of someone familiar as opposed to a stranger, Kendal cites the results from earlier experimentation:

Dr. Vincent in Legrand & Saule’s “Legal Medicine” lays down that, presuming the eyesight to be normal and the light good, one is able in broad daylight to recognise: - (a) Persons whom one knows very well, at a distance of from 50 to 90 yards; when there are particular and very characteristic signs, 110 yards; in exceptional cases up to 165 yards. (b) Persons one does not know very well and has not often seen, from 28 to 33 yards. (c) People one has only seen once, 16 yards.\(^{104}\)

Like Mitchell’s textbook, Kendal’s discussion of eyewitness identification was located in the chapter on “The Expert” and grouped with sections describing what we would today recognize as typical forensic sciences: the use of fingerprinting, handwriting analysis, the study of firearms, dust, and blood.\(^{105}\) These texts clearly recognize eyewitness identification as one of the many areas of criminal investigation that rely on scientific techniques and expert knowledge.

The European model of using scientific methods in criminal
investigations was fundamental in the development of American crime laboratories and in the expansion of science into police practices generally.\textsuperscript{106} Beginning in the late 1920s and continuing into the 1930s science and technology played an ever-increasing role in American law enforcement.\textsuperscript{107} In Chicago, police reformers such as Calvin Goddard worked to establish the Scientific Crime Detection Laboratory, which would later serve as a model for laboratories across the country.\textsuperscript{108} The Scientific Crime Detection Laboratory was “the first time that a really comprehensive attempt to combat crime in all its phases by scientific laboratory methods had been undertaken in the United States . . . .”\textsuperscript{109} Therefore, as Goddard describes, “we had no precedent to go upon—at least on this side of the water. There existed, in Europe . . . , however, a number of institutions engaged in work of the character we contemplated . . . .”\textsuperscript{110} So, the European labs were used as a model for the new American one.\textsuperscript{111} Accordingly, the first training curriculum developed by the Scientific Crime Detection Laboratory designed for law enforcement officers included a section on the “Fallibility of Eye Witnesses (lecture and demonstration),”\textsuperscript{112} presumably providing information regarding what was then known about the ability (or lack thereof) of eyewitnesses to accurately identify an individual.

Finally, many important publications of the time indicated an understanding that identification procedures were in fact themselves an experiment and should therefore be governed by scientific

\begin{itemize}
  \item \textsuperscript{107} Id. at 116–17; Robert C. Wadman & William Thomas Allison, To Protect and Serve: A History of Police in America 119–20 (2004).
  \item \textsuperscript{108} See William J. Tilstone, Kathleen A. Savage, & Leigh A. Clark, Forensic Science: An Encyclopedia of History, Methods, and Techniques 18 (2006) (explaining that Goddard advised the FBI when it set up a laboratory three years later).
  \item \textsuperscript{109} Calvin Goddard, Scientific Crime Detection Laboratories in Europe, 1 Am. J. Police Sci. 13, 13 (1930). See also Bruce Smith, Police Systems in the United States 300 (1940) (citing the Scientific Crime Detection Laboratory as the “first well-equipped police science laboratory to be set up on this continent”).
  \item \textsuperscript{110} Goddard, supra note 109, at 13.
  \item \textsuperscript{111} Id. at 37 (“Let us now, based on our observations of these institutions, speculate upon the make-up of an ideal Scientific Police Laboratory for a large American city. Let us consider the type of investigations it should undertake, and what it should let alone, how large its staff should be, and how constituted, and what equipment it would require in the conduct of its work.”).
  \item \textsuperscript{112} Calvin Goddard, Outline of Teaching Program for a Course in Methods of Scientific Crime Detection, 2 Am. J. Police Sci. 67, 68 (1931).
\end{itemize}
principles. The American Journal of Police Science, a journal published by the Northwestern University Press on behalf of the Scientific Crime Detection Laboratory in Chicago, was touted as offering “for the first time in the United States, an organ for the spread of information as to methods and apparatus that can be used to analyze the traces of a crime.”113 Recognizing that “[i]n Europe, these methods of police science are already far advanced” the Journal aimed to “help the speedy growth of police science,” in part by “mak[ing] available in the United States the discoveries already tested and proved in other countries.”114 One of these methods of police science “already tested and proved” in another country was the police practice of showing prisoners to witnesses for identification.115 The author F. Gorphe, a judge at the Court of Lille in France, explicitly acknowledged the scientific nature of identification procedures, first noting, “recognition is here distinguished from other phenomena of memory-recollection [because] . . . [s]howing a prisoner to a witness involves a recognition intentionally evoked.”116 Therefore, “[s]howing of prisoners to witnesses bears to the spontaneous answer the same relationship an experiment bears to observation.”117 Because of the scientific nature of the procedure, the identification “demand[s] all possible guaranties of correctness.”118 Gorphe also discussed the use of lineups rather than show-ups, citing “experiments . . . which indicate that . . . collective presentation, or, rather, selective presentation, has apparently yielded better results than the individual identification.”119 Gorphe operates from the assumption that the identification procedure itself is considered a scientific tool that should be grounded in the empirical findings of psychological experiments and sought to set out the best procedures as determined by then-existing scientific knowledge. The editors of the new journal, by including this article, clearly hoped that eyewitness identification would be one more area where the application of scientific techniques would improve criminal investigations.

Other legal scholars also called for the application of scientific

114. Id. at 1–2.
115. See, e.g., Gorphe, supra note 81.
116. Id.
117. Id.
118. Id. at 80.
119. Id. at 83.
methods to improve the procedures of eyewitness identification. In the introduction to his collection of cases on wrongful convictions, Professor Borchard warns “[w]hen it is realized how unreliable the haphazard methods of identification have frequently proved to be, it will be apparent that more scientific methods of identification must be devised.” 120 Professor Wigmore’s writings on eyewitness identification also reveal an expectation that eyewitness identification would be swept up into the emerging field of police science. In his treatise on scientific proof, in addition to citing to Gorphe’s article as a “valuable article on method” 121 for identification procedures, Wigmore calls for “a thorough study, by scientists, of all phases of the process, under the conditions usual in judicial inquiries, with a view to differentiating the several types, to estimating the relative probability of latent errors, and to locating and eliminating their sources.” 122 Elsewhere, Wigmore expressed greater distress that the science of identification had not developed more rapidly, lamenting, “[n]o part of the field of proof has been so defective in its use of the common sense of psychology . . . . What is wanted is the application of scientific method, based as nearly as possible on the psychology of recognition.” 123 Although this complaint reveals that the science of eyewitness procedures was not particularly well developed, Wigmore and Borchard’s calls to action make clear that eyewitness identification procedures were considered equally as prone to scientific study and inquiry as every other part of the emerging field of “police science.” The goal during this era was to use scientific methods to improve the accuracy and efficiency of police investigations, and eyewitness identification was one more area where such an improvement in outcomes could be achieved.

B. Power Struggle Over the Scope of the Scientific Crime Lab

Despite Wigmore’s six years’ of pleas for greater scientific study of eyewitness identification procedures, 124 the early excitement

120. BORCHARD, supra note 5, at xii–xiv.
122. Id. at 560.
123. John H. Wigmore, Evidence — Corroboration by Witness’ Identification of an Accused on Arrest, 25 ILL. L. REV. 550–51 (1930). Wigmore’s specific suggestion was to employ the use of “‘movietone’ or ‘talking film’ (more correctly, ‘cinema-phonograph’ or vocal motion-picture) in the identification of arrested persons.” Id.
124. JOHN H. WIGMORE, THE SCIENCE OF JUDICIAL PROOF 560 (3d ed. 1937) (repeating the call for “a thorough study, by scientists, of all phases of the process, under the conditions
around the application of more scientific methods to police identification procedures did not translate into any significant practical change in police practices.\textsuperscript{125} Meanwhile, the development of other areas of police science had flourished. In this third edition of \textit{The Science of Judicial Proof}, Professor Wigmore added a host of new sections specifically addressing the newly developed practical applications of “police science.”\textsuperscript{126} In the new section on “Police Science” generally, he noted, “[m]odern [s]cience has enormously enlarged the possibilities of the concomitant kinds of evidence. This knowledge is being extensively and increasingly used in police-detection and in judicial proceedings.”\textsuperscript{127} However, eyewitness identification science did not keep pace with these other areas of rapid scientific progress. Although Wigmore again urged that “[i]n the application of science to police methods a place should soon be found” for more scientific approaches,\textsuperscript{128} the discussion of eyewitness identification had already disappeared from most of the discussions of police science as police science came to be exclusively defined as the science conducted within crimes labs. The disappearance of eyewitness identification from the field of “police science” was not the result of a realization about the fundamental nature of eyewitness identifications as somehow “non-scientific.” As the scientific reformers became increasingly zealous about the scope of problems that could be solved through an application of scientific methods, police officers without scientific training felt that their jobs were being threatened and resisted the intrusion of scientific methods into their practices;\textsuperscript{129} and probably with good reason. The American Bar Association established a “Medico-Legal Committee” to work with a similar committee from the American Medical Association on

usual in judicial inquiries, with a view to differentiating the several types, to estimating the relative probability of latent errors, and to locating and eliminating their sources”).

\textsuperscript{125} \textit{Id.} at 538 (“Owing to the haste and routine of police and trial proceedings, adequate precautions are (presumably) seldom taken in official practice in the United States.”).

\textsuperscript{126} \textit{Id.} at vii (indicating new sections on “Police Science” generally and a variety of specific areas of new scientific development including “Blood Group Composition,” “Microscope,” “Spectroscope,” “X-ray Apparatus,” and “Chemical Reagents”).

\textsuperscript{127} \textit{Id.} at 85.

\textsuperscript{128} \textit{Id.} at 540.

\textsuperscript{129} See, e.g., Al Dunlap, \textit{Science Versus Practical Common Sense In Crime Detection}, 2 AM. J. POLICE SCI. 322, 325 (1931) (Stating that although science can be valuable “[t]his does not mean however, that we should go still further, as the public has been led to believe, and substitute scientific detectives with college diplomas for experienced men who show a natural aptitude for the work of criminal investigation, men of initiative, courage and good judgment who know their business and can be depended upon to get results.”).
“questions in which law and medicine overlap.”

The Committee’s report called for increased training of police officers because “[a]s a rule he knows little about criminality and the science of criminal identification and often he is not qualified to appraise the value of evidence which comes into his hands.”\textsuperscript{130} Calvin Goddard, in his praise of the European scientific crime labs stated, “[t]he European Police are commanded by men chosen for high education and marked ability every one of whom is alive to the importance of employing all possible scientific aids in crime detection . . . . Practically without exception, they hold degrees as doctors of law, science, philosophy or medicine.”\textsuperscript{131} He also disparaged the American police for being “quite satisfied with the ‘good old fashioned methods’ and turn[ing] up their noses at anything that savors of science.”\textsuperscript{132}

Throughout the early 1930s there was “a pretty well-defined controversy raging in this country between some of the exponents of science on the one side and a few of the old-time detective heads on the other.”\textsuperscript{133} August Vollmer, a prominent police reformer and former Police Chief of Berkeley, California, who advocated for the increased use of science in crime detection,\textsuperscript{134} stated that “[t]o have intimated to the old-time police detective that the scientist had tools which could be used by him might have proved disastrous to the well-intentioned individual who made the suggestion.”\textsuperscript{135} Frank Loveland, the Director of the Division for Research in Crime Prevention in the Massachusetts Department of Correction explained that applying scientific research methods to criminal justice was more difficult than applying science in either industrial or medical research because:


\textsuperscript{131} Goddard, supra note 109, at 15.

\textsuperscript{132} Id.

\textsuperscript{133} Dunlap, supra note 129, at 322.

\textsuperscript{134} See Samuel Walker, \textit{A Critical History of Police Reform} 142–43 (1977) (“Vollmer had steadily abandoned his own concern with the social work aspects of policing in the 1920s and early 1930s and increasingly emphasized technological developments such as the crime lab . . . .”).

\textsuperscript{135} August Vollmer, \textit{Police Progress in the Past Twenty-Five Years}, 24 \textit{J. AM. INST. CRIM. L. & CRIMINOLOGY} 161, 171 (1933). See also Vollmer, \textit{The Scientific Policeman}, 1 \textit{AM. J. POLICE SCI.} 8, 8–9 (1930) (“[T]here are still existing in modern police departments thousands of ‘old experienced policemen’ who insist that the scientist has nothing to offer which can assist them in solving their crime problems. Fortunately, a more open-minded type of man is gradually entering the police service in the United States”).
The whole system of criminal treatment has its roots planted deeply in ancient tradition and even though scientific analysis were to show a certain operation in our treatment of criminal offenders to be utterly ineffectual and though a technique indicating much more promising possibilities might be suggested, there would be a powerful element of public opinion which would decry the proposal as a vicious attack on a respected social institution.  

Despite the grand ambitions of the proponents of scientific investigation, the resistance from the “old-school” police and the public presented a limit beyond which they could not extend the scope of scientific reform. The compromise that appears to have emerged is for science to “simply confine its efforts to the solution of all problems that call for special scientific treatment, and never undertake to steal the show, so to speak, by underrating the importance of practical common-sense methods in the general investigation of nearly all crime cases.”  

That is, the scientific experts would remain distinct from the work of the police and, when needed, the police could call upon the “potent aid” of science. This approach of reserving the “special” problems for the scientists ultimately appealed to the proponents of science crime detection because it would prevent the laboratories from “being engulfed in a mass of minutiae” and would leave “to the Laboratory staff only those tasks requiring very special training and apparatus.” Vollmer, describing the development of new scientific laboratories affiliated with police departments also focused on the training and technology present in those labs:

The personnel of the laboratories are scientifically trained for their profession and are competent to handle any of the problems ordinarily referred to the chemist or micro-analyst, or the expert in ballistics . . . . Police laboratories are adequately equipped with ultra-violet lamps, microphoto and photographic equipment,

137. Dunlap, supra note 129, at 326.
138. Id at 327.
microscopes of unusual power and others designed for particular types of work.\footnote{140}

This approach, of sifting out problems that required scientific training and equipment to distinguish between the work of the labs and the work of the police, was also brought to the trainings presented by the crime labs. For example, the purpose of a training course on “The Laboratory” for police in the Kansas Municipalities was described as “not intended to create experts of the students but only to demonstrate the possibilities offered in this field; to enable them to know when they should call for expert assistance and what they may reasonably expect from such assistance.”\footnote{141}

There was still some debate over exactly which questions required such “special training and apparatus.” For example, a proposal more generous to the police suggested a limited “conception of ‘science’ to those various branches of scientific research that we hear so much about in connection with modern crime detection such as biology, pathology, toxicology, bacteriology, parasitology and the like,”\footnote{142} while reserving “ballistics, the classification of handwriting, special photography, work with the ultra-violet ray lamp” for law-enforcement agencies themselves as part of their “identification departments.”\footnote{143} Calvin Goddard’s proposal for the Scientific Crime Detection Laboratory included handwriting analysis and ballistics within the scope of the laboratory. However, Goddard was more cautious with fingerprinting, stating “this field should be entered no farther than might be necessary to ensure the discovery and preservation of latent prints. Such matters as classification, reproduction, etc. should be handled in every case by the local Police.”\footnote{144} Fingerprinting was therefore split between the police and the laboratories. The portions of the field that required the use of the physical laboratory to study would be within the purview of the scientists, but those portions that could be handled within the infrastructure of the police stations themselves, would remain with the police.

\footnote{140. Vollmer, \textit{supra} note 125, at 171 (discussing crime labs that had developed in Rochester, New York, New Orleans, Louisiana, and Palo Alto, California).}
\footnote{141. Police Science Notes, 25 AM. INST. CRIM. L. \& CRIMINOLOGY 338, 339 (1934).}
\footnote{142. Dunlap, \textit{supra} note 129, at 323.}
\footnote{143. \textit{Id.} at 326.}
\footnote{144. Goddard, \textit{supra} note 139, at 146.}
Unlike fingerprinting, eyewitness identification was not part of the contested turf in the battle to define the scope of the scientific crime lab. Eyewitness identification procedures were routinely conducted by police, in the police stations.\(^{145}\) Therefore, there was no need for special equipment or use of the new technologies provided in the laboratories. Furthermore, eyewitness identification procedures, although informed by and grounded in psychological principals, did not require a police officer to have special scientific or psychological training in order to perform a lineup. In the new framework, crafted in the compromise between proponents of science and the old-school police detectives, eyewitness identifications would not have constituted a problem that required “special scientific treatment.”\(^{146}\) Instead, eyewitness identification was excluded from the scope of scientific crime labs in order to prevent the advocates of scientific detection from encroaching too far into the work of the “old-school police.” This meant that the police would still be able to perform these procedures themselves and did not need to cede this portion of the investigation process to the scientists. The energy and attention of the scientific reformers turned to other areas of police science, such as fingerprinting, and eyewitness identification was left to the police.\(^{147}\)

\(^{145}\) Cf. Harry Soderman & John J. O’Connell, Modern Criminal Investigation 24–25 (1935) (describing “customary” practice of police to “have the witness brought into a room where several persons are found lined up with the suspect”).

\(^{146}\) See, e.g., Smith, supra note 109, at 301 (citing a 1939 list of services conducted by the FBI Technical Laboratory that does not include reference to eyewitness identification).

\(^{147}\) There is little systemic research and very few publications on actual police practices regarding identification procedures from the 1930s through the 1960s. The Supreme Court acknowledged this gap in information about lineups in United States v. Wade, cautioning that “as is the case with secret interrogations, there is serious difficulty in depicting what transpires at lineups and other forms of identification confrontations. Privacy results in secrecy and this in turn results in a gap in our knowledge as to what in fact goes on.” 388 U.S. 218, 229–30 (1967). But this is in itself a kind of evidence that eyewitness procedures remained in the purview of the police, for there are extensive writings on those areas of police science that did ultimately reside in the laboratory. See Fred E. Inbau, American Journal of Police Science Index, 27 AM. INST. CRIM. L. & CRIMINOLOGY 263 (1936) (compiling a “comprehensive index” of all the police science articles published in the American Journal of Police Science and the Journal of Criminal Law and Criminology to date. Of the articles listed, only three deal with eyewitness identification, compared with twenty-eight articles on fingerprinting, twenty on document analysis, fifty-two on firearms and ballistics, and fifteen on microanalysis). The evidence of identification practices used by police that does exist, consists primarily of compilations of individual cases of mistaken identity. See, e.g., Borchard, supra note 5 (compilation of sixty-five cases); Judge Jerome Frank & Barbara Frank, Not Guilty (1957) (compiling thirty-six cases of wrongful conviction). Rather than provide comprehensive or generalizable views of police practices in the United States, they provide glimpses into unique cases. While this lack of evidence may be shaky
But the police at this moment in history were defining the scope of their work as distinct from, and in contrast to, the “scientific” work done in the laboratories, and so the home that eyewitness identification found in the police station came with a new defining characteristic: “Non-Scientific.” However, this was not an inevitable result. Eyewitness identification might have developed into a full-blown scientific field much earlier, were it not for the need to separate scientists from the police detectives.

Despite its historically contingent origins, the characterization of eyewitness identification as “non-scientific” took hold and ultimately influenced the legal precedents established to deal with the question of unreliable eyewitness identifications. It is actually relatively easy to see how this characterization of eyewitness evidence translated into the current precedent governing the admissibility of eyewitness evidence. In the right to counsel cases, Wade and Gilbert, the Court made the non-scientific nature of eyewitness identification procedures explicit. In Wade, the Court stated that the right to counsel at a lineup is necessary precisely because the “the confrontation compelled by the State between the accused and the victim or witnesses to a crime to elicit identification evidence is peculiarly riddled with innumerable dangers and variable factors which might seriously, even crucially, derogate from a fair trial.” The lineup’s “variable factors” were contrasted with “systematized or scientific analyzing of the accused’s fingerprints, blood sample, clothing, hair, and the like.” The right to counsel would not attach to these “mere preparatory steps” because:

Knowledge of the techniques of science and technology is sufficiently available, and the variables in techniques few enough, that the accused has the opportunity for a meaningful confrontation... through the ordinary processes of cross-examination of the Government’s expert witnesses and the

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149. Wade, 388 U.S. at 228.
150. Id. at 227.
presentation of the evidence of his own experts.151

The fact that eyewitness evidence had not been standardized by the scientific reformers led the Court to explicitly characterize identification evidence as “Non-Scientific.”

In Gilbert, in addition to considering the in-court and lineup identifications, the Court addressed whether the right to counsel extended to the production of handwriting samples.152 The Court failed to extend the right to counsel to handwriting exemplars because, unlike the lineup procedure at issue in Wade, the handwriting exemplar could be sufficiently challenged at trial, through the introduction of the defendant’s own samples and expert.153 Justice Black took issue with the holding of the majority, stating in his dissent that “the handwriting exemplars were just as important as the lineup and perhaps more so, for handwriting analysis, being, as the Court notes, ‘scientific’ and ‘systematized,’ may carry much more weight with the jury than any kind of lineup identification.”154 Although he disagreed with the Court’s holding, Justice Black’s reasoning reinforced the distinction between eyewitness identification and other forms of “scientific” investigation, such as handwriting analysis.155

Wade and Gilbert make clear that the Court’s assessment as to whether a procedure was “systematized or scientific” or not was a determining factor for whether the right to counsel attached to a given pre-trial procedure. Eyewitness identification, which was not scientific, required presence of counsel to protect a defendant’s rights.156 Handwriting analysis, which the Court considered scientific, had the added safeguards of standardized procedures and therefore did not necessitate the presence of counsel.157

In Wade, the Court explicitly acknowledged the ability for eyewitness identifications to change its status and become more scientific in the future. Specifically, the Court explained, “the more

151. Id. at 227–28.
153. Id. at 266–67.
154. Id. at 278 (Black, J., dissenting) (internal citations omitted).
155. See id.
156. See Wade, 388 U.S. at 239–42.
157. Gilbert, 388 U.S. at 267 (explaining that the accused can “make an unlimited number of examples for analysis and comparison by government and defense handwriting experts.”).
systematic and scientific a process or proceeding, including one for purposes of identification, the less the impediment to reconstruction of the conditions bearing upon the reliability of that process or proceeding at trial.”

Furthermore, the Court admitted that such a change in the scientific nature of eyewitness identification procedures could even support a change in the legal doctrine: “[l]egislative or other regulations, such as those of local police departments, which eliminate the risks of abuse and unintentional suggestion at lineup proceedings and the impediments to meaningful confrontation at trial may also remove the basis for regarding the stage as ‘critical.’”

Although eyewitness identification was initially left out of the forensic crime lab and remained underdeveloped compared to other forensic sciences, that gap has now closed. In the 1930s, it was an open question whether eyewitness identification was a science. At that time, we answered no, and we’ve been holding on to that answer ever since. But if, instead of taking that answer for granted, we asked ourselves the question again today, as if for the first time, we would clearly say yes, lineups are in fact a science.

VII. CONCLUSION

Eyewitness identifications are widely used in criminal proceedings, yet are frequently unreliable. The current safeguards in the legal system are not keeping unreliable identifications out of court. This is in large part because the legal system has failed to appreciate that eyewitness identifications are essentially a kind of scientific tool used by police in their investigations, akin to the scientific procedures employed by forensic laboratories. The courts’ separate treatment of eyewitness identification procedures has established a set of legal standards that do not reflect existing scientific knowledge about how identification procedures can be improved to increase reliability. A closer look at the history of police science reveals that the non-scientific characterization of eyewitness identifications, upon which courts rely, is actually a product of social, cultural, and political forces rather than a description of an intrinsic quality of eyewitness identification. Given the dramatic development

158. Wade, 388 U.S. at 239 n.30.
159. Id. at 239. Although the Court later limited the right to counsel to post-indictment lineups in Kirby v. Illinois, 406 U.S. 682, 690 (1972), this limitation did not challenge either the non-scientific characterization of eyewitness identifications or the importance of that characterization in determining what constitutes a “critical” stage of the prosecution.
of the science of eyewitness identification it is time for courts to rethink this characterization and begin scrutinizing eyewitness identifications offered at trial as scientific evidence.