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How to Analyze the Accuracy of Eyewitness Testimony in a Criminal Case

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Article

How to Analyze the Accuracy of Eyewitness Testimony in a Criminal Case

RICHARD A. WISE, CLIFFORD S. FISHMAN & MARTIN A. SAFER

This Article describes a method for analyzing the accuracy of eyewitness testimony that will significantly enhance the ability of the criminal justice system to assess eyewitness accuracy. The method consists of the following components: First, ascertain whether law enforcement conducted the eyewitness interviews in a manner that obtained the maximum amount of information from the eyewitness, did not contaminate the eyewitness's memory of the crime, or artificially increase the eyewitness's confidence. Next, determine whether the identification procedures in the case were fair and unbiased. Finally, evaluate what eyewitness factors during the crime are likely to have increased or decreased the accuracy of the eyewitness testimony. The Article discusses scientific guidelines for assessing the fairness of eyewitness interviews and identification procedures, and a list of eyewitness factors that most commonly affect eyewitness accuracy in criminal trials. The Appendix contains a form that will aid participants in the criminal justice system in applying this method to eyewitness testimony in criminal cases. By implementing this method, the criminal justice system will significantly reduce wrongful convictions from eyewitness error.
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How to Analyze the Accuracy of Eyewitness Testimony in a Criminal Case

RICHARD A. WISE, CLIFFORD S. FISHMAN & MARTIN A. SAFER

I. INTRODUCTION

In July of 1984, Jennifer Thompson, a 22-year-old college student, awoke around 3:00 a.m. to find someone in her apartment. When she asked who was there, a man jumped on her, pinned her arms to the side of her head, put a knife to her throat, and raped her. Despite her terror, she was determined to identify her rapist so he would pay for his crimes. Once her eyes adjusted to the dark, she used the light coming through her blinds and bedroom window, as well as her nightlight to see if he had any tattoos, scars, unusual jewelry, how he parted his hair, what he was wearing, and anything else that would be useful in identifying him. She made sure that when he allowed her to stand up she stood close to him so she could determine how tall he was.¹

During her long ordeal, Jennifer tried maneuvering him into different positions where she could best use the available light in her apartment to see him. At one point, he bent down and turned on her stereo, and a blue light from the stereo illuminated his face. When he permitted Jennifer to go to the bathroom, she turned on the light and had an opportunity for a moment to get a good look at his face. She also managed to briefly turn on a lamp in the bedroom before he ordered her to turn it off. Jennifer told her assailant that she was thirsty so she would have an excuse to go to the kitchen. In the kitchen, she turned on the light, which gave her another opportunity to see her assailant. Summoning her courage, wrapped only in a blanket, Jennifer ran from her kitchen to a neighbor’s house. The rapist

did not follow, but that same night, he broke into another apartment and raped a second woman.  

With the help of a police sketch artist, Jennifer created a composite drawing of the rapist: an African American, in his twenties with short hair and a thin moustache. The police widely circulated the composite drawing and received several calls from people who thought they recognized the rapist. Based on the calls, the police created a six-person photo array for Jennifer, including all the suspects they had in the case. After studying the photo array for a few minutes, Jennifer identified Ronald Cotton, an employee at a local seafood restaurant, as the rapist. The police responded: “We thought this might be the one,” because Ronald Cotton had a prior conviction for sexual assault, and they knew that he liked white women.

When Ronald Cotton learned that the police were looking for him, he went to the police station to clear up the matter. Unfortunately, Ronald Cotton did not help himself during his interrogation. He was nervous; he got his dates mixed up, and his alibi did not check out. Furthermore, a piece of foam was missing from one of his shoes, and a similar piece of foam from a shoe was found at the crime scene. The police arrested him for both rapes and placed him in a seven person lineup. Jennifer had little difficulty identifying him from the lineup, but the second rape victim identified a foil from the lineup. The police informed Jennifer that she had identified the same man from the lineup whose photo she had picked out from the photo array a few days earlier.

At trial, the only physical evidence the prosecution produced to connect Ronald Cotton to the crime was the piece of foam found at the crime scene and that he owned a flashlight that resembled the one used by the rapist. Jennifer, however, was a “terrific witness.” During the crimes, she had made every possible effort to see her rapist, and she had identified him twice, once from a photo array and once from a lineup. Moreover, she was completely confident that she had the right man and told the jury that she had no doubt that Ronald Cotton was the rapist. The jury found Ronald Cotton guilty of rape. On January 17, 1985, when Cotton was sentenced to life in prison, Jennifer toasted his sentence with champagne. She said that “[i]t was the happiest day of [her] life.”

After spending two years in prison, Ronald Cotton learned from an inmate that another inmate, Bobby Poole, was bragging that he was the man who had raped Jennifer Thompson and the other woman. Cotton was eventually granted a new trial because the North Carolina Supreme Court ruled that the trial court had erred in not permitting the jury to learn that

\footnotesize{\begin{itemize}
  \item[2] COSTANZO, supra note 1, at 170.
  \item[3] Id.; O’Neill, supra note 1.
  \item[4] COSTANZO, supra note 1, at 170; O’Neill, supra note 1.
  \item[5] COSTANZO, supra note 1, at 170–71; O’Neill, supra note 1.
\end{itemize}}
the second rape victim had failed to identify him from the lineup.\textsuperscript{6}

In November of 1987, Cotton was retried, this time for both rapes, because the second rape victim had decided by the time of the second trial that Cotton was her rapist despite her failure to pick him out of a lineup several years earlier. Both Jennifer and the second rape victim told the jury that they were positive that Ronald Cotton was the rapist. The judge excluded testimony during the trial that Bobby Poole had admitted to committing the rapes. The jury found Ronald Cotton guilty, and he was given two life sentences. Cotton’s appellate attorney failed to assert that the trial court’s exclusion of Poole’s confession constituted prejudicial error. Cotton’s new convictions were affirmed.\textsuperscript{7}

For the next eight years, Cotton wrote letters to anyone he thought might help him get his convictions overturned. He likely would have died in prison if Richard Rosen, a law professor and attorney, had not decided to investigate his case. Rosen and another attorney filed a motion for appropriate relief on the basis of inadequate representation during his second appeal. They also filed a motion for DNA testing, which was granted in October of 1994. The DNA evidence from one victim was too deteriorated to be conclusive, but the DNA samples from the other victim showed that Cotton was not the rapist. At his defense attorneys’ request, the DNA samples were sent to the state’s DNA database, which contains DNA from all convicted felons in North Carolina. The DNA samples from the crimes matched the DNA of Bobby Poole. After learning of the DNA results, the district attorney joined with Cotton’s defense attorneys in moving to dismiss all charges against Ronald Cotton. In July of 1995, the Governor of North Carolina officially pardoned Ronald Cotton.\textsuperscript{8}

Having spent two years wracked with guilt after learning that she identified the wrong man, Jennifer asked the detective in charge of the case to arrange a meeting for her with Ronald Cotton. An Associated Press reporter described their meeting:

A few weeks later, she drove 50 miles to a church in the town where she was raped. She asked her husband and the pastor to leave. Trembling, she opened the door. She had prayed for the strength to face this moment. She had prayed for the strength to face this man. “I’m sorry,” she said. “If I spent every day for the rest of my life telling you how sorry I am, it wouldn’t come close to what I feel.” Ronald Cotton was calm and quiet, and Thompson thought he seemed so very

\textsuperscript{6} State v. Cotton, 351 S.E.2d 277, 280 (N.C. 1987); O’Neill, supra note 1.

\textsuperscript{7} State v. Cotton, 394 S.E.2d 456, 457, 460 (N.C. Ct. App. 1990); see also O’Neill, supra note 1.

tall. Finally, he spoke. "I’m not mad at you," he said softly. "I’ve never been mad at you. I just want you to have a good life." Tears falling, Thompson looked into his eyes and knew she would never see him in her nightmares again.

This case produced several tragedies. Jennifer endured the terrible ordeal of the rape; she is still afraid sometimes, especially at night when she is alone, and she had to deal with the guilt of convicting the wrong man. Ronald Cotton was imprisoned for eleven agonizing years for crimes he did not commit. Additional crimes could have been prevented if Bobby Poole had been arrested earlier. The prosecutor, police, defense attorneys, jurors, and judges have to live with the knowledge that they are responsible for sending an innocent man to prison for eleven years. This case illustrates both the power and the danger of erroneous eyewitness testimony.

Each year, thousands of men and women in the United States are wrongfully convicted of felonies that they did not commit. Experts estimate that eyewitness error plays a role in half or more of all wrongful felony convictions. A study published in 2006 showed that eyewitness

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9 O'Neill, supra note 1. Jennifer Thompson and Ronald Cotton became good friends. She said of Ronald Cotton, "He is an amazing human being. He has been a real good teacher for me." Id. Jennifer Thompson has become a strong opponent of the death penalty and frequently speaks about the unreliability of eyewitness testimony. Id.


11 Richard A. Wise & Martin A. Safer, A Survey of Judges' Knowledge and Beliefs About Eyewitness Testimony, 40 CT. REV. 6, 6 (2003) (explaining that estimates of the number of wrongful felony convictions range from 5000 to as many as 100,000 per year with DNA exoneration cases suggesting that the number of wrongful felony convictions is closer to the upper limit of this estimate); see also D. Michael Risinger, Innocents Convicted: An Empirically Justified Factual Wrongful Conviction Rate, 97 J. CRIM. L. & CRIMINOLOGY 761, 780 (2007) (discussing a study that used the DNA exoneration cases to estimate that in 3.3% to 5% of the capital rape-murder convictions in the U.S. from 1982–89, the defendants were innocent). If this percentage of wrongful convictions were applicable to other types of crimes, there would be 33,000 to 50,000 wrongful felony convictions per year in the United States.

12 See C. Ronald Huff, Wrongful Convictions: Societal Tolerance of Injustice, 4 RES. IN SOC. PROBS. & PUB. POL’Y 99, 103 (1987) ("In our own database, eyewitness error was involved in nearly 60 percent of the cases."); Arye Rattner, Convicted but Innocent, 12 L. & HUM. BEHAV. 283, 289 (1988); see also Garrett L. Berman & Brian L. Cutler, Effects of Inconsistencies in Eyewitness Testimony on Mock-Juror Decision Making, 81 J. APPLIED PSYCHOL. 170, 170 (1996) ("False eyewitness identifications . . . appear to be one of the leading causes of erroneous conviction." (citations omitted)); Amy L. Bradfield et al., The Damaging Effect of Confirming Feedback on the Relation Between Eyewitness Certainty and Identification Accuracy, 87 J. APPLIED PSYCHOL. 112, 112 (2002); Jacqueline McMurtrie, The Role of the Social Sciences in Preventing Wrongful Convictions, 42 AM. CRIM. L. REV. 1271, 1275 (2005) (quoting United States v. Wade, 388 U.S. 218, 229 (1967)); Gary L. Wells et al., Eyewitness Identification Procedures: Recommendations for Lineups and Photospreads, 22 L. & HUM. BEHAV. 603, 603 (1998) ("In addition to the experimental literature, cases of proven wrongful convictions of innocent people have consistently shown that mistaken eyewitness identification is responsible for more of these wrongful convictions than all the other causes combined."); Northwestern Univ. Sch. of Law, Ctr. on Wrongful Convictions, How Mistaken and
error occurred in seventy-five percent or more of the first 180 DNA exoneration cases.\textsuperscript{13} In several of the DNA cases, more than one eyewitness made an erroneous identification, and a number of the defendants were sentenced to death.\textsuperscript{14} Unfortunately, DNA testing can correct only a small fraction of eyewitness misidentifications because it is only available in a small number of criminal cases.\textsuperscript{15}

One of the principal reasons that eyewitness error is the leading cause of wrongful convictions is because it is one of the most powerful types of evidence that can be presented against a criminal defendant.\textsuperscript{16} As the United States Court of Appeals for the Second Circuit wrote in \textit{Kampshoff v. Smith}:

There can be no reasonable doubt that inaccurate

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\textsuperscript{13} Gary L. Wells et al., \textit{Eyewitness Evidence, Improving Its Probative Value}, 7 PSYCHOL. SCI. PUB. INT. 45, 48 (2006); see also Donald A. Dripps, \textit{Miscarriages of Justice and the Constitution}, 2 BUFF. CRIM. L. REV. 635, 638–39 (1999) ("A Department of Justice study found that, out of a sample of more than 21,000 cases, DNA testing exonerated the suspect in 23% of the cases."). Since DNA evidence was first introduced into the criminal justice system, it has exonerated more than 144 people who were wrongfully convicted of crimes. Samuel R. Gross et al., \textit{Exonerations in the United States, 1989 Through 2003}, 95 J. CRIM. L. \\& CRIMINOLOGY 523, 524 (2005). "In 64% percent of these exonerations (219/340) at least one eyewitness misidentified the defendant." \textit{Id.} at 542. Eighty-eight percent of the rape exonerations involved eyewitness misidentification. \textit{Id.} at 530; see also Gary L. Wells \\& Elizabeth A. Olson, \textit{Eyewitness Testimony}, 54 ANN. REV. PSYCHOL. 277, 278 (2003) (stating that more than 100 convicted felons have been exonerated by DNA evidence).

\textsuperscript{14} The Northwestern University School of Law Center on Wrongful Convictions released a study in 2001 involving wrongful convictions in capital cases throughout the United States. Of the eighty-six cases studied, the Center found that "53.5\%[\!] had been prejudiced in whole or part on mistaken or perjured eyewitness testimony. In thirty-three of the cases, the eyewitness testimony was the sole basis of the conviction." Ctr. on Wrongful Convictions, \textit{supra} note 12; see also WAYNE WEITEN, PSYCHOLOGY: THEMES AND VARIATIONS, BRIEFER VERSION 230 (7th ed. 2008) (describing the near-conviction of an innocent priest based on the testimony of seven eyewitnesses); Wells et al., \textit{Eyewitness Identification Procedures}, \textit{supra} note 12, at 605 (stating that of forty cases overturned by DNA evidence in the 1990s, five of the exonerated inmates were on death row, and "36 (or 90\%) involved eyewitness identification evidence in which one or more eyewitnesses falsely identified the person").

\textsuperscript{15} See Wells et al., \textit{Eyewitness Evidence}, \textit{supra} note 13, at 49 ("In contrast to sexual assault cases, only a small fraction of murders (more than 16,000 reported in 2004) and almost no robberies (more than 400,000 reported in 2004) or aggravated assaults (more than 850,000 reported in 2004) result in biologically rich trace evidence left behind."); Gary L. Wells et al., \textit{From the Lab to the Police Station, A Successful Application of Eyewitness Research}, 55 AM. PSYCHOLOGIST 581, 589 (2000) ("Perpetrators of murders, drive-by shootings, convenience store robberies, muggings, and other common crimes almost never leave DNA trace evidence that could exonerate someone who has been the [sic] mistakenly identified by an eyewitness.").

\textsuperscript{16} As one study on eyewitness testimony explained: An eyewitness who says "That is the person I saw pull the gun" is providing direct evidence of guilt in the sense that the criminal act and the defendant are directly linked. In contrast, physical evidence such as fingerprints indicate only that the suspect touched a given surface at some point in time, perhaps for reasons unrelated to the crime, and hence is circumstantial evidence. Wells et al., \textit{Eyewitness Identification Procedures}, \textit{supra} note 12, at 604.
eyewitness testimony may be one of the most prejudicial features of a criminal trial. Juries, naturally desirous to punish a vicious crime, may well be unschooled in the effects that the subtle compound of suggestion, anxiety, and forgetfulness in the face of the need to recall often has on witnesses. Accordingly, doubts over the strength of the evidence of a defendant’s guilt may be resolved on the basis of the eyewitness’ seeming certainty when he points to the defendant and exclaims with conviction that veils all doubt, "[T]hat’s the man!"17

The prevalence of eyewitness error poses a major dilemma for the criminal justice system because it is frequently the only or primary evidence available in a criminal case. For instance, a 1987 study estimated that in 77,000 criminal trials each year in the United States, the primary or sole evidence against a defendant is eyewitness testimony.18 As evidenced by the Ronald Cotton case described in this Introduction, criminal cases where eyewitness testimony is the sole or primary evidence pose the greatest risk that eyewitness error will result in a wrongful conviction.19 Therefore, it is essential that the criminal justice system institute reforms to increase the reliability and accuracy of eyewitness testimony. As is explained below, improving judges’ and attorneys’ abilities to assess the accuracy of eyewitness testimony would significantly reduce eyewitness error. This Article delineates a method for analyzing the accuracy of eyewitness testimony that will enable judges and attorneys to achieve this vital goal.

Part II of this Article describes the current state of the law concerning eyewitness identifications. Part III examines the major causes of eyewitness error. Part IV explains why the ability to assess the accuracy of eyewitness testimony in criminal cases is essential to the proper performance of judges’ and attorneys’ duties. Part V describes a three-part method for analyzing the accuracy of eyewitness testimony that will significantly enhance judges’ and attorneys’ abilities to evaluate eyewitness accuracy. This method consists of the following components: (1) judges and attorneys determine if law enforcement conducted the eyewitness interviews in a manner that obtained the maximum amount of

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17 Kampshoff v. Smith, 698 F.2d 581, 585 (2d Cir. 1983) (citation omitted).
19 Richard A. Wise et al., A Tripartite Solution to Eyewitness Error, 97 J. CRIM. L. & CRIMINOLOGY 807, 842 (2007); see also Wells et al., Eyewitness Identification Procedures, supra note 12, at 609 (stating that the only safeguard that has demonstrated any efficacy in educating jurors about eyewitness testimony—expert testimony—is often not used by defendants because of its cost). For further discussion of the difficulties in using expert testimony, see infra notes 84–90 and accompanying text.
information from the eyewitness, did not contaminate the eyewitness’s memory of the crime, or artificially increase the eyewitness’s confidence; (2) they ascertain if the identification procedures in the case were fair and unbiased; and (3) they examine the eyewitness factors during the crime that likely increased or decreased the accuracy of the eyewitness testimony.

Part VI sets forth scientific guidelines for evaluating whether an eyewitness interview obtained the maximum amount of information from the eyewitness, did not contaminate an eyewitness’s memory of a crime, or artificially increased the eyewitness’s confidence. Part VII details scientific guidelines for appraising the fairness of identification procedures. Part VIII describes common eyewitness factors present during crimes that affect eyewitness accuracy. Part IX sets forth a modified standard for determining when eyewitness identifications should be admissible at trial. Part X makes some concluding remarks about using this method to analyze the accuracy of eyewitness testimony. The Appendix to this Article contains a form that will aid judges and attorneys in applying this method when evaluating eyewitness accuracy in criminal cases.

II. THE CURRENT STATE OF THE LAW

Between 1967 and 1977, the United States Supreme Court rendered several decisions that considered the constitutional implications of various identification procedures. The Court has not rendered any significant decisions on identification procedures since then. As a result, certain principles are firmly established in the case law, while other issues are addressed only briefly or not at all.

A. Pretrial and In-Court Identifications: Legal Categories and Principles

In the typical criminal case in which the defendant denies he or she was the perpetrator, two evidentiary issues will generally arise whenever the prosecutor calls an eyewitness at trial. First, will the prosecutor be permitted to elicit testimony about the eyewitness’s pretrial identification(s) of the defendant? Second, will the eyewitness be permitted to make an in-court identification during the trial? These

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20 Similar issues sometimes arise regarding an eyewitness’s ability to recognize and identify a defendant’s voice, but that subject is beyond the scope of this Article. For a detailed discussion of this topic, see CLIFFORD S. FISHMAN & ANNE T. MCKENNA, 2 WIRETAPPING & EAVESDROPPING: SURVEILLANCE IN THE INTERNET AGE §§ 38:4–38:5 (3d ed. 2008).

21 Such testimony might come from the eyewitness or from the police officer who conducted the pretrial identification procedure, or both.

22 The in-court identification may be a moment of high drama, but its evidentiary value is suspect because anyone familiar with an American courtroom will, in most cases, be able to identify the defendant simply by observing where he or she is sitting.
issues are generally resolved in a hearing prior to the trial.\textsuperscript{23}

The Supreme Court has long been aware of the dangers posed by suggestive identification procedures.\textsuperscript{24} Yet, rather than create a single set of rules and standards to govern such cases, the Court has divided identification issues into two categories, one quite narrow and the other quite broad, and has applied very different legal principles to each. The narrow category involves only pretrial identification procedures which (a) were corporeal in nature, i.e., the witness viewed the defendant "live"; (b) were conducted after the defendant was arraigned on the charge in question; and (c) were conducted in the absence of the defendant’s attorney. The second, broader category includes all other pretrial identification procedures: corporeal identifications prior to arraignment and photo identifications, whether before or after arraignment.


Once a defendant has been arraigned, the defendant enjoys the right, guaranteed by the Sixth Amendment, to have counsel present during all "critical stages" of the case, whether they occur prior to or during the trial.\textsuperscript{25} In 1967, in United States v. Wade\textsuperscript{26} and Gilbert v. California,\textsuperscript{27} the Supreme Court held that a lineup or other identification procedure in which the defendant is forced to participate is a "critical stage," and that to hold such a lineup in the absence of defense counsel violates that right.\textsuperscript{28}

If that right is violated, the Court held that the prosecutor is not

\textsuperscript{23} See discussion infra Part II.C.


\textsuperscript{25} The Court first used the phrase "critical stage" in connection with the right to counsel in Parker v. Illinois, 333 U.S. 571, 575 (1948), and first specified that counsel must be provided to a defendant at a "critical stage" of a criminal prosecution in Hamilton v. Alabama, 368 U.S. 52, 54–55 (1961). The phrase occurs with regularity in discussions of the right to counsel: a December 2008 Westlaw search of the Supreme Court database, "critical stage w/p counsel attorney," produced 65 "hits."

\textsuperscript{26} Wade was convicted of robbing a federally insured bank. Wade, 388 U.S. at 218.

\textsuperscript{27} Gilbert was convicted of robbing a state bank, and of murdering a police officer who happened to enter the bank during the robbery. Gilbert, 388 U.S. at 263.

\textsuperscript{28} Wade, 388 U.S. at 236–37; Gilbert, 388 U.S. at 272. "[T]he 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." Wade, 388 U.S. at 228. After discussing the risks of misidentification and, particularly, the risks involved in suggestive identification procedures, the Court commented:

It is a matter of common experience that, once a witness has picked out the accused at the line-up, he is not likely to go back on his word later on, so that in practice the issue of identity may (in the absence of other relevant evidence) for all practical purposes be determined there and then, before the trial.

\textit{Id.} at 229 (citation omitted).
permitted to elicit testimony about the lineup at trial.\(^2\) Moreover, an eyewitness who identified the defendant at a post-arraignment lineup conducted in the absence of counsel will not be permitted to make an in-court identification at trial, unless the prosecutor can "establish by clear and convincing evidence that the in-court identifications were based upon observations of the suspect other than the lineup identification."\(^3\) In other words, the prosecutor must establish by clear and convincing evidence that the eyewitness remembered the defendant from the crime itself and was not relying on his or her memory of the lineup to make the in-court identification.\(^3\)

2. All Other Pretrial Identification Procedures: The "Due Process" Standard

In subsequent decisions, the Supreme Court has considered the constitutional implications of identification procedures in a variety of contexts not covered by the Wade and Gilbert decisions.

In Kirby v. Illinois, police conducted a pre-arraignment one-person corporeal "showup."\(^3\) The Court declined to apply the Wade-Gilbert rule to this situation because the Sixth Amendment right to counsel does not exist prior to arraignment.\(^3\) Instead, the Court enunciated a different test, based on the Due Process Clause of the Fifth and Fourteenth Amendments.\(^3\) In United States v. Ash, the Court likewise declined to apply the Wade-Gilbert rule to a post-arraignment use of a photo array\(^3\) because the use of photos does not involve an actual, live "confrontation" between the defendant and law enforcement officials and their witnesses.\(^3\)

\(^2\) Only a per se exclusionary rule as to such testimony can be an effective sanction to assure that law enforcement authorities will respect the accused's constitutional right to the presence of his counsel at the critical lineup." Gilbert, 388 U.S. at 273.

\(^3\) Wade, 388 U.S. at 240.

\(^3\) See id. at 242.

\(^3\) Kirby v. Illinois, 406 U.S. 682, 684–85 (1972). In a "showup" the eyewitness is only shown the suspect. In contrast, in a lineup, the suspect is one of several people standing in an array, and the eyewitness is asked if the perpetrator is in the lineup. See Neil v. Biggers, 409 U.S. 188, 198 (1972).

\(^3\) Kirby, 406 U.S. at 689–90. Four Justices dissented, with Justice Brennan accusing the plurality of valuing the "mere formalism" of the pre- vs. post-arraignment distinction over what he considered the fundamental unfairness of the result the Court permitted. Id. at 698–99 (Brennan, J., dissenting) (citations omitted).

\(^3\) The Court held that due process of law "forbids a lineup that is unnecessarily suggestive and conducive to irreparable mistaken identification." Id. at 691.

\(^3\) A photo array is like a lineup; an eyewitness is shown photographs of several individuals and is asked whether the perpetrator's picture is among them.

\(^3\) United States v. Ash, 413 U.S. 300, 314 (1973). The Court also cited a second reason: defense counsel has no right to be present when a prosecutor prepares his or her witnesses to testify, and showing photographs to an eyewitness was simply one aspect of such preparation. Id. at 317–18. Justice Brennan, joined by Justices Marshall and Douglas, dissented: "[T]oday's decision marks simply another step towards the complete evisceration of the fundamental constitutional principles
In *Simmons v. United States* and *Manson v. Brathwaite*, the Court considered the constitutional implications of pre-arraignment, highly suggestive photograph identifications. In *Simmons*, the Court held that a due process test should be applied to determine whether the suggestive pretrial procedure should prohibit the eyewitness from making an in-court identification at trial. In *Brathwaite*, the Court held that even if the photo identification was highly and unnecessarily suggestive, a due process test should be applied to assess the admissibility of both the pretrial and in-court identifications.

In *Neil v. Biggers*, a pre-indictment, corporeal showup case, the Court issued its most elaborate commentary on "the relationship between suggestiveness and misidentification," and on the due process to be applied in cases not covered by the Sixth Amendment *Wade-Gilbert* rule. As to "suggestiveness," the Court stated:

> It is, first of all, apparent that the primary evil to be avoided is "a very substantial likelihood of irreparable misidentification." While the phrase was coined as a standard for determining whether an in-court identification would be admissible in the wake of a suggestive out-of-court identification, with the deletion of "irreparable" it serves equally well as a standard for the admissibility of testimony concerning the out-of-court identification itself. It is the likelihood of misidentification which violates a defendant's right to due process. . . . Suggestive confrontations are disapproved because they increase the likelihood of misidentification, and unnecessarily suggestive ones are

established by this Court, only six years ago, in *United States v. Wade.* "Id. at 326 (Brennan, J., dissenting) (footnote and citations omitted). The first step, in Justice Brennan's view, was the Kirby decision. See id. at 326 n.1.


38 Shortly after a bank robbery, Simmons became a suspect. FBI agents obtained from relatives several photos of Simmons and others and showed them to eyewitnesses, who identified him as one of the robbers. *Simmons*, 390 U.S. at 380-81. At trial, the eyewitnesses made in-court identifications, but the prosecutor did not offer evidence about the pretrial photo identifications. *Id.* at 382.

39 Id. at 384.

40 An undercover officer purchased narcotics from a man he had never seen before, then described him to a back-up officer. That officer, believing Brathwaite fit the description, left a mug shot of Brathwaite for the undercover officer, who identified him as the seller. *Brathwaite*, 432 U.S. at 99-101.

41 Id. at 113-14.

42 Seven months after she was raped by a stranger, the complainant identified the defendant at a station-house showup. She had gotten a good look at the perpetrator during her ordeal, and in the intervening time, had viewed, in showups, lineups, and photographs, numerous other suspects, without identifying any of them. The police conducted a showup of Biggers after making efforts to find look-alikes for a lineup, efforts which the Supreme Court found unimpressive. *Neil v. Biggers*, 409 U.S. 188, 193-95, 199 (1972).

43 Id. at 198.
condemned for the further reason that the increased chance of misidentification is gratuitous. But . . . the admission of evidence of a showup without more does not violate due process.44

The Court also delineated in Biggers five factors that should be considered in assessing whether the facts present "a very substantial likelihood of irreparable misidentification"45 and based on these factors concluded that it did not. Thus, it held that testimony about the showup and the in-court identification were both admissible, despite the unnecessarily suggestive nature of the showup.46 The Court subsequently affirmed the Biggers rule in Brathwaite, its most recent significant identification case.47

In essence, therefore, the due process standard is an all-or-nothing test. If the pretrial identification process for an eyewitness was suggestive and the totality of the circumstances convinces the judge that it created a substantial likelihood of misidentification, then no evidence of that eyewitness's pretrial identification of the defendant can be introduced at trial; nor can that eyewitness make an in-court identification of the defendant.48 On the other hand, if the judge concludes that the eyewitness made the identification based on his memory of the crime, then even if the pretrial identification procedure was suggestive, the judge will deny the motion, and permit both testimony about the eyewitness's pretrial identification of the defendant, and the in-court identification.49

3. The Supreme Court's Discussion of Accuracy Factors

In Neil v. Biggers and Manson v. Brathwaite, the Supreme Court held that the reliability of an eyewitness's identification is to be determined by the "totality of the circumstances."50 In these decisions, the Supreme Court delineated five eyewitness factors that the trier of fact should consider when evaluating eyewitness accuracy: (1) the eyewitness's opportunity to

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44 Id. at 198 (quoting Simmons, 390 U.S. at 384). The prosecutor in Simmons did not offer evidence of the photo identification.
45 Biggers, 409 U.S. at 198; see infra text accompanying note 50 (setting forth the "totality of the circumstances" test from Biggers and Brathwaite).
46 Biggers, 409 U.S. at 198–99.
48 The Court found identification procedures to violate due process in Foster v. California. 394 U.S. 440, 443 (1969). An eyewitness failed to identify Foster the first time he confronted him, despite a suggestive lineup, and could only make a tentative identification at a showup, then made a positive identification at yet another lineup. The Court held it was error to allow any identification testimony in the case. Id. at 442–43.
49 Thus, in Kirby, Biggers, and Brathwaite, the Court held that, despite suggestiveness, pretrial and in-court identifications were both permissible. See Kirby v. Illinois, 406 U.S. 682, 690 (1972); Biggers, 409 U.S. at 199–200; Brathwaite, 432 U.S. at 115–16. In Foster, by contrast, the Court held that neither should have been admitted. Foster, 394 U.S. at 442–43.
view the perpetrator during the crime; (2) the length of time between the crime and the subsequent identification; (3) the level of certainty demonstrated by the witness at the identification; (4) the accuracy of the eyewitness’s prior description of the criminal; and (5) the eyewitness’s degree of attention during the crime.\(^{51}\) In the years immediately following these decisions, courts in most states adopted the approach enunciated in Biggers and Brathwaite.\(^{52}\)

B. **Assessment of the Supreme Court’s Approach to Eyewitness Error**

In its case law concerning eyewitness identifications, the Supreme Court considered four issues. First, when does a defendant have a right to the presence of counsel at an eyewitness identification procedure? Second, what rule should govern the admissibility of an unnecessarily suggestive eyewitness identification procedure? Third, what factors should a court consider in deciding whether to admit testimony about a pretrial eyewitness identification, and an in-court identification of the defendant by the eyewitness? Fourth, what burden of proof should the prosecutor satisfy to secure the admissibility of eyewitness identifications? We will not address the first issue in this Article.\(^{53}\)

As to its resolution of the other three issues, the Court’s decisions about them predated the vast majority of scientific research on eyewitness testimony.\(^{54}\) For example, the factors listed in Biggers and Brathwaite “constitute ‘educated guesses’ by the Court on how [these five eyewitness factors] affect identification accuracy.”\(^{55}\) Subsequent scientific research has shown that many of these five factors do not affect eyewitness

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\(^{51}\) *Brathwaite*, 432 U.S. at 114; *Biggers*, 409 U.S. at 199–200.


\(^{53}\) We believe the Court decided this issue correctly. The Sixth Amendment right to counsel attaches only after arraignment and should not be read to require a prosecutor to invite defense counsel to his office during the prosecutor’s pretrial preparations with an eyewitness. *See supra* note 31. This issue, however, is beyond the scope of this Article, and no further discussion of it is offered herein.

\(^{54}\) Wise et al., *Tripartite Solution*, supra note 19, at 815.

\(^{55}\) *Id.*
accuracy the way the Supreme Court believed they do. These five factors are also deficient because they do not include many other eyewitness factors that affect eyewitness accuracy. Additional serious flaws in Biggers and Brathwaite include that: (1) the decisions do not take into account how the eyewitness interviews impacted eyewitness accuracy; (2) the decisions mistakenly assume that in all cases it can be determined whether an identification from a suggestive identification procedure is reliable; (3) three of the criteria (certainty, view, and attention) are self-reported by the eyewitness, and a suggestive identification procedure can increase an eyewitness’s confidence, cause the eyewitness to believe that he or she paid more attention to the perpetrator during the crime, and had a better view of the crime than he or she actually had; and (4) the decisions ignore that both eyewitness memory and confidence are highly malleable.

This theme is developed more fully in Parts III and VII of this Article.

In sum, the due process standard and procedures the Supreme Court promulgated in Kirby, Ash, Biggers, and Brathwaite for assessing identification accuracy in criminal cases, including its five factor test, are seriously flawed and in fact may contribute to, rather than reduce, the number of wrongful convictions.

In recognition of these flaws and shortcomings, a number of states have moved away from the Supreme Court’s due process approach. Some state courts, applying their state constitution’s due process clause, have revised the Biggers-Brathwaite standards. Other states have

56 Id. at 816–18.
57 Id. at 818–19.
59 See discussion infra Part VI (addressing the importance of analyzing eyewitness interviews to determine if law enforcement obtained the maximum amount of information from the eyewitness, contaminated the eyewitness’s memory of the crime, or increased the eyewitness confidence, and why the harmful effects of a biased eyewitness interview or identification procedure cannot be corrected).
60 Wise et al., Tripartite Solution, supra note 19, at 819.
61 The discussion in the rest of this paragraph is based in part on Wells & Quinlivan, supra note 58, at 18–21.
62 For example, in State v. Long, Utah’s Supreme Court observed that “several of the criteria listed by the Court are based on assumptions that are flatly contradicted by well-respected and essentially unchallenged empirical studies.” 721 P.2d 483, 491 (Utah 1986). Relying on the due process clause of the state constitution, the court adopted a somewhat different list of factors:
   (1) the opportunity of the witness to view the actor during the event; (2) the witness’s degree of attention to the actor at the time of the event; (3) the witness’s capacity to observe the event, including his or her physical and mental acuity; (4) whether the witness’s identification was made spontaneously and remained consistent thereafter, or whether it was the product of suggestion; and (5) the nature of the event being observed and the likelihood that the witness would perceive, remember and relate it correctly. This last area includes such factors as whether the event was an ordinary one in the mind of the observer during the time it was observed, and whether the race of the actor was the same as the observer’s.
rejected the *Kirby-Ash-Brathwaite* due process doctrine and applied the *Wade* approach to all pretrial identification procedures, those conducted before as well as after the right to counsel has attached. If the pretrial procedure was unnecessarily suggestive, testimony about it is excluded per se, and the eyewitness is permitted to make an in-court identification only if the prosecution establishes by clear and convincing evidence that the eyewitness will be able to make the identification at trial based solely on his or her memory of the crime itself, independent of the suggestive pretrial procedure.

As the rest of this Article demonstrates, this latter approach is much more consistent with what is now known about human memory and eyewitness identifications, and therefore is far more consistent with the ultimate goals of the criminal justice system: to convict those who are guilty, and avoid convicting those who are innocent.

C. How Eyewitness Issues Are Litigated

Soon after a defendant is arraigned, the defense attorney files a motion for discovery. Included in the motion is a request for information about

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63 For discussion of this doctrine, see *supra* Part II.A.2.

64 *Johnson*, 650 N.E.2d at 1261; People v. Riley, 517 N.E.2d 520, 525 (N.Y. 1987); State v. Dubose, 699 N.W.2d 582, 596 (Wis. 2005); *see also* State v. Herrara, 902 A.2d 177, 182 (N.J. 2006) (hinting that the court considered the issue a valid one but declining to address it because the defendant had failed to raise it at trial).

65 Generally, if an eyewitness’s memory is contaminated by a suggestive or biased identification procedure, the error cannot be correct by subsequently conducting a fair lineup. See *infra* Parts V, IX. Consequently, there are very limited circumstances where the prosecutor will be able to show that the eyewitness’s in-court identification of the defendant is not tainted by the prior, biased out of court identification procedure. See *infra* Part V.

66 This section is based on Professor Fishman’s and Professor Wise’s experiences as prosecutors, and on Professor Fishman’s discussion of the matter with current prosecutors, defense attorneys, and judges, and his reading of more court opinions on the subject than he cares to remember, let alone count. The procedures described herein will vary slightly from jurisdiction to jurisdiction, but the basic outline is the same.

67 *See, e.g.*, FED. R. CRIM. P. 16 (setting forth the rules for information subject to disclosure).
any and all pretrial identifications of the defendant by any eyewitness. In response, the prosecutor informs defense counsel of the details: which eyewitnesses identified the defendant, the kind of procedure used, and so on. At an appropriate time prior to trial, defense counsel moves to suppress the eyewitness evidence. Where there have been pretrial identifications, the motion will allege that the identifications were suggestive, and will lead to a misidentification at trial. The defense attorney will request that the judge suppress testimony about the pretrial identifications and also preclude the eyewitnesses from making in-court identifications. Often the judge will order a hearing on the motion.

If the eyewitness testifies at the hearing, the prosecutor will ask the eyewitness questions designed to establish that the eyewitness had a good opportunity to see the perpetrator (e.g., time, lighting), to note his or her appearance, and to fix it firmly in the eyewitness’s mind. The prosecutor will then ask the eyewitness to describe the identification procedure, again structuring his or her questions to elicit the strongest impression of non-suggestiveness that the facts legitimately allow. Ideally, the eyewitness will testify that as soon as he or she saw the defendant, the eyewitness recognized the defendant as the perpetrator, based on the eyewitness’s memory of seeing the defendant commit the crime; that the eyewitness was sure that his or her identification was accurate; and that he or she so informed the officer.

On cross-examination, defense counsel will seek to undercut each aspect of the eyewitness’s direct testimony. Defense counsel may challenge the eyewitness’s estimation of how long he or she had an opportunity to view the defendant, and question whether the eyewitness’s powers of perception or memory were diminished by drink, drugs, lack of sleep, fear, focus on a weapon, or other distractions. The defense attorney may emphasize any discrepancies between the description the eyewitness

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68 In some jurisdictions, prosecutors provide this information voluntarily, without requiring defense counsel to file a motion.

69 Defense counsel will file a motion to suppress whether the procedure involved was absurdly and unnecessarily suggestive, or apparently was as completely non-suggestive and as perfect as is humanly possible. This occurs because, even if the judge ultimately denies the motions to suppress (which, as every trial lawyer and judge knows, is the result in the vast majority of cases), a hearing on the motion will require the prosecutor to call at least some of his or her witnesses at the hearing, and give defense counsel an opportunity to cross-examine them—a type of pretrial discovery that, though common in civil litigation, is fairly unusual in criminal cases.

70 In some jurisdictions, the defendant is entitled to a hearing as a matter of course. In others, the judge will grant a hearing only if defense counsel first submits affidavits or other proof that make out a prima facie case that the pretrial identification was suggestive.

71 The prosecutor may decide not to call an eyewitness at the hearing to prevent the defense attorney from discovering the eyewitness’s testimony prior to trial, relying instead on the testimony of the police officers who conducted the identification procedure. Some jurisdictions, however, may permit the defense attorney to call the eyewitness to testify at the hearing if the prosecutor does not.

72 To the extent that it will be helpful, the prosecutor’s questions will track the reliability factors discussed by the Supreme Court in *Biggers* and *Brathwaite*. See supra text accompanying note 51.
gave to the police and the defendant's actual appearance. Counsel may probe for evidence of suggestiveness in the lineup, showup, or photo identification. Counsel may question the eyewitness about any previous lineups, showups, or photo identifications at which the eyewitness picked out someone else as the perpetrator.73

If the procedure was a lineup, the prosecutor may introduce a photograph or video of the lineup to impress upon the judge that it was fair and non-suggestive. If the eyewitness was shown a number of photographs in addition to the defendant's, the prosecutor, for the same reason, may introduce the entire photo array into evidence.

Depending on the circumstances, one or more officers who conducted the identification procedure may also testify.74 If the identification procedure was a corporeal one, defense counsel may put the defendant on the stand at the hearing to contest the prosecutor's version of how the lineup or showup was conducted. Occasionally, other eyewitnesses may be available to contradict the prosecutor's eyewitnesses' description of the identification procedure. After both sides rest and argue the issues, the judge, applying the appropriate standard (Wade-Gilbert or due process), will rule on what identification testimony, if any, the eyewitness will be permitted to give.

D. Expert Testimony Regarding Eyewitness Identification

For decades, psychologists and defense attorneys have maintained that eyewitness testimony can be notoriously unreliable, and courts, including the United States Supreme Court, have recognized this fact.75 The development of DNA evidence has confirmed what many observers and participants in the criminal justice system have long suspected, namely, that the number of innocent people who are convicted of crimes is distressingly high, and in many such cases, eyewitness identification testimony played a significant role in their wrongful convictions.

To combat such testimony, defense attorneys have sought to introduce expert testimony outlining the weaknesses and shortcomings of eyewitness testimony.76 There is sharp division among courts whether such testimony meets the requirements governing expert evidence.

As a general rule, expert testimony on any given subject is admissible

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73 On the other hand, if it is obvious that the judge will deny the motion to suppress identification evidence at trial, defense counsel may not use some of this information at the hearing, hoping to surprise the eyewitness and the prosecutor with it at the trial itself.

74 If the prosecutor decides not to call the officer as a witness at the hearing, defense counsel may choose to do so.

75 See supra note 24 and accompanying text.

only if several criteria are satisfied. First, the subject matter of the testimony must be one recognized as a valid one for expert testimony, based on reliable principles and methodology. Second, the expert must be qualified as an expert on that subject. Third, the expert’s testimony must have an adequate factual basis. Fourth, the expert must apply “the principles and methods reliably to the facts of the case.” Finally, the testimony must “assist the trier of fact to understand the evidence or to determine a fact in issue.”

Courts generally accept that a properly qualified expert can satisfy the first four requirements. But many courts have been reluctant to admit expert testimony on the weaknesses of eyewitness testimony. Courts cite two reasons to justify this reluctance. First, many courts have held that such testimony “will not aid the jury because it addresses an issue of which the jury already generally is aware, and it will not contribute to their understanding of the particular factual issues posed.” Second, comments can be found throughout the case law that the “proposed testimony intrudes too much on the traditional province of the jury to assess witness credibility.” The perceived risk, that the jury will be confused or place undue emphasis on the expert’s testimony, is therefore seen as outweighing what is viewed as the limited probative value of the evidence.

Courts that accept this reasoning appear to give jurors both too much credit, and not enough. Such reasoning ignores scientific research showing that jurors have limited knowledge of eyewitness factors and that the effect of many factors on eyewitness accuracy is not a matter of common sense. It also reflects concern that wily experts will induce naïve and susceptible jurors to reject eyewitness testimony that is reliable. Furthermore, it ignores jurors’ tendency to be skeptical of experts, especially defense experts, whose testimony goes against what they consider simple common

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77 See, e.g., FED. R. EVID. 702 (identifying the elements necessary for expert testimony to be admitted into evidence).
78 Thus, in the language of Federal Rule of Evidence 702, the subject of the testimony must consist of “scientific, technical, or other specialized knowledge [that is . . . the product of reliable principles and methods . . . .]” FED. R. EVID. 702.
79 See id. (“[T]he witness [must be] qualified as an expert by knowledge, skill, experience, training, or education . . . .”).
80 See id. (“[T]he testimony [must be] based upon sufficient facts or data . . . .”).
81 Id.
82 Id.
83 See FISHMAN & MCKENNA, supra note 76, § 41:44.
84 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)); see also State v. Lawhorn, 762 S.W.2d 820, 823 (Mo. 1988) (“[T]he introduction of expert testimony would be a superfluous attempt to put the gloss of expertise, like a bit of frosting, upon inferences which lay persons were equally capable of drawing from the evidence.” (citation omitted)).
85 United States v. Lumpkin, 192 F.3d 280, 289 (2d Cir. 1999).
A number of courts, however, have held that it is an abuse of discretion to exclude expert testimony about eyewitness identifications where the prosecutor’s case rests solely or primarily on eyewitness identification, particularly if it is of uncertain accuracy or sharply contested.

Furthermore, as Fishman and McKenna state:

Even where a court is receptive to such testimony, it is generally agreed that the most that should be permitted is general testimony about the relevant types of difficulties with eyewitness testimony and that an expert witness should not be permitted to give an opinion on the accuracy of a particular eyewitness’s testimony, on the ground that such testimony constitutes impermissible comment on credibility.

III. THE CAUSES OF EYEWITNESS ERROR

There are several reasons why an eyewitness’s testimony can be erroneous even though, like Jennifer Thompson, the eyewitness is
testifying in good faith and with a high degree of confidence, and the police have attempted to conduct a fair and thorough investigation.

A. The Nature of Human Memory

Although human memory can be reasonably accurate, it does not work like a video camera.\(^9\) Consequently, an eyewitness's memory of a crime is not stored like a videotape that the eyewitness can replay to produce an exact record of the crime. It frequently does not contain the degree of detail sought by criminal investigators.\(^9\) Instead, when an eyewitness recalls a crime, he or she unconsciously reconstructs his or her memory of the crime.\(^9\) In unconsciously reconstructing his or her memory of the crime, the eyewitness unknowingly fills in the gaps in his or her factual memory of the crime based on such factors as the eyewitness's expectations, attitude, beliefs, and knowledge of similar events.\(^9\) These different sources of information are automatically blended together in the

\(^9\) John C. Brigham & Robert K. Bothwell, *The Ability of Prospective Jurors to Estimate the Accuracy of Eyewitness Identifications*, 7 L. & HUM. BEHAV. 19, 20 (1983); John C. Brigham et al., *Disputed Eyewitness Identification Evidence: Important Legal and Scientific Issues*, 36 CT. REV. 12, 13 (1999) ("Contrary to popular belief, human perception does not work like a camera or video recorder. Rather, what is perceived and stored in memory is often incomplete or distorted as a result of the individual's state of mind or nature of the event observed.").

\(^9\) Daniel L. Schacter, *The Seven Sins of Memory: Insights from Psychology and Cognitive Neuroscience*, 54 AM. PSYCHOLOGIST 182, 197 (1999); see also Richard A. Wise et al., *A Survey of Defense Attorneys' Knowledge and Beliefs About Eyewitness Testimony*, CHAMPION, Nov. 2007, at 23 ("Although memory can be reasonably accurate, it frequently does not contain the degree of detail sought by criminal investigators and is fragile and subject to changes in subtle ways by new information.").

\(^9\) See CURT R. BARTOL & ANNE M. BARTOL, *PSYCHOLOGY AND LAW: THEORY, RESEARCH AND APPLICATIONS* 228 (3d ed. 2004). Bartol and Bartol state that:

Memory, especially for complex or unusual events, involves the integration of perceptual information with preexisting experiences, as well as with other subjective relevant information that may be introduced later. In this sense, memory is very much a reconstructive, integrative process that develops with the flow of new experiences and thoughts. This perspective is called the *reconstructive theory of memory.*

\(^9\) COSTANZO, *supra* note 1, at 180. For example, researchers conducted a study that determined that people have shared "scripts" for common types of crimes, such as a convenience store robbery, bank robbery, or mugging. "Scripts are widely held beliefs about sequences of actions that typically occur in particular situations." *Id.* They found that people's scripts for a convenience store robbery consist of the following elements: The robber cases the store, plans the robbery, enters the store, observes who is in the store, acts like a customer, waits for an opportunity, approaches the cash register, pulls out a gun, demands money, takes the money, exits the store, and drives away. *Id.* In a follow-up study, researchers had participants listen to a mock criminal trial that involved a convenience store robbery where evidence was omitted for three key elements: the casing of the store, using a gun, and taking the money. *Id.* Most participants in the study, nonetheless, erroneously recalled hearing evidence during the trial that indicated that the three missing elements occurred during the alleged crime. *Id.* This study demonstrates that an eyewitness's expectations, attitudes, beliefs, and knowledge will influence what an eyewitness perceives, encodes, stores, and retrieves about a crime. *Id.* at 181; see also Wise & Safer, *supra* note 11, at 15 (stating that when witnesses recall crimes, they fill in the blanks with information based on expectancies and information obtained after the crime).
eyewitness’s memory to produce an account of the crime that is apparently seamless and coherent but that may contain inaccuracies.  

B. Eyewitness Bias

An eyewitness’s expectations, attitudes, beliefs, and knowledge not only influence what an eyewitness recalls about a crime, but also what the eyewitness perceives about a crime. For example, if a hair stylist witnesses a crime, he or she may pay more attention to the perpetrator’s hair than other eyewitnesses would. In addition, these factors influence what an eyewitness encodes about a crime. Encoding refers to the process by which an eyewitness transforms what he or she perceives about a crime into a stored memory. Normally, the eyewitness is unaware of the process of encoding.

Because encoding involves interpretation and inference, what is stored in memory is not just what the eyewitness saw during the crime, but also the meaning the eyewitness gave to what occurred. Furthermore, the meaning that an eyewitness gives to the crime is influenced by his or her expectations, attitudes, beliefs, and knowledge. Factors present during a crime such as a high level of stress, a weapon, or a disguise may further hamper an eyewitness’s ability to accurately encode important details of the crime. Forgetting the details of the crime can occur rapidly. New faces, pictures, and events experienced after the crime can also interfere with the eyewitness’s memory of the crime.

94 See BARTOL & BARTOL, supra note 92, at 228 (“[E]ven the most well-intentioned eyewitnesses may err and unconsciously distort their recall and identification. In part, this explains the radically different accounts of the same event that are provided by witnesses who are ‘absolutely positive’ about what they saw.”).
95 Id.; Wise & Safer, supra note 11, at 8, 15. There are four stages to memory: perception, encoding, storage, and retrieval. EDIE GREENE ET AL., WRIGHTSMAN’S PSYCHOLOGY AND THE LEGAL SYSTEM 129–32 (6th ed. 2007).
96 See Wise & Safer, supra note 11, at 8 (“Expectancies can exert a powerful influence on attention and recall of relevant information.”).
97 WEITEN, supra note 14, at 205–06.
98 BARTOL & BARTOL, supra note 92, at 228.
99 Id.
100 Id.
102 See Kenneth A. Deffenbacher, A Maturing of Research on the Behaviour of Eyewitnesses, 5 APPLIED COGNITIVE PSYCHOL. 377, 381 (1991) (“With single-trace fragility theory, trace decay is by far the greater contributor to forgetting in the first minutes and hours after initial encounter of a face, but the amount of forgetting due to this source decreases per unit of time.”).
103 WEITEN, supra note 14, at 218.
C. Misinformation Effect

Because an eyewitness's memory of a crime is a reconstructive process, it can be altered by information that the eyewitness learns after the crime from other sources such as other eyewitnesses, the police, the prosecutor, and the media.\footnote{Wise et al., Tripartite Solution, supra note 19, at 844-45; see also BARTOL & BARTOL, supra note 92, at 229 (stating that police officers do not recognize that a person's memory can be contaminated by "careless interviewing and misleading commentary"); Ronald P. Fisher, Interviewing Victims and Witnesses of Crime, 1 PSYCHOL. PUB. POL'Y & L. 732, 740 (1995) ("There is little argument, however, that the phenomenon of postevent suggestibility exists, that it is robust, and perhaps most important, that witnesses truly believe that they observed an event that was only suggested.").} The eyewitness generally does not know that his or her memory of the crime has been changed and updated by post-event information, which may or may not be accurate.\footnote{See BARTOL & BARTOL, supra note 92, at 228 ("Moreover, there are ample opportunities for witnesses to encounter additional information after the event and then integrate it unknowingly into their original memories.").} Moreover, the post-event information not only affects an eyewitness's memory of the crime, but it may also impair his or her ability to identify the perpetrator of the crime.\footnote{See Elizabeth F. Loftus & Edith Greene, Warning: Even Memory for Faces May Be Contagious, 4 L. & HUM. BEHAV. 323, 333 (1980) ("The verbal expressions and other postevent information to which a witness is exposed will not only appear in the verbal reports of witnesses but will also influence future recognition of persons who have been seen before.").}

D. Source Monitoring Errors

Eyewitnesses can become confused about where they learned information about a crime or where they saw an individual. Accordingly, eyewitnesses may misattribute information to observing a crime when in fact they learned it from another source such as the media, a police officer, a prosecutor, or another eyewitness.\footnote{See Schacter, supra note 91, at 188 ("First, people may remember correctly an item or fact from a past experience but misattribute the fact to an incorrect source. For instance, individuals sometimes recall encountering a bit of trivia in the newspaper that, in fact, they acquired from the experimenter.").} They also sometimes identify as the perpetrator of a crime an individual who was a bystander to the crime or whom they saw in another situation or context.\footnote{See, e.g., COSTANZO, supra note 1, at 178-79 ("Robert Buckhout, one of the first psychologists to conduct systematic research on eyewitnesses, staged a series of thefts and assaults in his classroom. Of the students who witnessed the mock crime, 39% showed the unconscious transference effect. These witnesses incorrectly identified a person who had been in the classroom the day of the crime.")} For example, a rape victim identified a psychologist, Dr. Donald Thompson, as her rapist.\footnote{Id. at 179.} At the time of the rape, however, Dr. Thompson was in a television studio giving a live interview, ironically, about the fallibility of eyewitness memory.\footnote{Id.} The rape victim had seen part of the interview of Dr.
Thompson and in her memory unconsciously transferred his face from the interview to the rape.\footnote{Id.}

E. Hindsight Bias

When an individual knows how an event turned out, this knowledge affects both the individual’s memory of the event and his or her memory of what they were thinking when the event occurred.\footnote{WEITEN, supra note 14, at 230–31.} Therefore, once an eyewitness learns that a suspect has been indicted and is going to be tried for a crime, this information alters an eyewitness’s memory of the crime and what the eyewitness remembers about what he or she was thinking when the crime occurred.\footnote{Id. at 231.}

F. Eyewitness Overconfidence in the Accuracy of His or Her Perceptions and Memory and the Malleability of Eyewitness Confidence

People tend to overestimate the accuracy of their perceptions and memory.\footnote{Id. at 231.} Thus, eyewitnesses are likely to be overconfident about the accuracy of their account of the crime and their identification of the suspect as the perpetrator of the crime.\footnote{See Wells et al., Eyewitness Identification Procedures, supra note 12, at 624 (“Confidence malleability refers to the tendency for an eyewitness to become more (or less) confident in his or her identification as a function of events that occur after the identification.”).} In addition, not only is an eyewitness’s memory of a crime highly malleable, but so is an eyewitness’s confidence in the accuracy of his or her memory of the crime.\footnote{See Michael R. Leippe & Donna Eisenstadt, Eyewitness Confidence and the Confidence-Accuracy Relationship in Memory for People, in 2 HANDBOOK OF EYEWITNESS PSYCHOLOGY, MEMORY FOR PEOPLE 377, 417–18 (Rod C. L. Lindsay et al. eds., 2007). Leippe and Eisenstadt write: “The ready malleability of confidence by feedback, co-witness information, deliberate or inadvertent communication by police investigators, repeated questioning, lawyer briefings, and other events make it clear that confidence statements made following an immediate post-identification confidence judgment will inevitably be hopelessly undiagnostic of memory accuracy. Short of being restricted to a hermetically sealed room until the trial, it is hard to imagine an eyewitness not being subjected to manipulative influences on his or her confidence.” Id.; see also Saul M. Kassin et al., On the “General Acceptance” of Eyewitness Testimony Research, A New Survey of the Experts, 56 AM. PSYCHOLOGIST 405, 410 (2001); Wells et al., From the Lab, supra note 15, at 586.} Many factors can increase eyewitness confidence, but do not in any way improve the accuracy of an eyewitness’s identification.\footnote{Id.} For instance, questioning of an eyewitness by the police and prosecutor, confirmation feedback from a lineup administrator (e.g., “Good! You have identified the suspect.”), and learning that another eyewitness has also identified the suspect all increase an eyewitness’s confidence but not his or
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her accuracy. Post-event information has its greatest effect on the eyewitness's confidence in erroneous information.

The eyewitness is generally unaware that his or her confidence has been increased by these factors. Furthermore, when the eyewitness is asked at trial how confident he or she was in the accuracy of the identification at the time of the lineup, the eyewitness tends to report his or her present level of confidence. Eyewitnesses tend to make this error because they cannot recall at trial how confident they were in the accuracy of their identification at the time they made it. Artificially increasing eyewitness confidence can cause wrongful convictions because studies show eyewitness confidence is generally the most important factor that the trier of fact relies on when evaluating the accuracy of eyewitness identification.

118 See John S. Shaw III & Kimberley A. McClure, Repeated Postevent Questioning Can Lead to Elevated Levels of Eyewitness Confidence, 20 L. & HUM. BEHAV. 629, 630 (1996). Shaw and McClure state:

For example, Wells, Ferguson, and Lindsay found that briefing witnesses about the nature of an impending cross-examination can lead to higher confidence ratings during the subsequent examination, and Luus and Wells demonstrated that providing information to an eyewitness about a co-witness's identification decision (e.g., whom the witness picked from a lineup) can alter that eyewitness's confidence about her or his own choice.

Recent research by Shaw suggests that a common police investigation procedure—repeated questioning of witnesses—may also result in changes in eyewitness confidence independently of eyewitness accuracy.

119 Id. (internal citations omitted); see also Gary L. Wells & Amy L. Bradfield, "Good, You Identified the Suspect": Feedback to Eyewitnesses Distorts Their Reports of the Witnessing Experience, 83 J. APPLIED PSYCHOL. 360, 374 (1998). "[A] casual comment from a lineup administrator following eyewitnesses' identification can have dramatic effects on their reconstructions of the witnessing and identification experience." Id. For example, such a comment caused the witness to state that the defendant's face "just 'popped out' to them, that their memorial image of the gunman is particularly clear, and that they are adept at recognizing faces of strangers. These effects were very robust, with effect sizes that exceed what are normally considered large effects in psychology." Id.

120 See Donald P. Judges, Two Cheers for the Department of Justice's Eyewitness Evidence: A Guide for Law Enforcement, 53 ARK. L. REV. 231, 249 (2000) ("Research has found that the confidence-inflating impact of post-event questioning was the largest for inaccurate responses, including responses to questions about the witnesses' memory for an object that did not even exist in the original event. . .").

121 Wells & Bradfield, supra note 118, at 373.

122 Id. at 362. Wells states that:

That is, eyewitnesses do not form clear impressions at the time of the event about how good or poor their view is, how much attention they are paying, how confident they are in their identification, and so on. Instead, people's memories for cognitive processes operating during an event (in this case the witnessed event as well as the event of making an identification) are, like other memories, reconstructions. Hence, answers to these questions are postcomputed (later) by eyewitnesses when the relevant question is asked of them. When later asked to judge how good their view was, for example, the eyewitness does not recall an impression or judgment but rather forms one.

Id.; see also Wells et al., Eyewitness Identification Procedures, supra note 12, at 635–36 ("The only way to know how confident the eyewitness was at the time of the identification is to have asked the eyewitness at the time of the identification."),
G. Eyewitnesses Tend to Make a Relative Judgment in Making an Identification

Eyewitnesses are likely to make a relative judgment when they select a lineup participant, particularly when law enforcement uses a simultaneous lineup (where all lineup participants are presented at once) rather than a sequential lineup (where lineup participants are presented individually). In other words, eyewitnesses generally select the lineup participant who most closely resembles their memory of the perpetrator of the crime. A sequential lineup is more likely to prompt the eyewitness to compare each participant in the lineup to the eyewitness’s memory of the perpetrator of the crime (i.e., make an absolute judgment), rather than compare the participants to each other (i.e., make a relative judgment).

Relative judgments frequently result in erroneous eyewitness identification, especially in lineups that do not include the perpetrator of the crime. Eyewitnesses tend to make relative judgments for several reasons:

122 Wells et al., Eyewitness Identification Procedures, supra note 12, at 620 (stating that eyewitness confidence “is the most powerful single determinant of whether or not observers of that testimony will believe that the eyewitness made an accurate identification”).

123 Wells et al., From the Lab, supra note 15, at 585–86.

124 See id. (“The standard police lineup presents the eyewitness with all lineup members (e.g., six or eight persons) at one time. Under these conditions, eyewitnesses tend to compare lineup members with each other to determine which one most closely resembles the perpetrator relative to the others, a process called relative judgment.”). In contrast, sequential lineups decreased the probability that the eyewitness will make a relative judgment:

In sequential lineups, the witness views the lineup members one at a time and is asked to make an identification decision after viewing each one. The witness is instructed that each lineup member will be presented only once and is not told how many lineup members will be presented. The lineup stops when the witness identifies someone or has seen all the lineup members without identifying anyone. Reliably fewer false identifications are obtained with sequential than with simultaneous presentation.

Veronica Stinson et al., How Effective Is the Motion-to-Suppress Safeguard? Judges’ Perceptions of the Suggestiveness and Fairness of Biased Lineup Procedures, 82 J. APPLIED PSYCHOL. 211, 212 (1997); see also discussion infra Part VII.6. (discussing sequential lineups).

125 Wells et al., Eyewitness Identification Procedures, supra note 12, at 613 (“There is good empirical evidence to indicate that eyewitnesses tend to identify the person from the lineup who, in the opinion of the eyewitness, looks most like the culprit relative to the other members of the lineup.”).

126 In one study, Lindsay and Wells found that:

Although the eyewitness [viewing a sequential lineup] could decide that the person being viewed currently looks more like the perpetrator than did the previous person, the eyewitness cannot be sure that the next (not yet viewed) person does not look even more like the perpetrator than did the one being viewed currently. Lindsay and Wells reasoned that this would force eyewitnesses to use a more absolute criterion (i.e., “Is this the perpetrator or not?”) rather than the relative-judgment criterion (i.e., “Is the person more similar to the perpetrator than the other lineup members?”).

Wells et al., From the Lab, supra note 15, at 586.

127 See Rudolf Koch, Note, Process v. Outcome: The Proper Role of Corroborative Evidence in Due Process Analysis of Eyewitness Identification Testimony, 88 CORNELL L. REV. 1097, 1104–05
reasons. First, they logically assume that law enforcement would not conduct a lineup if they did not have a suspect. Second, many eyewitnesses feel pressure from law enforcement, relatives, friends, and themselves to make an identification. In addition, many eyewitnesses feel like a failure if they cannot make an identification during an identification procedure.

H. Lineups Are Frequently Conducted in a Manner that Draws the Eyewitness’s Attention to the Suspect (e.g., The Lineup-as-Experiment Analogy)

Scientists have long known that safeguards are necessary to ensure that they do not unintentionally influence participants in an experiment. Unintentional influence is often a problem because people unconsciously tend to test their hypotheses in a manner that confirms them and because of the self-fulfilling nature of expectations. Thus, scientists implement safeguards to ensure that the results of their experiments are the product of the independent variable (i.e., the variable the experimenter manipulates to try to produce an effect) and not the experimenter’s bias or some other extraneous factor. By analogy, in lineups, the “independent variable” is the eyewitness’s memory and the desired result is that the eyewitness either does or does not identify the suspect as the perpetrator of the crime.

Professors Garrioch and Brimacombe explain how a lineup administrator’s bias that the suspect is the perpetrator can affect the fairness of a lineup:

Like a researcher with a specific hypothesis (i.e., that a particular lineup [participant] is the suspect), the detective is
now in a position to exert tremendous influence in administering the lineup. A lineup administrator’s knowledge of the suspect’s identity can increase the likelihood that the witness will identify the suspect.134

Professor Wells and his colleagues further elaborate on how lineups resemble experiments:

[T]he police have a hypothesis (that the suspect is the culprit); they collect materials that could be used to test the hypothesis (e.g., picture of the suspect and filler pictures), they create a design (e.g., placing suspect’s picture in a particular position in an array), instruct the subject(s) (eyewitness or eyewitnesses); run the procedure (show the lineup to the eyewitness), record the data (identification of the suspect or not); and interpret the hypothesis in light of the data (decide whether the identification decision changes their assessment of whether the suspect is the culprit).135

The lineup-as-experiment analogy helps us to identify procedural errors in lineups that are likely to cause eyewitness misidentifications. They include:

[T]he presence of demand characteristics (e.g., pressuring the eyewitness to make a choice), the influence of confirmation biases (e.g., asking the eyewitness specifically about the suspect while not asking those same questions about the distractors), the facilitation of response biases (e.g., encouraging a loose recognition criterion threshold in the eyewitness), making inferences from small sample sizes (e.g., making strong judgments of validity based on only one eyewitness), not using control groups (e.g., failing to see if even people who did not witness the crime [but who have the eyewitness’s description of the perpetrator] can identify the suspect), selective recording and interpretation of data (e.g., finding significance in an identification of the suspect, but ignoring the outcome if the eyewitness makes a non-identification), leaking of the hypothesis (e.g., making it

135 Wells et al., Eyewitness Identification Procedures, supra note 12, at 618.
136 Id. Among other concerns, Wells and his colleagues mention the use of “mock witnesses” as a solution to the problem of biased lineups: “Mock witnesses are people who have never seen the culprit but are given the eyewitness’s verbal description of the culprit, shown a picture of the lineup or photospread, and asked to select the person they think is the suspect in the case.” Id. at 631. If after reading the eyewitness’s description of the perpetrator the mock witnesses select the suspect from the photo array at greater levels than chance, the lineup is likely biased.
obvious to the eyewitness which person in the lineup is the suspect), and a host of other possible confounds.\textsuperscript{137} Accordingly, to avoid eyewitness error, law enforcement must conduct lineups so that an eyewitness identification of a suspect is a product of the eyewitness’s memory and not how the lineup was conducted.\textsuperscript{138}

It is also useful to view eyewitness evidence as a type of trace evidence such as fingerprints, DNA, and firearm patterns.\textsuperscript{139} Similar to other types of trace evidence, eyewitness evidence has a physiological basis (i.e., biochemical changes in the eyewitness’s brain).\textsuperscript{140} Therefore, its accuracy depends in part on the use of proper scientific procedures to extract the evidence.\textsuperscript{141} In sum, before ruling on the admission of eyewitness evidence at trial, a judge should evaluate whether proper scientific procedures were used in collecting it, and if they were not used, that fact should weigh heavily against admitting the testimony.\textsuperscript{142} Unfortunately, as is discussed below, most lineups do not comply with scientific guidelines for conducting fair and unbiased lineups nor does law enforcement generally follow scientific guidelines when engaged in other procedures for collecting eyewitness evidence, such as eyewitness interviews.\textsuperscript{143}

I. Lack of Knowledge of Memory and Eyewitness Factors

Police officers, attorneys, judges, and jurors lack knowledge about how memory works and how eyewitness factors affect identification

\textsuperscript{137} Id. at 618.
\textsuperscript{138} See id. at 618–19 (noting the importance of proper extraction of an eyewitness’s memory).
\textsuperscript{139} See id. at 618 (“Some forms of forensic evidence, such as fingerprints, DNA, and firearms patterns are subject to criticism for not following scientific principles in the collection and analysis of the evidence. We see no reason why eyewitness identification evidence should not be treated in a similar fashion.”).
\textsuperscript{140} For example:
Eyewitness evidence can be construed as a type of trace evidence except that, unlike blood or fingerprints, the trace is in the brain of a human observer in the form of a memory. This memory trace even has some physical properties in the sense of being located as a neurological trace in the brain. Like physical evidence, the critical issue is how to extract the evidence in a way that is maximally diagnostic of identity.
Id. at 618–19.
\textsuperscript{141} Id.
\textsuperscript{142} See id. at 617–19 (analogizing good methods for conducting an experiment with good methods for conducting lineups); see also Wells & Quinlivan, supra note 58, at 21 (“Today, police carry out very complex evidence collection procedures with physical evidence such as blood, hair, and fiber that have to conform to precise protocols and careful documentation. Clearly, police would be capable of carrying out careful non-suggestive protocols with eyewitness identification evidence as well if courts were more assertive in demanding it.”).
\textsuperscript{143} Wells et al., Eyewitness Identification Procedures, supra note 12, at 604; Ronald P. Fisher & Nadja Schreiber, Interview Protocols to Improve Eyewitness Memory, in 1 HANDBOOK OF EYEWITNESS PSYCHOLOGY: MEMORY FOR EVENTS 53, 55 (Michael P. Toglia et al. eds., 2007).
accuracy. Their lack of knowledge about the nature of memory and eyewitness factors makes it difficult for them to prevent eyewitness error and to determine when it has occurred.

IV. WHY JUDGES AND ATTORNEYS NEED A METHOD FOR ASSESSING EYEWITNESS ACCURACY IN CRIMINAL CASES

It is vital that judges, prosecutors, and defense attorneys know how to correctly evaluate the accuracy of eyewitness testimony. Such knowledge is essential so that they can properly assess the probative value of eyewitness testimony in criminal cases and help prevent wrongful convictions that might result from erroneous eyewitness testimony. For example, trial judges need this skill when determining if they should admit testimony about a pretrial eyewitness identification, allow an in-court identification by the eyewitness, admit eyewitness expert testimony, permit other legal safeguards to educate jurors about eyewitness testimony, in ruling on eyewitness evidentiary issues, and in bench trials when they must evaluate the accuracy of eyewitness testimony. Appellate judges must know how to evaluate the accuracy of eyewitness testimony when they decide if the trial court abused its discretion by excluding expert testimony about potential weaknesses of eyewitness testimony. Such knowledge will also help appellate judges determine whether the eyewitness testimony in a case is sufficiently reliable to affirm a guilty verdict on appeal.

Prosecutors have to assess if the eyewitness testimony in a case is sufficiently accurate to indict a suspect and take a case to trial. Prosecutors also need this skill when preparing the state’s eyewitnesses for cross-examination, arguing eyewitness evidentiary issues, and attempting to persuade the trier-of-fact that the state’s eyewitness testimony is reliable.

Knowing how to evaluate the accuracy of eyewitness testimony is also

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145 See Wise et al., Tripartite Solution, supra note 19, at 843–48 (discussing common errors that law officers make during eyewitness identification procedures). Wise et al., as part of their tripartite solution to eyewitness error, advocate educating the principal participants in the criminal justice system about eyewitness testimony to sensitize them to the effects of error. Id. at 822. They also describe the many benefits that would accrue to the criminal justice system if the principal participants in the criminal justice system were knowledgeable about eyewitness testimony. Id. at 866–67.

146 GREENE ET AL., supra note 95, at 144.

147 Cf. Richard A. Wise et al., What US Prosecutors and Defense Attorneys Know and Believe About Eyewitness Testimony, 23 APPLIED COGNITIVE PSYCHOL. 1266 (2009) (describing a study involving prosecutors and defense attorneys and finding that prosecutors often overestimate the reliability of eyewitness testimony and jurors’ knowledge of eyewitness testimony).

148 Id.
critical to defense attorneys. This knowledge will enable them to more effectively cross-examine an eyewitness at a pretrial identification hearing and at trial, advise a defendant whether to accept a plea bargain, decide whether to offer an eyewitness expert at trial, and argue to the trier of fact that the state’s eyewitness testimony in a case is unreliable or wrong.\textsuperscript{149}

Although the ability to evaluate the accuracy of eyewitness testimony is essential to legal professionals, scientific studies show that prosecutors,\textsuperscript{150} defense attorneys,\textsuperscript{151} and even judges have limited knowledge of eyewitness factors.\textsuperscript{152} For example, Wise and Safer surveyed 160 judges about a wide range of eyewitness factors and procedures that affect identification accuracy.\textsuperscript{153} Some of the questions in the survey were the same or similar to those used in an earlier survey of eyewitness experts.\textsuperscript{154} For those questions, the judges’ answers were compared to experts’ answers.\textsuperscript{155} The judges also indicated for a subset of questions how they believed the average juror would respond to the question and what legal safeguards they would permit attorneys to use to educate jurors about eyewitness factors.\textsuperscript{156} These latter questions are important because research has consistently shown that jurors are unaware of many of the factors that affect identification accuracy and cannot distinguish between accurate and inaccurate eyewitnesses.\textsuperscript{157} Yet one of

\textsuperscript{149} See supra Part II.C. (discussing how eyewitness issues are litigated).

\textsuperscript{150} John C. Brigham & Melissa P. WolfsKeil, Opinions of Attorneys and Law Enforcement Personnel on the Accuracy of Eyewitness Identifications, 7 L. & HUM. BEHAV. 337, 346 (1983) ("In general, prosecuting attorneys and law enforcement officers were similar in their responses to most of the survey questions. These individuals consistently indicated that they regard eyewitness identification as relatively accurate and feel that its importance is appropriately emphasized by judges and jurors."); Wise et al., A Survey, supra note 91, at 20.


\textsuperscript{152} Wise & Safer, supra note 11, at 13.

\textsuperscript{153} Id. at 7.

\textsuperscript{154} Id. at 8.

\textsuperscript{155} Id. at 9–11.

\textsuperscript{156} Id. at 8.

\textsuperscript{157} See John C. Brigham & Robert K. Bothwell, The Ability of Prospective Jurors to Estimate the Accuracy of Eyewitness Identifications, 7 L. & HUM. BEHAV. 19, 29 (1983) (finding that jurors would benefit from eyewitness expert testimony on eyewitness factors); Thomas Dillickrath, Expert Testimony on Eyewitness Identification: Admissibility and Alternatives, 55 U. MIAMI L. REV. 1059, 1062–63 (2001) (advocating for expert testimony given jurors’ general lack of knowledge of eyewitness testimony); Saul M. Kassin & Kimberly A. Barndollar, The Psychology of Eyewitness Testimony: A Comparison of Experts and Prospective Jurors, 22 J. APPLIED PSYCHOL. 1241, 1243–45 (1992) (showing that student mock jurors’ answers in a study were significantly different from those of eyewitness experts); R. C. L. Lindsay et al., Mock Juror Belief of Accurate and Inaccurate Witnesses, 13 L. & HUM. BEHAV. 333, 337–38 (1989) (discussing a study in which mock jurors were unable to
the most common reasons judges exclude eyewitness expert testimony at trial is their beliefs that jurors are knowledgeable about eyewitness factors.\(^{158}\)

The study showed that the judges had limited knowledge of eyewitness testimony as they averaged only fifty-five percent correct on the fourteen-item knowledge scale.\(^{159}\) Thus, many judges in the survey were unaware that eyewitness confidence is not related to eyewitness accuracy at trial, that sequential lineups are more effective than simultaneous lineups in reducing erroneous eyewitness identifications, and that several studies indicate jurors cannot differentiate between accurate and inaccurate eyewitness testimony.\(^{160}\) The judges’ answers compared to those of the eyewitness experts differed significantly on five of the eight questions where they answered the same or similar questions.\(^{161}\) In addition, the judges were substantially less skeptical than the experts of jurors’

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First, they are not knowledgeable about eyewitness testimony, and therefore do not realize that the effect of many eyewitness factors on identification accuracy is not a matter of common sense. They also appear to be concerned about the time and expense that would result from permitting expert testimony. Finally, they seem to believe that jurors will perfunctorily follow the opinion of the expert resulting in guilty defendants going free.

Wise et al., *Tripartite Solution, supra* note 19, at 823 n.121; see also United States v. Daniels, 64 F.3d 311, 315 (7th Cir. 1995) (citing United States v. Larkin, 978 F.2d 964, 971 (7th Cir. 1992)) ("[B]ecause it addresses an issue of which the jury already generally is aware ... it will not contribute to their understanding of the particular factual issue posed.").

\(^{159}\) Wise & Safer, *supra* note 11, at 13. In a follow-up study, undergraduates and law students completed the same eyewitness questionnaire that was administered to the judges. Richard A. Wise & Martin A. Safer, *A Comparison of What U.S. Judges and Students Know and Believe About Eyewitness Testimony*, J. APPLIED SOC. PSYCHOL. (forthcoming) (on file with authors). The results of the study showed that judges were no more knowledgeable about eyewitness testimony than the undergraduates and slightly less knowledgeable than the law students. *Id.* These results occurred even though the judges on average had practiced law for fourteen years, been on the bench for twelve years, and seventy-six percent of judges had been a prosecutor, defense attorney, or both prior to becoming a judge. *Id.*

\(^{160}\) Wise & Safer, *supra* note 11, at 9–11, 13; see also discussion *infra* Part VII.6. (noting the importance of using sequential lineups).

\(^{161}\) Wise & Safer, *supra* note 11, at 9–11.
knowledge of eyewitness testimony.162 The judges in the survey were reluctant to permit expert testimony to educate jurors about eyewitness testimony even though expert testimony is the only legal safeguard that has demonstrated any effectiveness in educating jurors about eyewitness testimony.163 Other studies of judges’ knowledge of eyewitness testimony have yielded similar results.164

Attorneys’ and judges’ lack of knowledge of eyewitness testimony is not surprising. The effect of many of these eyewitness factors on eyewitness accuracy is not a matter of common sense, and in fact may be quite counter-intuitive, and attorneys and judges receive little training about eyewitness testimony.165 Moreover, even experienced judges and attorneys are unaware of these factors, probably because they do not receive feedback on which eyewitnesses gave inaccurate testimony during trials and what eyewitness factors caused their inaccuracies.166

Furthermore, even if judges and attorneys were knowledgeable about eyewitness factors, it would still be difficult for them to assess the accuracy of eyewitness testimony. This result would likely occur because the ability to assess accuracy of eyewitness testimony is not just a matter of knowledge but also of integration.167 Integration is the ability to apply relevant knowledge when making a decision.168 As Cutler and Penrod

162 See id. at 11.
163 Id.
164 See Tanja Rapus Benton et al., Eyewitness Memory Is Still Not Common Sense: Comparing Jurors, Judges, and Law Enforcement to Eyewitness Experts, 20 APPLIED COGNITIVE PSYCHOL. 115, 126 (2006) (finding that jurors, judges, and law enforcement officers had limited knowledge of eyewitness testimony); Pär Anders Granhag et al., Eyewitness Testimony: Tracing the Beliefs of Swedish Professionals, 23 BEHAV. SCI. & L. 709, 723 (2005); Svein Magnussen et al., What Judges Know About Eyewitness Testimony: A Comparison of Norwegian and US Judges, 14 PSYCHOL. CRIME & L. 177, 185 (2008) (“The results of the present study, in conjunction with the Wise and Safer study, show that judges in Norway and the US have limited knowledge of eyewitness factors, and they harbour beliefs and opinions that are at odds with current scientific knowledge as defined by the opinions of eyewitness experts.” (citations omitted)).
165 See Wise & Safer, supra note 11, at 13 (finding that seventy-five percent of judges thought they should receive more training on eyewitness testimony).
166 Id.
168 Cutler also states:

Sensitivity comprises two components: knowledge and integration. Knowledge refers to awareness how units of information should be combined to form a judgment; for example, knowledge of what witnessing and identification factors are important and how these factors should be combined in the evaluation of eyewitness identification accuracy. Integration refers to the ability to form judgments that reflect the unit combinatorial scheme about which the judge is knowledgeable; for example, ability to integrate eyewitness evidence in accordance with the judge’s knowledge of what witnessing and identification factors are important. Theoretically, knowledge and integration skills can vary independently.

Id. The method for analyzing eyewitness testimony described in this Article not only informs attorneys and judges about many different types of factors that affect eyewitness accuracy, but it also helps them
Note, decision making research in a variety of psychological domains shows that integration is quite difficult to achieve, even by trained experts. Accordingly, what judges and attorneys need to assess the accuracy of eyewitness testimony is not merely greater knowledge about eyewitness testimony, but also a method of analyzing eyewitness testimony that enables them to apply the relevant eyewitness factors to the facts of a case. That is what this Article offers.

**TABLE 1:**

**METHOD FOR ANALYZING THE ACCURACY OF EYEWITNESS TESTIMONY**

**Step 1: Evaluating the Eyewitness Interviews**

A. Did the interviews obtain the maximum amount of information from the eyewitness?

B. Did the interviews contaminate the eyewitness’s memory?
   1. Did they contaminate the eyewitness’s memory of the crime?
   2. Did they contaminate the eyewitness’s memory of the perpetrator of the crime?

C. Did the interviews, identification procedures, other eyewitnesses, the prosecutor, the media, or some other factor significantly increase the confidence of the eyewitness prior to taking a statement of the eyewitness’s confidence in the accuracy of his or her identification?

**Step 2: Evaluating the Identification Procedures and Identification Accuracy**

A. Did one of the following circumstances occur that would make the eyewitness’s identification of the defendant presumptively inaccurate?
   1. Was the eyewitness interview significantly biased and did the bias pertain to information concerning the description or identity of the perpetrator?
   2. Was an identification procedure significantly biased?

Overcome the problem of integrating that knowledge into their analyses of eyewitness accuracy. See discussion infra Part V (describing the method for analyzing eyewitness testimony).

B. Because of the nature of memory, the effects of biased interviews and identification procedures on identification accuracy cannot be corrected by later conducting a fair interview and identification procedure. Accordingly, if an eyewitness’s memory of the perpetrator of a crime has been significantly contaminated, identification by the eyewitness of the defendant should be considered presumptively inaccurate.

C. Does one of the two exceptions apply to the general rule that an eyewitness’s identification is presumptively inaccurate if an eyewitness interview or identification procedure was significantly biased?

1. Did some unusual circumstance exist that overcomes the presumptive inaccuracy of the identification (e.g., the eyewitness knew the perpetrator prior to the crime or had prolonged repeated exposure to the perpetrator)?

2. Was there reliable, valid corroborating evidence that establishes the veracity of the eyewitness testimony?

D. Were the eyewitness interviews and identification procedures fair and impartial or did one of the exceptions to biased interviews and identification procedures apply? If so, go on to Step 3. If not, the eyewitness’s identification should be presumed to be inaccurate.

**Step 3: Evaluating the Eyewitness Factors Present During the Crime**

A. What eyewitness factors during the crime likely increased the accuracy of the eyewitness identification and testimony?

B. What eyewitness factors during the crime likely decreased the accuracy of the eyewitness identification and testimony?

**Step 4: Conclusions**

A. Was the maximum amount of information obtained from the eyewitness during the interviews?

B. Was a statement of the eyewitness’s confidence in the accuracy of his or her identification obtained prior to the eyewitness receiving any feedback?

C. Is there a high, medium, or low probability that the eyewitness’s testimony was accurate?

D. Is there a high, medium, or low probability that the eyewitness identification was accurate?
V. A METHOD FOR ANALYZING THE ACCURACY OF EYEWITNESS TESTIMONY

Professor Wise has developed a method of analyzing eyewitness testimony that enables judges and attorneys to apply the relevant eyewitness factors to the facts of the case so they can better evaluate the accuracy of eyewitness testimony. This method of analyzing eyewitness testimony consists of three components.

First, judges and attorneys determine if law enforcement officials (a) conducted the eyewitness interviews in a manner that obtained the maximum amount of information from the eyewitness; (b) did not contaminate the eyewitness’s memory of the crime with post-event information; or (c) artificially increased the eyewitness’s confidence. (See Table 1, Step 1)

Obtaining the maximum amount of accurate information from eyewitnesses is an important factor in preventing wrongful convictions. For instance, a comprehensive study of criminal investigations by the Rand Corporation indicated that the most important determinant of whether a case is solved is the completeness and accuracy of the eyewitness testimony in the case.170 In addition, the trier of fact is more likely to render a correct verdict if detailed and accurate accounts of the crime are presented at trial.171 Detailed and accurate eyewitness accounts further contribute to the just resolution of criminal cases because they help law enforcement obtain confessions from guilty suspects and also permit defense attorneys to more effectively represent innocent defendants.172 (See Table 1, Step 1.A.)

Assessing whether law enforcement interviews have contaminated an eyewitness’s memory with post-event information is vital because scientific research shows that post-event information not only affects an eyewitness’s verbal reports of the crime, but also his or her ability to recognize the perpetrator of a crime.173 (See Table 1, Step 1.B.2.)

Determining whether an eyewitness’s confidence has been artificially increased during an interview, an identification procedure, or by other means, is also essential. If this has occurred prior to taking a statement of the eyewitness’s confidence in the accuracy of his or her identification, the statement of confidence has little or no probative value in assessing

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170 Fisher, supra note 104, at 732; Fisher & Schreiber, supra note 143, at 53.
171 Fisher, supra note 104, at 732.
172 See id. (“On the one hand, it reduces the need to conduct extensive interrogations with suspects, because they are more likely to admit guilt when faced with thorough eyewitness information .... On the other hand, the more evidence defense attorneys can marshal, the better they can defend their clients. In short, all concerned profit from having more complete and accurate eyewitness evidence.” (citations omitted)).
173 Loftus & Greene, supra note 106, at 333.
identification accuracy. Because eyewitness confidence is the factor that jurors and judges rely on most heavily when evaluating the accuracy of eyewitness testimony, they need to know when the eyewitness’s confidence has been artificially increased by a law enforcement interview or other means prior to taking a statement of the eyewitness’s confidence in the accuracy of his or her identification. (See Table 1, Step 1.C.) Scientific guidelines for evaluating the fairness and completeness of eyewitness interviews are discussed below.

The second component of the method for analyzing eyewitness accuracy is for judges and attorneys to ascertain if the identification procedures in the case were fair and unbiased. (See Table 1, Step 2) This assessment can be made by applying the scientific principles that are delineated later in this Article.

The final component of the method for analyzing eyewitness accuracy requires judges and attorneys to evaluate which eyewitness factors during the crime likely increased or decreased the accuracy of the eyewitness testimony and identification. (See Table 1, Steps 3.A.–B.) A list of the most common eyewitness factors that affect eyewitness accuracy during a crime are described in a subsequent section.

If judges or attorneys determine that the eyewitness interview or identification procedures were significantly biased, then the accuracy of the eyewitness’s identification is highly questionable unless the eyewitness conditions were exceptionally good (e.g., the eyewitness victim was kidnapped and had prolonged, repeated exposure to his or her abductor) or there is reliable, valid corroborating evidence establishing the accuracy of the eyewitness testimony. As Koehnken, Malpass, and Wolfgater stated:

Valid implementation of eyewitness identification using line-ups and photo spreads demands especially careful preparation. Once a mistake it made, it cannot be corrected. An identification of a suspect under suggestive conditions early in an investigation cannot simply be rectified by later conducting a fair line-up. Various psychological mechanisms result in the witness retaining the effects of errors made in

174 See Wise et al., Tripartite Solution, supra note 19, at 855 (“Several studies have identified post-event factors that significantly increase the confidence, but not the accuracy, of eyewitness testimony. These factors include post-event questioning, confirming feedback, and repeating questions of witnesses. Thus, by the time of trial, eyewitness confidence has little probative value in assessing eyewitness accuracy because of the many factors that affect eyewitness confidence but not accuracy.” (footnotes omitted)).
175 Wells et al., Eyewitness Identification Procedures, supra note 12, at 620.
176 See infra Part VI (discussing guidelines for evaluating the fairness of eyewitness interviews).
177 See infra Part VII (discussing guidelines for evaluating the fairness of identification procedures).
178 See infra Part VIII (providing a list of the common eyewitness factors during a crime that affect eyewitness accuracy).
previous recognition tests. There are no procedures that can reliably rule out the possibility that earlier mistakes will be maintained at a later identification.\(^{179}\)

In short, once law enforcement has contaminated an eyewitness’s memory of the perpetrator of the crime by conducting a biased eyewitness interview or identification procedure, the error cannot be corrected by subsequently conducting fair procedures.\(^{180}\) (See Table 1, Step 2.B.) Therefore, not only should an identification of a suspect that is a product of biased interview or identification be presumed to be inaccurate, but any subsequent identification by the eyewitness whose memory has been contaminated should also be presumed to be inaccurate even if it results in a fair identification procedure later.

In contrast, if law enforcement conducted fair and unbiased eyewitness interviews and identification procedures, then the eyewitness identification and testimony is more likely to be accurate even if the eyewitness conditions were somewhat less than ideal. Accordingly, when assessing the accuracy of eyewitness testimony, judges and attorneys should always first analyze the eyewitness interviews and identification procedures. (See Table 1, Steps 1.—2.)

Of course, no method can definitively determine if an eyewitness has made an accurate identification. This method, however, provides a comprehensive analytical framework for identifying and organizing the myriad of disparate factors that affect the accuracy of eyewitness testimony. It also alerts judges and attorneys to the many different types of eyewitness factors that affect identification accuracy. Perhaps most importantly, it also provides judges and attorneys with a method for integrating their knowledge of eyewitness factors into their decisions about the accuracy of eyewitness testimony. Accordingly, the use of this method substantially increases the probability that attorneys and judges will correctly assess eyewitness accuracy.

There are other advantages to using this method. It emphasizes the importance of the State conducting fair and unbiased interviews and identification procedures. The method’s emphasis on fair and unbiased procedures is justified not only because it is logical (if the methodology of an investigation is invalid, then its results are likely to be invalid) and supported by empirical evidence, but also because the fairness of the eyewitness interviews and identification procedures are generally within

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\(^{179}\) Koehnken et al., supra note 130, at 208; see also Susan R. Klein, Identifying and (Re)Formulating Prophylactic Rules, Safe Harbors, and Incidental Rights in Constitutional Criminal Procedure, 99 MICH. L. REV. 1030, 1065 (2001); Wells & Quinlivan, supra note 58, at 15 (setting forth a different hypothesis on how contamination affects an eyewitness’s memory); Michael S. Wogalter et al., A National Survey of US Police on Preparation and Conduct of Identification Lineups, 10 PSYCHOL. CRIME & L. 69, 78 (2004).

\(^{180}\) Wogalter et al., supra note 179, at 78.
On the other hand, the State cannot control the eyewitness factors that affected the eyewitness's ability during a crime to make an accurate identification. Moreover, there is generally no objective record of the crime or of the eyewitness factors that affected the accuracy of the eyewitness testimony.

This method also provides the State with a strong incentive to conduct fair interviews and identification procedures because they can significantly strengthen the State's case at trial. Furthermore, the State can achieve the goal of conducting fair and unbiased eyewitness interviews and identification procedures without incurring either an unreasonable financial or administrative burden. This emphasis in the method is further warranted because the best way to prevent and reduce eyewitness error is 

181 Wells et al., From the Lab, supra note 15, at 582; Wise et al., Tripartite Solution, supra note 19, at 864–65. In effect, the method for analyzing the accuracy of eyewitness testimony delineated in this Article distinguishes between system variables and estimator variables. System variables are factors “over which the justice system has control, whereas . . . estimator variables are beyond the control of the justice system.” Wells et al., From the Lab, supra note 15, at 582. “The number of foils [i.e., known innocent members] in a line-up, the selection of line-up members, and questioning techniques are examples of system variables.” Douglas J. Narby et al., The Effects of Witness, Target, and Situational Factors on Eyewitness Identifications, in PSYCHOLOGICAL ISSUES IN EYEWITNESS IDENTIFICATION 23–24 (Siegfried Ludwig Sporer et al. eds., 1996). “Some examples of estimator variables are the level of stress experienced by the witness during the crime, and the degree to which the witness was distracted from attending to a perpetrator’s characteristics.” Id. at 23. The estimation of how much these variables influence the accuracy of identifications is subject to biases and error. Id. at 24. Thus, in the method for analyzing eyewitness accuracy discussed in this Article, the factors pertaining to whether law enforcement during the eyewitness interview obtained the maximum amount of information from the eyewitness, contaminated the eyewitness’s memory of the crime, or artificially increased eyewitness confidence, and whether the identification procedures were fair and unbiased are all system variables because they generally are within the control of the criminal justice system. See Table 1, Steps 1–2. In contrast, the factors during the crime that likely increased or decreased eyewitness accuracy are all estimator variables. See Tbl. 1, Step 3.

183 See Wells et al., From the Lab, supra note 15, at 582 (discussing the difference between system variables and estimator variables: system variables are eyewitness factors that the criminal justice system can generally control while estimator variables are eyewitness factors that it cannot control).

182 See Michael R. Headley, Note, Long on Substance, Short on Process: An Appeal for Process Long Overdue in Eyewitness Lineup Procedures, 53 HASTINGS L.J. 681, 700 (2002); Amy Klobuchar et al., Improving Eyewitness Identifications: Hennepin County’s Blind Sequential Lineup Pilot Project, 4 CARDOZO PUB. L. POL’Y & ETHICS 381, 409 (2006) (discussing how a pilot project that implemented double-blind, sequential lineup procedures was “extremely efficient” and, as Minnetonka Police Chief Joy Rikala noted: “There [are] no cost implications of this. It’s negligible.”). Fisher and Schreiber state that Britain has adopted national standards for interviewing eyewitnesses based on the cognitive interview. Fisher & Schreiber, supra note 143, at 56. They also point out: [T]raining practices differ widely across countries. The most advanced and rigorous training is found in Britain, where police often collaborate with academic researchers to develop and evaluate training programs . . . as have Australia, New Zealand, and Israel. We find it interesting that the United States and Canada, which have produced many of the leading theoretical advances in the psychology of memory, have not kept pace with their western counterparts by incorporating this knowledge into police training programs.

Id. at 57. The widespread use of the cognitive interview in several different countries supports the proposition that its implementation is both practical and cost efficient.
for the State to conduct fair and unbiased interviews and identification procedures.\textsuperscript{184}

Finally, though the method provides scientific guidelines for assessing eyewitness accuracy, as is discussed in Part IX, we also recognize that there are some limited circumstances where policy considerations may require the admission of an eyewitness identification at trial even though the method indicates that the identification should be presumed to be inaccurate.\textsuperscript{185}

In the next three sections, scientific guidelines for assessing the fairness of eyewitness interviews and identification procedures and a list of eyewitness factors that commonly affect eyewitness accuracy in criminal trials are discussed. The Appendix contains a form that will aid judges and attorneys in applying this method to eyewitness testimony.

\textbf{VI. EVALUATING THE EYEWITNESS INTERVIEWS (THE "COGNITIVE INTERVIEW"): TABLE 1, STEP 1}

Law enforcement officers are generally not trained to interview eyewitnesses, but rather only to interrogate suspects.\textsuperscript{186} Accordingly, when law enforcement officers conduct interviews of eyewitnesses they often make three types of errors: (1) they fail to obtain much of the information that an eyewitness knows about a crime; (2) they contaminate an eyewitness's memory of the crime; and (3) they create an unwarranted increase in an eyewitness's confidence in the accuracy of his or her testimony and identification.\textsuperscript{187}

In the 1980s, Ronald Fisher and Edward Geiselman began developing an interviewing technique which reduces the errors that law enforcement officers generally make when interviewing eyewitnesses.\textsuperscript{188} Scientific studies of their cognitive interview in the laboratory and in field studies

\textsuperscript{184} Wise et al., Tripartite Solution, supra note 19, at 864–65.

\textsuperscript{185} We are referring to situations where the police are acting in good faith, but necessity requires them to use a suggestive identification procedure. One example is using a showup with an eyewitness when the police believe that they have apprehended the perpetrator shortly after the crime has occurred. \textit{See infra} note 347. In such instances, where possible the police should follow proper procedures in conducting the showup. \textit{See Nat'l Inst. of Justice, U.S. Dep't of Justice, Eyewitness Evidence: A Trainer's Manual for Law Enforcement} 30–31 (2003), available at http://www.ncjrs.gov/nij/eyewitness/188678.pdf [hereinafter Nat'l Inst. of Justice].

\textsuperscript{186} Fisher, supra note 104, at 733; Wells et al., \textit{From the Lab}, supra note 15, at 583.

\textsuperscript{187} Fisher, supra note 104, at 755; Judges, supra note 119, at 249, 250, 252. For example, in Florida:

\begin{quote}
The "standard police interview" was characterized by constant interruptions, excessive use of a predetermined list of questions with an expectation that witnesses could provide answers, and questions that were timed inappropriately . . . if the witness was describing one of the perpetrators, the officer, might switch the line of questioning to the actions of another perpetrator.
\end{quote}

\textsuperscript{188} Wells et al., Eyewitness Evidence, supra note 13, at 55 (citations omitted).

\textsuperscript{188} Wells et al., \textit{From the Lab}, supra note 15, at 582–83.
show that it increases the amount of accurate information obtained from eyewitnesses by thirty-five to seventy-five percent over standard police interviews. It also decreases the probability of contaminating the eyewitness’s memory of the crime or artificially inflating their confidence. The cognitive interview forms the basis for the interviewing techniques that the National Institute of Justice recommended in its Training Manual for Law Enforcement.

The following scientific guidelines derived from the above mentioned sources can be used by judges and attorneys to assess whether law enforcement obtained the maximum amount of information from the eyewitness; whether they contaminated the eyewitness’s memory of the crime; and whether they increased the eyewitness’s confidence in the accuracy of his or her identification.

The factors for maximizing the amount of information obtained from the eyewitness are divided into three categories: pre-interview preparation, conducting the interview, and concluding the interview. Brief explanations follow for each guideline and the guidelines are in bold.

A. Factors Relevant to Maximizing the Information Obtained from the Eyewitness

1. Pre-Interview Preparation
   a. **When circumstances permit, the interview should be held as soon as possible after the crime.**

   Scientific studies show that eyewitnesses begin to forget the details of the crime very quickly, so the interview should be conducted as soon as the eyewitness is physically and emotionally capable of being interviewed and the exigencies of investigating the crime permit.

   b. **The interviewer should review all information about the crime prior to the interview.**

   This guideline allows an interviewer to conduct a more thorough and complete interview.

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189 Id. at 584.
190 Fisher, supra note 104, at 752.
191 See Wells et al., From the Lab, supra note 15, at 590; NAT’L INST. OF JUSTICE, supra note 185, at 10–12.
192 NAT’L INST. OF JUSTICE, supra note 185, at 13; Wise & Safer, supra note 11, at 11.
193 NAT’L INST. OF JUSTICE, supra note 185, at 13; see also Fisher & Schreiber, supra note 143, at 69 (discussing another reason for conducting the eyewitness interview as soon as possible after the crime: “The more likely prophylactic approach to minimizing the influence of suggestive questioning is to conduct an effective witness interview shortly after the critical event, before the witness has been exposed to the influence of the misleading suggestions.”).
194 NAT’L INST. OF JUSTICE, supra note 185, at 13.
c. The interview should be conducted in a comfortable environment, and distractions and interruptions should be minimized.

An eyewitness who is comfortable and relaxed and is not distracted or interrupted is likely to recall more information about the crime.\(^{195}\)

d. The resources needed to conduct the interview (e.g., pens, notepad, video recorder) should be obtained prior to the interview so it does not have to be interrupted to get these items.

Interruptions interfere with the eyewitness’s ability to remember the crime.\(^{196}\)

e. The eyewitness interview should be videotaped.

Videotaping ensures that judges, attorneys, and jurors can evaluate the interview and that there is an accurate and complete record of the eyewitness testimony prior to his or her exposure to post-event information. It also allows the interviewer to focus on what the eyewitness is saying rather than on note taking.\(^{197}\) Finally, it provides the eyewitness with an effective way of refreshing his or recollection before testifying at trial.

2. Conducting the Interview

When conducting the interview, the interviewer should:

\(^{195}\) Id. Law enforcement rarely meets this guideline. Fisher, supra note 104, at 756. For example, patrol officers, who usually conduct the initial interview of eyewitnesses, do so under very poor conditions, such as “general confusion and background noise, high witness arousal, severe time pressure, etc. They are pressed by their supervisors to file their reports quickly, even if at the cost of diminished information.” Id.

\(^{196}\) NAT’L INST. OF JUSTICE, supra note 185, at 13.

\(^{197}\) Id. at 21; see also Fisher, supra note 104, at 745 (stating that videotaping a witness’s response minimizes “information-overload”). Unfortunately, law enforcement does not generally record eyewitness interviews. See Fisher, supra note 104, at 755 (“The value of tape recording interviews is obvious in terms of exposing police errors. One ought to be able to uncover, at least in theory, whether an item of knowledge was ‘constructed’ by the interview process or whether it was based on the witness’s earlier perception of the original event.”). Sometimes, however, the characteristics of the ideal eyewitness interview conflict with one another, or may need to yield to more compelling considerations. Take the frequent circumstance where a police officer interviews an eyewitness or victim at the crime scene only minutes after the crime. Time is of the essence: the quicker the officer can obtain a description of the perpetrator, the quicker the police can begin searching for the perpetrator, hopefully before he or she has gotten too far from the crime scene. At-the-scene interviewing minimizes the time between the crime and the interview, but may make it impractical for the officer to learn anything about the crime prior to the interview, or to transport the eyewitness to a comfortable environment, or to videotape the interview. The situation may be even more exigent if the interview must be conducted while the eyewitness is receiving medical treatment, or the eyewitness is about to be taken to the hospital.
a. Establish and maintain rapport with the eyewitness and minimize his or her anxiety.

Relaxed eyewitnesses provide more information and eyewitnesses are often traumatized by the crimes they witnessed.\footnote{See NAT’L INST. OF JUSTICE, supra note 185, at 14 ("The development of rapport between the witness and interviewer will make the witness more comfortable during the interview process. Comfortable witnesses will generally provide more information."); Wells et al., Eyewitness Evidence, supra note 13, at 56. Police officers often have difficulty establishing rapport with eyewitnesses. See Fisher, supra note 104, at 755. Fisher notes that "I have found in the various interviewing workshops I have conducted that women were generally more effective interviewers than men." Id. at 756.}

b. Inquire about the eyewitness’s condition.

This question helps build rapport and alerts the interviewer to any condition that might impair the eyewitness’s ability to remember the crime (e.g., intoxication, shock, drugs).\footnote{Id. at 16.}

c. Instruct the eyewitness to: (1) volunteer information;\footnote{Id. at 20; Wells et al., Eyewitness Evidence, supra note 13, at 57.} (2) report all details they remember about the crime even if the information seems trivial and unimportant;\footnote{Fisher, supra note 104, at 747; Fisher & Schreiber, supra note 143, at 62.} and (3) inform the eyewitness about the type and degree of detail of information the interviewer needs.\footnote{Id.}

These rules encourage the eyewitness to be active during the interview. This is vital because it is the eyewitness, not the interviewer, who has information about the crime, and unprompted information tends to be more accurate than information given in response to questions.\footnote{Fisher & Schreiber propose: Interviewers can induce witnesses to take more active roles and to volunteer information by (a) explicitly requesting them to do so, (b) asking open-ended questions, (c) not interrupting witnesses during their narrative responses, and (d) constructing the social dynamic so that witnesses perceive themselves to be the experts and therefore the dominant person in the conversation. This last point is especially important when children are being interviewed. See Fisher & Schreiber, supra note 143, at 61.}

These instructions also increase the likelihood that the eyewitness will not withhold any information about the crime and understands the kinds of information and the degree of detail that the interviewer needs.\footnote{NAT’L INST. OF JUSTICE, supra note 185, at 19.}

d. Ask the eyewitness to mentally recreate the crime.

This can be done by asking the eyewitness to think about his
or her thoughts and feelings during the crime. By mentally recreating the crime, the eyewitness will be able to recall more information about the crime.

e. Use primarily open-ended questions during the interview (e.g., What did the perpetrator look like?).

Open-ended questions give the eyewitness control of the interview. They also furnish the eyewitness with his or her best chance to fully disclose the details of a crime. In addition, responses to open-ended questions tend to be more accurate than responses to other types of questions and promote more attentive listening by the interviewer.

f. Ask close-ended questions only when they are needed to augment open-ended questions (e.g., What color was the perpetrator’s hair?).

Open-ended questions are preferable because close-ended questions limit the amount and scope of the information obtained from the eyewitness. Nonetheless, close-ended questions are appropriate when the eyewitness has not disclosed important information in his or her responses to open-ended questions.

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205 Id. at 20. Wells suggests that an officer can have an eyewitness mentally recreate the crime by: “asking them to form an image or impression of the environmental aspects of the original scene (e.g., the location of objects in a room); to comment on any emotional reactions and feelings (e.g., surprise, anger) at the time; and to describe any sounds, smells, and physical conditions (e.g., hot, humid, smoky) that were present.” Wells et al., Eyewitness Evidence, supra note 13, at 57.

206 Fisher & Schreiber, supra note 143, at 59; NAT’L INST. OF JUSTICE, supra note 185, at 20.

207 See NAT’L INST. OF JUSTICE, supra note 185, at 11 (“An open-ended question allows for an unlimited response from the witness in his/her own words (e.g., ‘What can you tell me about the perpetrator?’ or ‘Tell me in your own words what happened’.”).

208 Id.; Wise et al., Tripartite Solution, supra note 19, at 843.

209 NAT’L INST. OF JUSTICE, supra note 185, at 11.

210 Id.

211 Id. The National Institute of Justice’s Training Manual indicated that [a]lthough it is preferable to use open-ended questioning, the investigator should follow with more directed questions if the witness is unresponsive to open-ended questions or provides imprecise responses. If, for example, when answering an open-ended question, the witness states that the perpetrator was dressed in ‘shabby’ clothing, the investigator should ask the witness to elaborate on the type of clothing (e.g., “What do you mean by ‘shabby’?”).

212 Id.; Wells et al., Eyewitness Evidence, supra note 13, at 57.

211 NAT’L INST. OF JUSTICE, supra note 185, at 11. The National Institute of Justice’s Training Manual, however, suggests:

For each new topic of information being sought, the investigator should begin with open-ended questions and augment them with closed-ended questions if necessary. For example, if, after having elicited all information from the witness about the perpetrator, the next topic of information is the getaway car, the investigator should begin this line of inquiry with open-ended questions about the car.

Id.
g. Avoid interrupting the eyewitness.

Interruptions disrupt memory and discourage the eyewitness from volunteering information.213

h. Allow for pauses when an eyewitness stops talking and before asking the next question.

This ensures that the eyewitness has completed his or her response.214

i. Tailor questions to the eyewitness’s narrative rather than asking a standard set of questions.

Each eyewitness’s mental representation of a crime is unique; therefore, the interviewer’s questions should correspond to the eyewitness’s memory of the crime.215 For example, if the eyewitness is describing the perpetrator’s car, the interviewer should not be asking questions about the perpetrator’s appearance.216

j. Encourage nonverbal communications from the eyewitness such as drawings and gestures, especially from children eyewitnesses or eyewitnesses who are not fluent in English.217

Some information is difficult to express verbally and some aspects of events are expressed better nonverbally. Moreover, some eyewitnesses have limited verbal skills.

k. Ask the eyewitness, “Is there anything else I should have asked you?”

This question helps insure that the eyewitness has disclosed all the information he or she knows about the crime.218

3. Concluding the Interview

a. The eyewitness should be encouraged to contact the
interviewer if he or she remembers additional facts about
the crime.

Eyewitnesses frequently recall additional facts about the
crime after the interview is over.\footnote{Id. at 20; Fisher & Schreiber, supra note 143, at 63.}

b. The interviewer should review written documentation
with the eyewitness and ask the eyewitness if there is
anything he or she wishes to change, add, or emphasize.

Doing this helps insure that the information has been
accurately recorded and allows the eyewitness to recall more
information about the crime.\footnote{Id.; Fisher & Schreiber, supra note 143, at 60.}

c. Thank the eyewitness for his or her time and
cooperation.

Expressing gratitude to the eyewitness strengthens rapport with
the eyewitness and encourages future cooperation.\footnote{Id.; Fisher & Schreiber, supra note 143, at 60.}

B. “Contamination” of the Eyewitness’s Memory

To prevent contaminating the eyewitness’s memory and to assess
whether the eyewitness’s memory has been contaminated, the interviewer
should (See Table 1, Step 1.B.2.):

1. Separate the eyewitnesses and tell them not to discuss
the details of the crime with other eyewitnesses\footnote{NAT’L INST. OF JUSTICE, supra note 185, at 21. Fisher and Schreiber suggest that “[t]he
interviewer should also point out in a nonchallenging way any ambiguities or contradictory statements
within the witness’s statement and ask the witness to clarify these matters, even if that means indicating
that the witness is not certain about the matter.” Fisher & Schreiber, supra note 143, at 63.}

If an eyewitness hears another eyewitness’s or the media’s
account of the crime, this could alter the first eyewitness’s
memory of the crime and create a false consensus among the
eyewitnesses about details of the crime.\footnote{NAT’L INST. OF JUSTICE, supra note 185, at 12.}

2. Determine if an eyewitness has spoken to another
eyewitness or anyone else about the crime or been
exposed to media accounts of the crime.

Exposure to these sources could mean that the eyewitness’s
memory of the crime has been altered by post-event
ACCURACY OF EYEWITNESS TESTIMONY

3. Ascertain the nature of the eyewitness’s prior law enforcement contact related to the crime being investigated. This includes any prior interviews by law enforcement or participation in any type of identification procedure.

This information puts the eyewitness’s information into context and allows the interviewer to determine if post-event information or a biased identification procedure contaminated the eyewitness’s memory of the crime.\textsuperscript{226}

4. Avoid volunteering any information about the perpetrator or the crime.

Doing so could alter the eyewitness’s memory about the crime.\textsuperscript{227}

5. Tell the eyewitness not to guess and to indicate if he or she feels any uncertainty about an answer.

Guessing can alter the eyewitness’s memory.\textsuperscript{228}

6. Refrain from (a) using suggestive or leading questions (e.g., “Was the car red?”);\textsuperscript{229} (b) disclosing information to the eyewitness about the crime the interviewer learned from other sources; or (c) using multiple choice questions.

All these responses supply post-event information to an eyewitness, which can alter an eyewitness’s memory of the crime. Moreover, post-event information not only affects an

\textsuperscript{225}Id. If two or more eyewitnesses are victimized by or observe a crime, it is understandable that they may discuss what happened while waiting for the police to arrive. Clearly no blame should be placed on the police for what the eyewitnesses did before the police had an opportunity to intervene; nor can any blame be assigned to the eyewitnesses, who do not know that discussing the matter with each other may contaminate their memories of what happened. Thus, the occurrence of such a discussion prior to the first police interview cannot by itself mandate suppression of eyewitness testimony; but it is a factor for the judge to consider, in making an overall assessment of the accuracy and reliability of their testimony. Moreover, if the eyewitnesses make an in-court identification at trial, defense counsel should be permitted to elicit that the eyewitnesses had discussed the facts among themselves, and to elicit expert testimony about the resultant risk of contamination and inaccuracy.

\textsuperscript{226}Id. at 14; see also Brigham et al., supra note 90, at 14 (discussing how “witnesses are highly susceptible to suggestions regarding their memory for the previously viewed event”); Shaw & McClure, supra note 118, at 647 (discussing how repeated questioning of an eyewitness can increase the risk of contaminating the eyewitness’s memory); Gary L. Wells & Amy L. Bradfield, Distortions in Eyewitnesses’ Recollections: Can the Postidentification-Feedback Effect Be Moderated?, 10 PSYCHOL. SCI. 138, 138 (1999).

\textsuperscript{227}NAT’L INST. OF JUSTICE, supra note 185, at 23; Fisher & Schreiber, supra note 143, at 60.

\textsuperscript{228}NAT’L INST. OF JUSTICE, supra note 185, at 13, at 57.

\textsuperscript{229}NAT’L INST. OF JUSTICE, supra note 185, at 11.
eyewitness’s memory of the crime, but it can also impair an eyewitness’s ability to recognize the perpetrator of the crime.  

C. Eyewitness Confidence

To prevent increasing the confidence of the eyewitness and to determine if it has been artificially increased, the interviewer should (See Table 1, Step 1.C.):

1. Use the cognitive interview.

It minimizes the probability that the interviewer will increase the eyewitness’s confidence.  

2. Avoid disclosing to the eyewitness: (a) that another eyewitness has identified the same suspect; (b) what another eyewitness said about the crime or the perpetrator; or (c) that there is other evidence that confirms the eyewitness’s testimony or identification. All these factors artificially increase eyewitness confidence.  

3. Determine if the eyewitness had contact with other eyewitnesses, the media, or other law enforcement officers and the nature of that contact to assess whether it has increased the eyewitness’s confidence (e.g., the eyewitness has been told that another eyewitness also identified the suspect).  

4. Avoid giving the eyewitness any type of confirming feedback (e.g., “Good, you have identified the suspect”) or exposing the eyewitness to unnecessary, repeated questioning.

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230 Id. at 23; see also Wise et al., Tripartite Solution, supra note 19, at 846 (“Law officers can convey post-event information to eyewitnesses in a variety of ways, from overtly volunteering information to the eyewitness, to asking leading questions, to encouraging guessing by the eyewitness, to offering confirming feedback.” (footnotes omitted)).


233 Nat’l Inst. of Justice, supra note 185, at 12 (“Media information may contaminate the witness’s memory. Media requests for a story or offers of compensation may encourage a witness to fabricate information. . . . Witnesses should not hear others’ accounts because they may be influenced by that information.”).
These factors significantly increase eyewitness confidence.\(^{234}\)

5. **Take a statement of the eyewitness’s confidence in the accuracy of his or her identification of the suspect as the perpetrator of the crime immediately after the identification procedure and prior to the eyewitness receiving any feedback about his or her identification.**\(^{235}\)

Eyewitness confidence is highly malleable; therefore, a statement of the eyewitness confidence should be taken immediately after the identification.\(^{236}\)

This guideline recognizes that at some point the eyewitness is likely to receive positive or confirming feedback.\(^{237}\) Indeed, law enforcement officials may have legitimate reasons for providing such feedback to the eyewitness.\(^{238}\)

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\(^{235}\) Wells et al., *Eyewitness Identification Procedures, supra* note 12, at 635. The authors support this suggestion, stating:

This recommendation is based on the observation that confidence statements from eyewitnesses can be affected dramatically by events occurring after the identification (postidentification events) that have nothing to do with the witness’s memory. As noted earlier, the confidence that an eyewitness expresses in his or her identification during testimony is the most powerful single determinant of whether or not observers will believe the eyewitness made an accurate identification. By recording the eyewitness’s confidence at the time of the identification, postidentification factors (which have little to do with the witness’s memory) will not yet have influenced the confidence judgment. If the confidence that an eyewitness expresses at trial is noticeably higher than it was at the time of the identification, then fact finders should consider the possibility that this inflation of confidence came from sources other than the goodness of the eyewitness’s memory. *Id.*; see also Wise et al., *Tripartite Solution, supra* note 19, at 864.

\(^{236}\) Leippe & Eisenstadt, *supra* note 117, at 417; Wells et al., *From the Lab, supra* note 15, at 586; see also *supra* Part III.F. (discussing eyewitnesses’ tendency to be overconfident in the accuracy of their identifications and the malleability of eyewitness confidence); WEITEN, *supra* note 14, at 230–31.

\(^{237}\) The eyewitness learning that the person he or she identified was subsequently indicted is likely to boost the eyewitness’s confidence that he or she picked out the “right” person. If the eyewitness learns that the defendant is also charged with committing other, similar crimes (a fact that is accessible to the public at large), this, too, will boost his or her confidence.

concerns underscore the importance of asking the eyewitness to estimate his or her degree of certainty immediately after the eyewitness’s identification of the defendant (and videorecording that statement), as a check against a subsequent increase in the eyewitness’s confidence from outside sources. If an eyewitness’s confidence in the accuracy of the identification increases by the time of trial, the judge should permit the defense attorney to use the eyewitness’s earlier statement of confidence to impeach the eyewitness’s current statement of confidence.\textsuperscript{239} Moreover, the trial judge should consider permitting expert testimony that explains how an eyewitness’s confidence can increase over time, and why this does not indicate that the identification is correct.\textsuperscript{240}

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\textbf{TABLE 2:} \\
\textbf{SCIENTIFIC GUIDELINES FOR FAIR AND IMPARTIAL IDENTIFICATION PROCEDURES} \\
\hline
1. Whenever possible, law enforcement should use photo arrays and lineups only when there is probable cause to believe the suspect committed the crime. \\
2. Before conducting an identification procedure, it should be determined whether the eyewitness has previously seen the suspect. \\
3. Only one suspect should be included in every identification procedure. \\
4. The number of lineup participants should be increased. \\
5. The suspect should not stand out from the foils. \\
6. Law enforcement should use sequential identification procedures. \\
7. The lineup administrator should not know the identity of the suspect. \\
8. Eyewitnesses should be given cautionary instructions. \\
\hline
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\caption{Scientific Guidelines for Fair and Impartial Identification Procedures}
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feelings might dictate that he or she be provided at least some additional information about the case; law enforcement officials may have a legitimate concern that the failure to do so might so offend the victim or eyewitness that he or she will refuse to subject him or herself to the ordeal of reliving the crime in the courtroom and, in particular, cross-examination that may prove upsetting or embarrassing.\textsuperscript{239} Where a prior statement by an eyewitness is inconsistent with that eyewitness’s testimony at trial, the prior statement should be admitted to impeach the testimony. See, e.g., FED. R. EVID. 613(b); CLIFFORD S. FISHMAN, 4 JONES ON EVIDENCE § 26:2 (7th ed. 2000). A complete, 180-degree contradiction is not required; it suffices that the prior statement leaves a significantly different impression than the testimony being impeached. Id. § 26:15. To preclude a defendant from bringing out such inconsistencies can constitute a violation of the right, guaranteed by the Sixth Amendment to confront and cross-examine witnesses. See Pennsylvania v. Ritchie, 480 U.S. 39, 51 (1987).\textsuperscript{240} See supra Part II.D. (discussing expert testimony concerning eyewitness identification).
9. All identification procedures should be videotaped.

10. An eyewitness should make a clear statement of his or her confidence at the time of the identification and prior to receiving any feedback.

11. Once a mistake is made in an identification procedure, it cannot be corrected.

VII. GUIDELINES FOR EVALUATING THE FAIRNESS OF IDENTIFICATION PROCEDURES

The following eleven guidelines, derived from scientific studies of identification procedures, can be used to objectively evaluate whether a photo array or lineup was conducted in a fair and unbiased manner. For detailed guidelines on the proper use of mug books, composite images, and showups, consult the National Institute of Justice’s Training Manual. The guidelines for conducting fair and unbiased photo arrays and lineups are in bold and a brief rationale for each guideline is included.

1. Whenever possible, law enforcement should use a lineup or photo array only when there is probable cause to believe the suspect committed the crime.

Most erroneous eyewitness identifications result from identification procedures that do not include the perpetrator of the crime. If law enforcement conducts photo arrays and lineups only when probable cause exists that the suspect committed the crime, the number of perpetrator-absent lineups and photo arrays, and therefore the number of erroneous identifications of an innocent suspect, will be significantly reduced.

“Probable cause” is the quantum of suspicion that is required before the police may lawfully arrest someone and...
Thus, if the suspect has already been lawfully arrested for the crime in question, the probable cause standard suggested here imposes no burdens or restrictions on law enforcement. When police, however, believe that a suspect committed the crime, but lack sufficient evidence to establish probable cause, including such a suspect in a photo array or lineup can be a highly

246 See Maryland v. Pringle, 540 U.S. 366, 369–70 (2003). Although the term is codified in the Fourth Amendment (“[A]nd no Warrants shall issue, but upon probable cause . . . .”) and has been the subject of countless court decisions since the ratification of the Amendment, no clear definition of it exists. The Supreme Court has observed that “[t]he probable-cause standard is incapable of precise definition or quantification into percentages because it deals with probabilities and depends on the totality of the circumstances.” Id. at 371; see also Illinois v. Gates, 462 U.S. 213, 231 (1983); Brinegar v. United States, 338 U.S. 160, 175 (1949). Moreover, “‘the quanta . . . of proof’ appropriate in ordinary judicial proceedings are inapplicable to” determinations of probable cause. Gates, 462 U.S. at 235 (citation omitted). Thus, “[t]he substance of all the definitions of probable cause is a reasonable ground for belief of guilt.” Pringle, 540 U.S. at 371 (citation omitted). A search or seizure of a person “must be supported by probable cause particularized with respect to that person.” Id. (citing Ybarra v. Illinois, 444 U.S. 85, 91 (1979)).

247 Not only is a photo array much easier to arrange than a lineup, but law enforcement officials may also conduct photo arrays before or after arraignment without first obtaining judicial authorization, and without notice to the suspect or his attorney. See United States v. Ash, 413 U.S. 300, 318–21 (1973); supra notes 35–36 and accompanying text.

248 This is appropriate when:

(1) A suspect could voluntarily participate in a lineup.

(2) Where the suspect is already in custody on other charges, at least one court has held that he can be forced to participate in a lineup regarding additional crimes if the police have at least a “reasonable suspicion” that he is guilty of those crimes. United States v. Allen, 408 F.2d 1287, 1288–89 (D.C. Cir. 1969). “Reasonable suspicion” requires less evidence or information than probable cause, and permits only temporary detention and, sometimes a frisk, rather than a custodial arrest and full search. See Terry v. Ohio, 392 U.S. 1, 9–11 (1968). Reasonable suspicion exists, the Court has held, when “the detaining officers have a particularized and objective basis for suspecting the particular person . . . of criminal activity.” United States v. Cortez, 449 U.S. 411, 417–18 (1981). For a detailed discussion of the difficulties in defining or distinguishing probable cause and reasonable suspicion, see WAYNE R. LAFAVE, 4 SEARCH AND SEIZURE 470–77, § 9.5(a) (4th ed. 2004).

(3) At least one court permitted police to compel such a suspect to participate in other-crime lineups without first showing either probable cause or reasonable suspicion as to the other crimes. See State v. Wilks, 358 N.W.2d 273, 277–78 (Wis. 1984).

(4) A prosecutor might persuasively argue by analogy to other Supreme Court decisions upholding grand jury subpoenas (for which no preliminary showing of reasonableness is needed) compelling a suspect to provide a handwriting exemplar or a voice exemplar. See United States v. Mara, 410 U.S. 19, 22 (1973); United States v. Diomisio, 410 U.S. 1, 13–14 (1973); see also Hayes v. Florida, 470 U.S. 811, 816–17 (1985) (suggesting that a court might have authority to order a suspect to submit to being fingerprinted where the police have shown “reasonable suspicion” that he is the culprit). Placing a suspect in a lineup without probable cause, however, probably does not occur very often. The police may not know where the suspect is, or may not want to alert him or her that he or she is a suspect. Moreover, conducting a lineup requires far more preparation than showing an eyewitness a series of photographs, and may be more intimidating to the eyewitness.
useful step in acquiring sufficient evidence to establish probable cause. Thus a conflict often arises between legitimate investigative concerns, on the one hand, and the need to safeguard against an increased risk of erroneous identifications, on the other.

A variety of solutions exist to this dilemma. Sometimes it is practical to postpone a photo array or lineup while the police investigate further.\(^{249}\) Where there are several eyewitnesses to a crime, police might show a photo array to one eyewitness; if he or she identifies the defendant as the perpetrator, the identification establishes probable cause, which justifies an arrest and, thereafter, a lineup at which other eyewitnesses will (hopefully) identify the defendant as well.\(^{250}\)

Where a pre-probable cause lineup is necessary, the risk of an erroneous identification can be reduced if the police scrupulously follow the guidelines set forth in this Article: a sequential lineup, conducted by an officer who does not know the identity of the suspect, with at least twelve participants, preceded by appropriate cautionary instructions, and so on. Similarly, if police need an eyewitness to attempt a pre-probable cause photo identification, using a photo array has the same shortcomings as a lineup. It should be permissible, however, to ask the eyewitness to look at a large collection of photos or mug-shots, if they are presented in a fair and unbiased manner, and the eyewitness is warned that the perpetrator’s picture may not be among them.\(^{251}\) Doing so would reduce, though not eliminate, the risk that the eyewitness will select the suspect’s photo merely because, of the photos shown, his photo most closely resembles the perpetrator.\(^{252}\) If these procedures are followed, a court

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\(^{249}\) If the suspect is already incarcerated on other charges, for example, there may be little concern that he or she will commit additional crimes before an arrest is made in the pending investigation.

\(^{250}\) The second eyewitness’s identification of the defendant would circumstantially corroborate the reliability of the first eyewitness’s identification at the pre-probable cause photo array, thereby giving assurance of its reliability—provided, of course, that both the photo array and the lineup were fair and unbiased.

\(^{251}\) Nat’l Inst. of Justice, supra note 185, at 29–35 (describing the procedures that should be used when the police show mug-shots to eyewitnesses).

\(^{252}\) At least one scholar urges that an eyewitness who police use to generate leads in a case should not be permitted to make an identification at trial. See Penrod, supra note 245. The reasons for this assertion are that once an eyewitness identifies someone as the perpetrator, it is very unlikely that the eyewitness will change his or her mind because of the commitment effect and the reconstructive nature of memory. Accordingly, if the police place a suspect in a lineup based only on a hunch, there is a much greater chance that they are conducting a culprit-absent lineup, and if the eyewitness chooses the
should have fewer qualms about allowing that eyewitness to make an in-court identification at trial.

2. Before conducting an identification procedure, it should be determined whether the eyewitness has previously seen the suspect before or after the crime.  

Studies strongly indicate that if an eyewitness has previously seen the suspect, such as in a mug-shot, this substantially increases the probability that the eyewitness will select the suspect in a subsequent identification procedure even if the suspect is innocent.

3. Only one suspect should be included in every identification procedure.

Studies show that including more than one suspect in an identification procedure increases the probability that an erroneous eyewitness identification will occur. This increased error rate occurs because multiple suspects decrease the number of fillers (i.e., known innocent participants) and increase the frequency with which an eyewitness will select someone whom the police think is suspect, it is unlikely the eyewitness will later change his or her mind. See Nat'l Inst. of Justice, supra note 185, at 25-30 (stating procedures that should be followed for mug books).

Wise et al., Tripartite Solution, supra note 19, at 857.

See Evan Brown et al., Memory for Faces and the Circumstances of Encounter, 62 J. Applied Psychol. 311, 311–18 (1977) (discussing the results of three experiments showing that people are much better at recognizing a face than remembering where they saw the face, and that this tendency makes it more likely for eyewitnesses to identify an innocent suspect as the perpetrator if the eyewitness has previously seen the innocent suspect's mug-shot); Koehnken et al., supra note 130, at 217 (“Research shows that identification errors may increase from previous exposure to a photograph of the suspect... Once a witness comes to a decision and expresses it, he or she may feel committed and may be less willing to change the decision later.”).

Nat'l Inst. of Justice, supra note 185, at 35 (“In multiple-suspect lineups, the probability of a possible mistaken identification rises as the number of suspects in a lineup increases.”). Wise et al. also advocate for this procedure, stating:

Many lineups in the United States contain more than one suspect, even when there is only one perpetrator who committed the crime. Research has shown that the use of multiple suspects in identification procedures significantly increases the risk of erroneous identifications. This increased risk occurs because multiple suspects decrease the proportion of fillers in the lineup and increase the number of correct responses. Putting more than one suspect in a lineup significantly increases the probability that an eyewitness will choose an innocent suspect.

Wise et al., Tripartite Solution, supra note 19, at 857–58 (footnotes omitted).

Wells et al., From the Lab, supra note 15, at 593; see also R. C. L. Lindsay & Gary L. Wells, Improving Eyewitness Identifications from Lineups: Simultaneous Versus Sequential Lineup Presentation, 70 J. Applied Psychol. 556, 557 (1985).

A lineup or photo array contains a suspect and several known innocent individuals. Wells et al., From the Lab, supra note 15, at 584. The innocent members of an identification procedure are referred to either as distractors, foils, or fillers. Id. at 584–85. The term “fillers” is used in this Article because it is the term that is most commonly used by law enforcement. Id.
guilty.\textsuperscript{258}

4. **The number of lineup participants should be increased in identification procedures.**\textsuperscript{259}

In the United States, the typical photo array or lineup contains five or six members.\textsuperscript{260} Even if a five or six person identification procedure is conducted in a manner that is completely fair and unbiased, studies show that the chances of an erroneous eyewitness identification is still substantial.\textsuperscript{261} Studies also indicate that increasing lineup size from six to twelve members in the United States could reduce false identifications by fifty percent without a significant drop in accurate identifications.\textsuperscript{262}

5. **The suspect in an identification procedure should not**

\textsuperscript{258} *Id.* In other words, in the typical six-person lineup, if you have two suspects, you have decreased the number of foils from five to four and have increased the number of “correct” choices (i.e., the two suspects) from one to two, thereby substantially increasing the risk of an erroneous identification.

\textsuperscript{259} Taslitz argues:

Lineups and photo spreads should also use a sufficient number of foils to reasonably reduce the risk of an eyewitness selecting a suspect by guessing rather than by recognition. The reason for this is straightforward. If there are six lineup participants, none of whom is guilty, there is a one-in-six chance that a guessing eyewitness will wrongly select the suspect. If there is a 10-person lineup, the risk of a mistake falls to one in ten. There is no indisputable basis for selecting one number over another. What is clear is that bigger is better. Researchers in the area have roundly condemned the six-person lineup common in the United States, recommending a 10-person size. The United Kingdom’s standard is a nine-person lineup, a size that has not proven impracticable for the police to achieve. The same principle applies to photo spreads, and the ABA policy does not make any recommendation preferring lineups over photo spreads or vice-versa.

Taslitz, *supra* note 234, at 21 (internal citations omitted); see also Wise et al., *Tripartite Solution, supra* note 19, at 858.

\textsuperscript{260} Avraham M. Levi & R. C. L. Lindsay, *Lineup and Photo Spread Procedures: Issues Concerning Policy Recommendations, 7 Psychol. Pub. Pol'y & L.* 776, 787 (2001); Wells et al., *Eyewitness Evidence, supra* note 13, at 62; see also Roy S. Malpass, *Eyewitness Identification Research Laboratory, Univ. of Tex. at El Paso, A Lineup Evaluation "Do-It-Yourself Kit" for Attorneys and Law Enforcement 4–5, available at http://eyewitness.utep.edu/Documents/DIY%20Kit.pdf.* Malpass sets forth a mathematical formula for evaluating the functional size of a lineup (i.e., if certain fillers fail to draw or draw too few choices from mock witnesses or certain fillers draw too many choices from mock witnesses). *Id.*

\textsuperscript{261} Levi & Lindsay, *supra* note 260, at 787.

\textsuperscript{262} See Wells et al., *Eyewitness Evidence, supra* note 13, at 62 ("Thus, adding six additional members to a six-person lineup reduces the chances of mistaken identification from 16.7\% to 8.3\% (i.e., among those making an identification."); *see also* Levi & Lindsay, *supra* note 260, at 787 (arguing that the use of nine- or ten-person lineups in England and twelve in Canada suggests that the use of larger lineups will not inhibit identifications: “Available research evidence shows no decline in correct identification from simultaneous lineups of at least 20 persons. Mug shot research suggests that even larger lineups may not compromise correct identification rates.” (internal citations omitted)); Wells et al., *Eyewitness Evidence, supra* note 13, at 63 (finding that eyewitnesses could view over 300 photos without a drop in the number of accurate identification and arguing that an increase in lineup size could play an important role in reducing eyewitness error).
stand out from the foils.\textsuperscript{263}

If a suspect stands out from the foils in an identification procedure, it cannot be reliably determined if the eyewitness's identification of the suspect is due to the eyewitness's memory or the manner in which the lineup was conducted.\textsuperscript{264} When this occurs, it may substantially diminish or even eliminate the validity of the identification as evidence of the defendant's guilt.\textsuperscript{265} There are several procedures that are necessary to prevent this type of error. First, the foils should generally match the eyewitness's description of the perpetrator of the crime.\textsuperscript{266} Second, suspects should be placed in different positions in each lineup by having the suspect's position in the lineup randomly determined.\textsuperscript{267} Random positioning of the suspect rather than placing a suspect always in the same position prevents a suspect's position in an identification procedure from becoming common knowledge among law enforcement and

\begin{itemize}
  \item Wise et al., Tripartite Solution, supra note 19, at 859 ("Likewise, in an identification procedure where the suspect stands out, it cannot be determined if the eyewitness selected the suspect because he or she recognized the suspect as the perpetrator of the crime, or because of the biasing effect of the fillers in the identification procedure.").
  \item Wells et al., Eyewitness Evidence, supra note 13, at 63; see also MALPASS, supra note 260, at 2 (delineating a mathematical test for evaluating lineup bias produced by filler selection).
  \item The National Institute of Justice's Training Manual states that police should:
    Select fillers who generally fit the witness's description of the perpetrator. When there is a limited/inadequate description of the perpetrator provided by the witness, or when the description of the perpetrator differs significantly from the appearance of the suspect, fillers should resemble the suspect in significant features.
    This does not mean that the fillers must closely resemble the suspect. If the description does not fit the suspect on some characteristic (e.g., the witness described dark hair, yet the suspect has light hair), then the fillers should match the suspect on that characteristic rather than matching the description on that characteristic so that the suspect does not stand out.
    NAT'L INST. OF JUSTICE, supra note 185, at 36; Wells et al., Eyewitness Evidence, supra note 13, at 62 ("The general recommendation for selecting fillers for lineups has been to use the eyewitness's description of the target and take any additional measures needed to make sure that the suspect does not stand out in the lineup."). For detailed procedures in selecting fillers when the suspect does not match the eyewitness's description, the suspect has unique non-described features, the suspect has common non-described features, the eyewitness description of the perpetrator is unique, or there is more than one eyewitness, see Wells et al., Eyewitness Identification Procedures, supra note 12, at 632-34.
  \item NAT'L INST. OF JUSTICE, supra note 185, at 36 ("If specific investigators consistently choose the same lineup location for the suspect, this can become common knowledge among both law enforcement officers and the general public. This could lead a witness to pick the person in that position for reasons other than recognizing the suspect."); see also Wogalter et al., supra note 179, at 72 ("Most officers report that they usually place the suspect in the middle of both live (87%) and photographic lineups (81%) as opposed to the beginning (left) and end (right) positions, but approximately one-half (47%) of those who construct live lineups said that they allow suspects to choose their location.").
\end{itemize}
ACCURACY OF EYEWITNESS TESTIMONY

the general public. Third, fillers should not be reused with the same eyewitness. When the same fillers are used with a new suspect they make the suspect stand out because the suspect is the only person not appearing in a previous identification procedure. Finally, the manner in which the lineup is conducted should not draw the eyewitness’s attention to the suspect.

6. Law enforcement should use sequential identification procedures.

In a simultaneous lineup, an eyewitness views all participants in the lineup at the same time. In a sequential lineup, members are presented individually to the eyewitness. Each lineup participant in a sequential lineup is shown only once, and the eyewitness must decide before seeing the next lineup participant if he or she is the perpetrator. Furthermore, the eyewitness is not told how many participants there are in the lineup. Compared to simultaneous lineups, sequential lineups reduce eyewitness error because they tend to force an eyewitness to make an absolute rather than a relative judgment when making an identification.

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268 NAT’L INST. OF JUSTICE, supra note 185, at 36.
269 Id. at 36–37 (“Using the same fillers with a new suspect can make the suspect stand out as the only one not appearing in a previous lineup. This could be considered a suggestive procedure. Also, the witness might recognize one of the fillers (from seeing him/her in a previous lineup) and misidentify the filler as the perpetrator.”).
270 Id.
271 COSTANZO, supra note 1, at 185. For example, the suspect should not be the only lineup member to repeat what the perpetrator said during the crime. See Koehnken et al., supra note 130, at 211 (explaining how other biased conditions of a lineup could make the suspect stand out from the foils, for example, if the suspect was the only one wearing handcuffs).
272 Wise et al., Tripartite Solution, supra note 19, at 860.
273 Wells et al., Eyewitness Evidence, supra note 13, at 63.
274 Id.
275 Id.
276 Id.; see also Stinson et al., supra note 124, at 212 (explaining how a sequential lineup is conducted).
277 Wells et al., From the Lab, supra note 15, at 586; NAT’L INST. OF JUSTICE, supra note 185, at 44. The State of New Jersey requires sequential lineups, and a New York court ordered a double-blind sequential lineup in at least one case. Headley, supra note 183, at 699–700. Moreover:

New Jersey’s reforms have influenced other states to examine the possibility of adopting similar lineup protocols. In 2002, Illinois Governor George H. Ryan’s Commission on Capital Punishment, charged with ensuring the accuracy and justness of capital punishment in Illinois, recommended the implementation of eyewitness identification reforms. The North Carolina Actual Innocence Commission created a series of recommendations in 2003 for state law enforcement officers, including a comprehensive lineup protocol. In early 2005, the Avery Task Force made similar recommendations for the Wisconsin criminal justice system. The Virginia General Assembly also instructed the Virginia State Crime
judgment, the eyewitness identifies the suspect because his or her appearance matches the eyewitness's memory of the perpetrator of the crime and not because the suspect most closely resembles the perpetrator. Although one study, conducted in Illinois, suggested that sequential identification procedures were of dubious value, the results of that study are flawed because of a design defect: double blind lineups were used only for the sequential lineups and not for simultaneous lineups.

Commission to create guidelines for improving lineup procedures in the commonwealth.

Klobuchar et al., supra note 183, at 386–87 (footnotes omitted).

Wells et al., Eyewitness Identification Procedures, supra note 12, at 613–14 (“Under [simultaneous lineup] conditions, the relative judgment process will nevertheless yield a positive identification because there will always be someone who looks more like the culprit than do the remaining lineup members. The problem... therefore, is that it includes no mechanism for deciding that the culprit is none of the people in the lineup.”); Wells et al., Eyewitness Evidence, supra note 13, at 61.

In a recent study, conducted on behalf of the State of Illinois, however, Sheri H. Mecklenburg found that the use of sequential lineups did not reduce erroneous identifications. SHERI H. MECKLENBURG, REPORT TO THE LEGISLATURE OF THE STATE OF ILLINOIS: THE ILLINOIS PILOT PROGRAM ON SEQUENTIAL DOUBLE-BLIND IDENTIFICATION PROCEDURES iv (2006), available at http://www.psychology.iastate.edu/FACULTY/gwells/IllinoisReport.pdf (“Surprisingly, the Illinois data did not bear out the research experiments that sequential, double-blind lineups produce a lower rate of known false identifications. Instead, the sequential, double-blind procedures resulted in an overall higher rate of known false identifications than did the simultaneous lineups.”). Gary L. Wells, a leading eyewitness researcher and a developer of the sequential lineup, pointed out an important design flaw in the Illinois study:

My main reaction to this report is disappointment and concern that the design of the study does not permit any clear conclusions. The reason that it does not permit clear conclusions is because the simultaneous lineups never used the double-blind procedure whereas the sequential lineups always used the double-blind procedure. This is extremely problematic because the failure to use double-blind procedures with the simultaneous lineups leaves open several “lineup-administrator influenced” means by which filler identifications could be suppressed and identifications of the suspect enhanced. These lineup-administrator influences were not available for the sequential because the sequential was conducted using double-blind procedures.


I was shocked when I learned of the failure of the study to include a double-blind control for the simultaneous lineups, a fact I learned only when I read the final report. Nancy Steblay clearly states that she too had no idea that this study would have this design flaw. I have asked Sherri [sic] Mecklenburg to correct this misperception, but no corrections have yet been made as far as I am aware.

Id. Nancy Steblay, another prominent eyewitness expert, states, "My primary concern with the Illinois report is that its conclusion appears to [have] ... minimal appreciation of the underlying reasons for these outcomes or the broader context of what is known about eyewitness fallibility." NANCY STEBLAY, OBSERVATIONS ON THE ILLINOIS LINEUP DATA 6 (May 3, 2006), available at http://web.augsburg.edu/~steblay/ObservationsOnTheIllinoisData.pdf. She also reports that "[Hennepin County]'s conclusion is that the blind-sequential procedure is working well in Minnesota. Acceptable suspect ID rates and lower filler rates suggest a protocol that will help to convict the guilty and protect the innocent." Id. at 7.

The experience of the pilot project [in Hennepin County] indicates that the double-
7. The lineup administrator should not know the identity of the suspect. 280

Scientific studies show that when the lineup administrator knows the suspect's identity in an identification procedure, he or she can intentionally or unintentionally cause the eyewitness to choose the suspect through verbal and non-verbal cues. 281 The eyewitness is generally unaware that the lineup administrator has influenced his or her identification of the suspect. 282

blind sequential protocol is workable for police in both large and small departments without undercutting the ability to solve cases. At the same time, the protocol elicits valuable new information for the effective investigation and prosecution of criminal cases.

Klobuchar et al., supra note 183, at 413. Commenting on the Mecklenburg Report and comments by Wells and Steblay, several prominent psychologists remarked:

If it is the case that the better outcome from the non-blind/simultaneous procedure is partly or entirely attributable to subtle, unintentional cues provided by the administrator, then the Illinois result may simply underscore that the present procedure produces a biased outcome that may ultimately result in the increased conviction of innocent individuals.

Daniel L. Schacter et al., Policy Forum: Studying Eyewitness Investigations in the Field, 32 L. & HUM. BEHAV. 1, 4 (2008). The State of Wisconsin also decided not to change its new eyewitness procedures in response to the Illinois report, stating that “the design of the program does not seem to support [the] inference or conclusion [that the higher rate of filler identification is due to the sequential procedure].” BUREAU OF TRAINING AND STANDARDS FOR CRIMINAL JUSTICE, WIS. DEP’T OF JUSTICE, RESPONSE TO CHICAGO REPORT ON EYEWITNESS IDENTIFICATION PROCEDURES 3–4 (2006), available at http://www.doj.state.wi.us/dles/tns/ILRptResponse.pdf. It further states that “the extensive prior laboratory research revealing that the double-blind and sequential procedures are superior remains the best scientific information available.” Id. at 4.

280 Wise et al., Tripartite Solution, supra note 19, at 862.

281 See Bradfield et al., supra note 12, at 112, 118 (“A lineup administrator who is invested in the outcome of a witness’s identification cannot be expected to have the same reaction (verbally or nonverbally) to a filler identification that he or she has to an identification of the suspect. Even if investigators are cautioned against giving feedback to eyewitnesses, involuntary reactions to a witness’s selection are difficult to conceal.”); Sarah M. Greathouse & Margaret Bull Kovera, Instruction Bias and Lineup Presentation Moderate the Effects of Administrator Knowledge on Eyewitness Identification, 33 L. & HUM. BEHAV. 70, 80 (2009) (advocating for a double-blind lineup procedure); Tsalitz, supra note 234, at 21; Wells et al., Eyewitness Evidence, supra note 118, at 63; see also Ryann M. Haw & Ronald P. Fisher, Effects of Administrator-Witness Contact on Eyewitness Identification Accuracy, 89 J. APPLIED PSYCHOL. 1106, 1106 (2004) (“Despite research findings showing its benefits, police are resistant to using double-blind testing because they perceive it as a loss of control and as a suggestion that they cannot conduct fair lineups.”). In a double-blind lineup, neither the eyewitness nor the lineup administrator knows the identity of the suspect. Bradfield et al., supra note 12, at 118. Double-blind lineups also preclude the eyewitness from looking to the lineup administrator for clues as to the identity of the suspect or for confirmation that the eyewitness has chosen the suspect. Id. Finally, they prevent the lineup administrator from artificially increasing the eyewitness’s confidence. Id.; see infra Part VII.8. (discussing that eyewitnesses should be given cautionary instructions).

282 See Haw & Fisher, supra note 281, at 1110 (“Witnesses were most confident when their lineup selection confirmed the administrator’s beliefs. Nevertheless, almost none of the witnesses (4.7%) or lineup administrators (0%) were aware of the lineup administrator’s influence.”); Wells & Bradfield, supra note 118, at 374 (“These data suggest that the eyewitness who is asked at trial whether the comments of a lineup agent is influencing the way they are answering the questions at trial is in fact
8. Eyewitnesses should be given cautionary instructions.\(^{283}\)

The lineup administrator should provide the eyewitness with the following cautionary instructions. First, he or she should be told that it is just as important to clear innocent suspects as it is to identify guilt suspects.\(^{284}\) This instruction emphasizes to the eyewitness that not identifying a lineup participant may be the correct decision.\(^{285}\) Second, the eyewitness should be advised that the perpetrator’s appearance may have changed since the crime.\(^{286}\) Many physical characteristics such as hair are changeable and perpetrators frequently alter their appearance when they participate in an identification procedure.\(^{287}\) Third, the eyewitness should be informed that the person who committed the crime may not be in the photo array or lineup.\(^{288}\) Research shows that this instruction significantly reduces eyewitness error with a minimal reduction in correct identification.\(^{289}\) Fourth, the eyewitness should be instructed that the lineup administrator does not know the identity of the suspect.\(^{290}\) This prevents the eyewitness from looking to the

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Unable to accurately report on that influence.") An Illinois study criticized the use of the double-blind method, however, as previously indicated, claiming that the design of that study was seriously flawed. See discussion supra note 279 (criticizing the Mecklenburg study for its design flaw of failing to use double-blind administrations with both sequential and simultaneous lineups).\(^{283}\) Wise et al., Tripartite Solution, supra note 19, at 863.

\(^{284}\) NAT’L INST. OF JUSTICE, supra note 185, at 40 (“This advice helps emphasize that failure to identify the suspect might be, in some cases, the appropriate outcome. Clearing an innocent suspect from suspicion can help refocus the investigation on developing other suspects.”).\(^{285}\) Id. at 39.

\(^{286}\) The National Institute of Justice notes:

Many physical characteristics are changeable. Hair, for instance, can be restyled, colored, cut, or grown longer; facial hair can be grown or cut; and so forth. Witnesses need to keep in mind that the suspect’s appearance on these changeable features might have been different at the time of the photo than it was at the time of the crime.

\(^{287}\) Id.; see also Narby et al., supra note 181, at 35–36 (discussing natural and deliberate changes in a perpetrator’s appearance since the commission of the crime).

\(^{288}\) NAT’L INST. OF JUSTICE, supra note 185, at 40; Narby et al., supra note 181, at 35–36.

\(^{289}\) Id.; see also Wells et al., Eyewitness Identification Procedures, supra note 12, at 615 (finding that an instruction that the perpetrator might or might not be present “has the effect of reducing identifications when the perpetrator is absent from the lineup while having no effect on identifying the perpetrator when the perpetrator is in the lineup”).

\(^{290}\) See Nancy Mehrkens Steblay, Social Influence in Eyewitness Recall: A Meta-Analytic Review of Lineup Instruction Effects, 21 L. & HUM. BEHAV. 283, 287–94 (1997). Steblay’s study aggregated the results of twenty-two prior studies on this topic using 2588 participants. The results showed that a cautionary instruction warning that the perpetrator may not be in the lineup reduced the rate of erroneous identifications by forty-two percent in culprit-absent identification procedures. It reduced the rate of accurate identifications in culprit-present identification procedures by only two percent. Id.
lineup administrator for clues as to the identity of the suspect or to confirm that he or she has chosen the suspect from the lineup. Finally, the eyewitness should be advised that the investigation will continue regardless of whether the eyewitness makes an identification. This instruction decreases the pressure on an eyewitness to make an identification and lets the eyewitness know that the success of the investigation does not depend on his or her identification of the suspect.

9. All identifications should be videorecorded.

Videorecording of identification procedures is essential to ensure that there is a complete, accurate record of the identification procedures so that attorneys, judges, and jurors can evaluate their fairness of the identification procedure.

The person who administers the lineup should not only be blind as to which person in the lineup is the suspect, but should also be perceived (by the eyewitness) to be blind as to which person is the suspect. The rationale is simply to prevent eyewitnesses from looking to the lineup administrator for cues as to which person to select or for cues as to whether the person they selected is the “right person.”

Wells et al., Eyewitness Identification Procedures, supra note 12, at 630; see also Garrioch & Brimacombe, supra note 134, at 306; Taslitz, supra note 234, at 21 (“The lineup administrator must instruct witnesses . . . that they should not assume the administrator knows who is the suspect . . .”).

Garrioch & Brimacombe, supra note 134, at 306; Wells et al., Eyewitness Identification Procedures, supra note 12, at 630; see also Taslitz, supra note 234, at 21 (stating that the eyewitness should be informed that the administrator does not know the identity of the suspect to reduce the risk of the eyewitness guessing the suspect’s identity).

NAT’L INST. OF JUSTICE, supra note 185, at 39.

Id.

Saul M. Kassin, Eyewitness Identification Procedures: The Fifth Rule, 22 L. & HUM. BEHAV. 649, 649 (1998); Taslitz, supra note 234, at 22. Videorecording preserves any record of error or suggestiveness:

Because most initial identifications of criminal suspects are done with photographs (and a large percentage of jurisdictions in the U.S. use only photographs and never use live lineups), the discovery of any ephemeral suggestive events that were embedded in the photographic lineup remains almost entirely dependent on the testimony of the case detective and the witness. Often, it is unclear that the witness and the detective who administered the photographic lineup are properly motivated to report suggestiveness. But, even if the witness and detective are motivated to report any suggestiveness, they would have had to explicitly notice its significance at the time, interpret it as a suggestive event, remember it for the weeks or sometimes months that pass before being questioned, and then articulate it to the questioning party. The scientific psychology literature is replete with evidence supporting the conclusion that people are poor at being able to accurately report on the variables that influence their responses and generally think that their actions are self-directed. The general point is there are very good reasons to believe that the actual prevalence of suggestiveness in eyewitness identification procedures greatly exceeds the ability of defense counsel to prove it.

Wells & Quinlivan, supra note 58, at 16 (internal citations omitted); see also Wise et al., Tripartite Solution, supra note 19, at 863–64 (stating that videorecording allows juries, judges, and attorneys to evaluate the fairness of an identification procedure).

Kassin, supra note 294, at 650.
Moreover, the other safeguards are of dubious effectiveness if there is no objective, complete record of how the identification procedures were conducted. Although the failure to videorecord a lineup should not mandate suppression of an eyewitness's testimony, in a case where there were no practical barriers to videorecording it, a judge should be skeptical of police assurances that no suggestiveness occurred. Furthermore, if the eyewitness is allowed to testify, the judge should permit expert testimony about the kinds of suggestiveness that might intentionally or unintentionally occur at a lineup and should instruct the jury that they should be cautious about relying on the testimony of an eyewitness who made a prior identification at a lineup that was not videorecorded.

10. "An eyewitness should make a clear statement of his or her confidence at the time of the identification and prior to receiving any feedback."297

As we have seen, eyewitness confidence is the factor that the trier of fact relies on most heavily in evaluating the accuracy of eyewitness identification.298 Because eyewitness confidence is highly malleable and because many factors can increase confidence but not eyewitness accuracy, by the time of trial, eyewitness confidence has little probative value in assessing eyewitness accuracy.299 In contrast, if an eyewitness’s statement of confidence is taken immediately after an identification of a suspect and prior to any feedback, it generally has a moderate, positive relationship to eyewitness accuracy, at least for those eyewitnesses who choose a suspect.300 Accordingly, statements of eyewitness

296 Id. at 652; Wise et al., Tripartite Solution, supra note 19, at 863–64.
297 Wise et al., Tripartite Solution, supra note 19, at 864.
298 Wells et al., Eyewitness Identification Procedures, supra note 12, at 620.
299 Andrew E. Taslitz states:
   Videotaping witness confidence statements at the time of the lineup or photo spread discourages upward confidence drift over time, or at least enables defense counsel to counter a witness's sincere insistence at trial of perfect confidence in his or her earlier identification of the defendant. For similar reasons, police are urged to obtain confidence statements from witnesses at the time that they make the identification.

Taslitz, supra note 234, at 22–23; Wells & Bradfield, supra note 118, at 375; Wells et al., Eyewitness Identification Procedures, supra note 12, at 635; see also Klobuchar et al., supra note 183, at 390–91 (advocating for a double-blind procedure for eyewitness identifications).
300 See Gary L. Wells & Donna M. Murray, Eyewitness Confidence, in EYEWITNESS TESTIMONY: PSYCHOLOGICAL PERSPECTIVES 155, 168–69 (Gary L. Wells & Elizabeth F. Loftus eds., 1984) (finding that studies on eyewitness confidence generally indicate that highly confident eyewitnesses are only somewhat more likely to make accurate identifications than less confident eyewitnesses); Wells et al.,
confidence should be taken immediately after the eyewitness makes an identification and before extraneous factors can influence it.\textsuperscript{301}

11. Once a mistake is made in an identification procedure, it cannot be corrected.

Because of the nature of memory, the effects of a suggestive lineup procedure cannot be corrected by later conducting a fair identification procedure.\textsuperscript{302}

VIII. COMMON EYEWITNESS FACTORS DURING A CRIME THAT AFFECT EYEWITNESS ACCURACY

Strong empirical evidence demonstrates that the following eyewitness factors, which arise frequently during crimes, have a significant effect on eyewitness accuracy. The effect of some of the eyewitness factors on identification accuracy may appear obvious and simply a matter of common sense. Nonetheless, because many eyewitness factors have a counterintuitive effect on identification accuracy, we believe it is important to include these common sense eyewitness factors as well. This list is not comprehensive. Accordingly, judges and attorneys should consult an eyewitness expert or the relevant scientific literature especially when handling criminal cases where the primary or sole evidence of the defendant's guilt is eyewitness testimony. The eyewitness factors are divided into three types: (1) eyewitness characteristics; (2) perpetrator characteristics; and (3) crime characteristics.

\textit{Eyewitness Identification Procedures}, supra note 12, at 626 ("The facts [sic] that eyewitness identification confidence is given great weight by jurors, that confidence is only modestly related to accuracy under pristine conditions, and that confidence is malleable are all matters of considerable importance."). Although some more recent studies show that under some conditions eyewitness confidence may have a greater relationship to eyewitness accuracy than earlier studies indicated, researchers warn that substantial CA [confidence accuracy] obtained in this study and in some others . . . should not be construed as evidence that the confidence witnesses display in court predicts the accuracy of their identification testimony. Myriad social, cognitive, and statistical factors likely greatly attenuate the CA relationship over the months between when a crime was witnessed and when the witness testifies. It is not to courtroom testimony to which the current findings may generalize, but rather to initial identification decisions made in nonbiased testing situations shortly after a witnessed event.


\textsuperscript{301} NAT'L INST. OF JUSTICE, supra note 185, at 39–40.

\textsuperscript{302} Wise et al., \textit{Tripartite Solution}, supra note 19, at 852; see also supra Parts III.A., V (discussing the nature of eyewitness memory and why a biased identification procedure cannot be corrected by later conducting a fair identification procedure).
TABLE 3:
COMMON EYEWITNESS FACTORS DURING A CRIME THAT AFFECT IDENTIFICATION ACCURACY

A. Eyewitness Characteristics
   1. Child eyewitnesses
   2. Elderly eyewitnesses
   3. Law enforcement officers
   4. Alcoholic intoxication
   5. Minor details
   6. Unconscious transference

B. Perpetrator Characteristics
   1. Cross-race bias
   2. Disguises
   3. Face distinctiveness
   4. Weapon focus

C. Crime Characteristics
   1. Exposure time
   2. Forgetting curve and retention interval
   3. Lighting
   4. Stress

A. Eyewitness Characteristics

1. Child Eyewitnesses

When asked open-ended questions, children provide reasonably accurate accounts of crime though they provide less information and somewhat less accurate information than adults.\textsuperscript{303} Young children are more likely than adults to be influenced by suggestion, peer pressures, and other social influences.\textsuperscript{304} Therefore, it is essential with a child eyewitness not to use suggestive questioning, repeated questioning, praise or rewards for desired answers, criticism or disapproval for unfavorable responses, or provide other forms of post-event information to the child.\textsuperscript{305}

Children are also about as accurate as adults at making identifications

\textsuperscript{303} COSTANZO, supra note 1, at 183.
\textsuperscript{304} Id.; see also Joanna D. Pozzulo, Person Description and Identification by Child Witnesses, in 2 HANDBOOK OF EYEWITNESS PSYCHOLOGY: MEMORY FOR PEOPLE 283, 296 (Rod C. L. Lindsay et al. eds., 2007) (stating that children are more eager to please the interviewer than adults and so they are more likely to give answers that they think the interviewer wants them to give than adults).
\textsuperscript{305} COSTANZO, supra note 1, at 183.
provided the perpetrator is present in the identification procedure.\textsuperscript{306} If the perpetrator is absent from the lineup, however, children make more erroneous eyewitness identifications because of their greater suggestibility.\textsuperscript{307}

2. Elderly Eyewitnesses

Like children, elderly eyewitnesses perform nearly as well as young adults in identifying the perpetrator when he or she is present in the lineup.\textsuperscript{308} Thus age appears to have little effect on the accuracy of recognition memory.\textsuperscript{309} When a lineup does not contain the perpetrator, however, like children, they make more mistaken identifications than young adults.\textsuperscript{310} Elderly adults also appear to recall fewer details about a crime than young adults.\textsuperscript{311} Some of this difference may, however, be a product of older adults’ greater caution and less confidence than young adults in their ability to recall the facts of a crime.\textsuperscript{312}

3. Law Enforcement Officers

Although law enforcement officers are more skilled than lay eyewitnesses at remembering the details or a crime, studies indicate they are not better than lay eyewitnesses at identifying the perpetrator of a

\begin{footnotesize}
\begin{enumerate}
\item See id.; see also Pozzulo, supra note 304, at 302 (“On a positive note, children as young as 5 years old can accurately identify a guilty suspect from a simultaneous lineup at the same rate as adults.”).\textsuperscript{306}

\item COSTANZO, supra note 1, at 183; see also Pozzulo, supra note 304, at 302 (“Unfortunately, in those cases where police have arrested an innocent suspect, children, even over 12 years of age, are more likely than adults to make an identification of an innocent person.”).\textsuperscript{307}

\item James C. Bartlett & Amina Memon, Eyewitness Memory in Young and Older Adults, in 2 HANDBOOK OF EYEWITNESS PSYCHOLOGY: MEMORY FOR PEOPLE 309, 333 (Rod C. L. Lindsay et al. eds., 2007) (“Within the lineup task, age-related deficits in correct rejections of target-absent lineups are larger and more consistent than age-related deficits in correct identifications from target-present lineups, a finding in line with a good deal of evidence from standard laboratory paradigms.”).\textsuperscript{308}

\item BARTOL & BARTOL, supra note 92, at 250. There is a limited amount of research on elderly eyewitnesses. Thus, some of the present conclusions may have to be revised or modified as more research is conducted. Id.; see also Kassin et al., supra note 117, at 408 tbl.1, 411, 412 tbl.4 (noting that only fifty percent of the sixty-four eyewitness experts in their survey agreed with the eyewitness statement that “elderly eyewitnesses are less accurate than are younger adults”).\textsuperscript{309}

\item Kassin et al., supra note 117, at 412.\textsuperscript{310}

\item See BARTOL & BARTOL, supra note 92, at 250–51 (“Older subjects do appear to be less adept at free recall of an incident than younger adults; a finding also reported for children.”). One study found:

Where straightforward comparisons have been made between different age groups, young adults have been found to be significantly superior to old adults in their accuracy of recall for perpetrator characteristics, environmental details, and details of actions and events. This applies to both free recall (where the witness provides a narrative account from his or her own perspective) and to cued recall (where the witness responds to interviewer questions . . . ).\textsuperscript{311}

\item Bartlett & Memon, supra note 308, at 312 (citations omitted).

\item See BARTOL & BARTOL, supra note 92, at 251.\textsuperscript{312}
\end{enumerate}
\end{footnotesize}
crime. This result occurs because though people can be trained to give more detailed accounts of crimes, their ability to identify faces cannot be improved.

4. Alcoholic Intoxication and Marijuana Use

Victims and eyewitnesses are frequently intoxicated when a crime is committed. The limited research available on intoxicated eyewitnesses indicates that alcohol primarily reduces memory for the details of a crime and the ability of an eyewitness to identify the perpetrator by interfering with his or her ability to perceive and encode the crime rather than by affecting retrieval. In other words, though an

See Brigham et al., supra note 90, at 16 (stating that research has failed to show that officers are better at identifying faces than ordinary citizens); Deffenbacher, supra note 102, at 379 ("Police . . . may even have a pronounced bias to identify someone from a lineup."). For example:

Yuille has shown that although both police trainees and veteran officers do not recall more correct sequential action facts that [sic] do lay persons, they do recall more correct descriptive facts about persons and scene details, and are more resistant to the effects of suggestion concerning salient details, at least.

Id. at 380 (internal citations omitted).

Id. at 379; Narby et al., supra note 181, at 30.

See Jennifer E. Dysart et al., The Intoxicated Witness: Effects of Alcohol on Identification Accuracy from Showups, 87 J. APPLIED PSYCHOL. 170, 170 (2002) ("Given the frequency of criminal activity in alcohol-abundant environments, understanding the possible effects of alcohol on eyewitness memory is critical."); Narby et al., supra note 181, at 40 ("Evidence from police files suggests that intoxicating substances, particularly alcohol, go hand in hand with many crimes. Both perpetrators and witnesses are often intoxicated at the time of the event." (internal citation omitted)); Sal A. Soraci et al., Psychological Impairment, Eyewitness Testimony, and False Memories: Individual Differences, in 1 HANDBOOK OF EYEWITNESS PSYCHOLOGY: MEMORY FOR EVENTS 261, 282 (Michael P. Toglia et al. eds., 2007) ("The question itself is also relevant because it is well known that events of forensic importance, indeed the majority of violent assaults and other crimes, very often occur in the context of substances that alter psychological and physiological processes of perpetrators, victims, and witnesses.") (citations omitted)).

See BARTOL & BARTOL, supra note 92, at 242; Soraci et al., supra note 315, at 282 ("However, the psychological literature on the effects of these substances on recollections of complex events is sparse, and, as a result, the specific memorial consequences of the ingestion of most drugs are not well understood.").

See BARTOL & BARTOL, supra note 92, at 242 (noting that ninety percent of the sixty-four eyewitness experts in Kassin's survey agree with the following statement: "Alcoholic intoxication impairs an eyewitness later ability to recall persons and events."); Kassin et al., supra note 117, at 408 tbl.1, 412 tbl.4. Laboratory research has shown that alcohol consumption inhibits the encoding process when administered beforehand and thereby impairs subsequent recall of information. However, research has been somewhat limited in examining the influence of alcohol or drug usage on the accuracy or completeness of eyewitness descriptions. One of the few empirical studies examining the effect of alcohol consumption on witness recall was conducted by Yuille and Tollestrup. In general, the authors found that consumption of alcohol significantly impaired participants' ability to recall details (in both frequency and accuracy of recall) of the event and/or target person, regardless of whether the participant recalled immediately (and under the continued influence of alcohol) or 1 week later. Read, Yuille, and Tollestrup subsequently found similar effects. In his archival analysis, Sporer also found that when witnesses had consumed alcohol they were less able to report details about the perpetrator's appearance.
intoxicated eyewitness will remember less about the crime and the perpetrator, the information an intoxicated eyewitness recalls about a crime tends to be almost as accurate as that recalled by a sober eyewitness.\textsuperscript{318} Because the intoxicated eyewitness remembers less about a crime, he or she is more likely to make an erroneous identification than a sober eyewitness when the perpetrator is not present in the photo array or lineup.\textsuperscript{319}

Furthermore, intoxicated eyewitnesses may be more susceptible to suggestion and post-event information than sober eyewitnesses.\textsuperscript{320} Accordingly, it may be especially important to avoid suggestion and post-event information when questioning eyewitnesses who were intoxicated at the time of the crime.\textsuperscript{321} Finally, one study suggested that if an intoxicated eyewitness experiences a high degree of stress or arousal during the crime, this tends to reduce the negative effects of moderate levels of alcohol consumption on eyewitness memory.\textsuperscript{322}

Only one study has assessed the effects of marijuana on eyewitness testimony. The results indicated that when marijuana is consumed in moderation, its effects on memory appear to be fairly small and temporary.\textsuperscript{323}

\textsuperscript{318} John C. Yuille & Patricia A. Tollestrup, \textit{Some Effects of Alcohol on Eyewitness Memory}, 75 J. APPLIED PSYCHOL. 268, 271 (1990) ("The accuracy of the information recalled was high in both alcohol and control groups, although slightly lower when alcohol was consumed.").

\textsuperscript{319} For example, a study found the following:

In the target-absent conditions, participants in the low-blood-alcohol-level condition were more likely to make a correct rejection (.78) than were those in the high-blood-alcohol-level condition (.48). In the target-present conditions, participants in the high-blood-alcohol-level group were as likely to make a correct identification (.62) as participants in the low-blood-alcohol-level group (.68). Dysart et al., \textit{supra} note 315, at 173 (internal citations omitted); \textit{see also} Yuille & Tollestrup, \textit{supra} note 318, at 272 ("Alcohol had no effect on the ability of witnesses to identify correctly a picture of the thief 1 week later. However, alcohol did influence the number of incorrect choices when the thief's picture was not included in the photospread.").

\textsuperscript{320} Soraci et al., \textit{supra} note 315, at 288 ("Finally, it is likely that individuals who have consumed alcohol may be less resistant to the effects of suggestion and post-event information. If true, more precautions need to be taken during their interviews and interrogation.").

\textsuperscript{321} \textit{Id.}

\textsuperscript{322} \textit{See id.} at 287 (stating that there is "some support for the lay idea that fear or stress can serve to 'sober up' someone who has been drinking, at least at moderate levels of consumption").

5. Minor Details

A witness's ability to recall minor or peripheral details about a crime is not related to identification accuracy. In fact, an eyewitness's memory for minor or peripheral details of a crime is inversely related to eyewitness accuracy because an eyewitness who attends to peripheral details has fewer cognitive resources available to encode the perpetrator's face.

6. Unconscious Transference

Eyewitnesses sometimes identify as the perpetrator a bystander to the crime or an individual they saw in a different context or situation. For example, an eyewitness who viewed a mug-shot of a suspect who later appears in a lineup may identify the suspect as the perpetrator of a crime even though the suspect is innocent. Accordingly, it is always important for law enforcement officials to determine prior to conducting an identification procedure whether the eyewitness saw the suspect before or after the crime.

B. Perpetrator Characteristics

1. Cross-Race Bias

Eyewitnesses make more accurate identifications of perpetrators of their own race than other races.

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325 Id.
326 This Article uses the term “unconscious transference” to refer to a specific type of source monitoring error that occurs when the eyewitness misidentifies as the perpetrator of a crime a bystander to a crime or a person they saw in another situation or context (e.g., identify an innocent suspect in a lineup as the perpetrator because they previously saw the suspect’s mug-shot). See discussion supra Part III.D. (concerning the source monitoring error and its contribution to erroneous eyewitness testimony).
327 COSTANZO, supra note 1, at 178.
328 See Brown et al., supra note 254, at 315–16; Koehnken et al., supra note 130, at 217; see also discussion supra Part III.C. This error may occur because the suspect in the lineup looks familiar since the eyewitness earlier examined his or her mugshot. See discussion supra Part III.C. In short, the eyewitness makes a source monitoring error and concludes that the familiarity of the suspect in the lineup results from the eyewitness having observed the suspect commit the crime rather than because he or she previously saw the suspect’s mugshot. See discussion supra Part III.D. (regarding the source monitoring error).
329 See discussion supra Part VII.2. (regarding the importance of determining whether an eyewitness has seen the suspect before or after the crime).
330 The term “bias” as used here does not mean racial animosity; rather, as many scientific studies show, it means a person of a particular race is likely to be better at identifying a perpetrator of his or her own race than he or she would be if the perpetrator was of a different race.
331 See 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, 21 (2001). Meissner and Brigham found in a study that the probability of a mistaken identification is 1.56 times greater when a witness makes an other-race identification than when a witness makes a same-race
2. Disguises

Even simple disguises such as a hat can make it significantly more difficult for an eyewitness to make an accurate identification. A hat decreases eyewitness accuracy because it conceals the perpetrator's hair and facial shape, which are important cues to identifying a person.

3. Face Distinctiveness

Distinctive faces (e.g., faces that are highly attractive or unattractive) are more likely to be recognized than faces that are non-distinctive.

4. Weapon Focus

The presence of a weapon impairs an eyewitness's ability to accurately identify the perpetrator's face. This occurs because the eyewitness tends to focus on the weapon, which leaves less attention available to the identification.

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Id. at 15. If this experimental finding carries over to real cases, then an innocent African-American suspect has a fifty-six percent greater chance of being misidentified by a Caucasian than an African-American eyewitness. See John C. Brigham et al., The Influence of Race on Eyewitness Memory, in 2 HANDBOOK OF EYEWITNESS PSYCHOLOGY: MEMORY FOR PEOPLE 257, 257–58 (Rod C. L. Lindsay et al. eds., 2006) ("The cross-race effect (CRE), also known as the own-race bias or other race-effect, refers to the consistent finding that adults are able to recognize individuals of their own race better than faces of another, less familiar race."); Narby et al., supra note 181, at 42 ("[T]here is little doubt that the own-race bias in recognition is reliable and appreciable in magnitude, but the theoretical underpinnings of the effect are elusive.").

Narby et al., supra note 181, at 35 (citations omitted); see also Patterson & Badeley, supra note 101, at 416; Shapiro & Penrod, supra note 101, at 145; Wells & Olson, supra note 13, at 281.

Narby et al., supra note 181, at 34; Wells & Olson, supra note 13, at 281.


[S]ubjects who viewed a simulated armed robbery spent more time looking at the weapon than control subjects who saw a virtually identical scene involving a check. They made more eye fixations on the gun, and those fixations were of longer duration. One consequence was a reduced ability to recognize the individual holding the weapon. In the second experiment, subjects who saw the event containing a weapon were not only less likely than controls to accurately identify the perpetrator, but they were less accurate when they answered specific questions about him.

Id. at 61; see also Kerri L. Pickel, Unusualness and Threat as Possible Causes of "Weapon Focus," 6 MEMORY 277, 278 (1998); Steblay, supra note 101, at 416.
eyewitness to observe the perpetrator's face.  

C. Crime Characteristics

1. Exposure Time

The less time an eyewitness has to witness a crime, the less information the eyewitness will remember about it. In general, however, the time an eyewitness has to view the crime is not as important as the type or amount of attention the eyewitness paid to the crime. Indeed, a meta-analysis of facial recognition studies found that 'quality of viewing,' which focused centrally on the type of attention that participants paid to the face . . . was the most important determinant of facial identification performance.

336 See COSTANZO, supra note 1, at 178; Meissner et al., supra note 317, at 10 ("[S]tudies of the 'weapon focus' effect have generally demonstrated a significant influence of the presence of a weapon on person description accuracy." (internal citation omitted)).

337 See Meissner et al., supra note 317, at 9 ("Yarmey, Jacob, and Porter conducted a study in which participants interacted with a target person for 5 seconds or 30 seconds and were subsequently asked to describe the encounter. As expected, their results indicated that person descriptions . . . were superior when participants had a longer time to observe the target person." (internal citation omitted)); see also Narby et al., supra note 181, at 37 ("Although some investigations show a linear increase in face recognition accuracy with exposure time, others show a logarithmic relationship. That is, as exposure duration increases, face recognition accuracy improves, but the improvements become smaller at long durations. This finding was supported in the Shapiro and Penrod meta-analysis." (internal citations omitted)).

338 Caputo & Dunning, supra note 337, at 429 ("There are many different ways that witnesses can attend to a culprit, and the seriousness and depth of this attention can influence identification accuracy in significant ways."); see also Wells & Olson, supra note 13, at 282 ("In general, the amount of time a culprit's face is in view is not as critical for eyewitness identification accuracy as the type or amount of attention given by the witness.").

339 Caputo & Dunning, supra note 337, at 429. Making physical determinations about a perpetrator's appearance does not necessarily lead to an accurate identification. If witnesses make abstract judgments about a perpetrator's appearance, they tend to more clearly recall that perpetrator later on.

As would be expected, the amount of time a culprit's face is in view affects the
2. Forgetting Curve and Retention Interval

Research has demonstrated that memory loss for a crime or other event is highest immediately after the crime occurs and then slows over time. Accordingly, eyewitness interviews and identification procedures should be conducted as soon as possible after a crime.

3. Lighting

Poor lighting conditions negatively impact an eyewitness's ability to make an accurate identification.

4. Stress

Very high levels of stress during a crime impair eyewitness accuracy. Scientific research shows that different levels of stress can have multiple, sometimes subtle, effects on eyewitness memory. As stress increases, a tunnel memory effect is likely to occur. This effect causes some information, such as a weapon, to be vividly remembered while causing other information, such as the color of a perpetrator's shirt, to be poorly recalled. Moreover, very high levels of stress are likely to cause a major deterioration in memory. High levels of stress tend to substantially impair eyewitness memory because the stress activates the eyewitness's fight or flight response, which interferes with the chances that the eyewitness can identify the person later. However, this relationship depends less critically on the eyewitness's opportunity to view per se and more on the amount and type of attention that the witness directs at the culprit. Given equal exposure time to a face, people are more likely to be able to recognize that face later if they make abstract inferences about it (e.g., does this person have a large or small nose?). Presumably, this effect occurs because the abstract inferences require holistic processing of the face whereas the physical judgments require feature processing.

Wells & Olson, supra note 13, at 282 (internal citations omitted).

340 See Caputo & Dunning, supra note 337, at 432 (“Studies looking at memory decay over time have shown that memory for unfamiliar faces does decrease over time. Indeed, the amount of decay tends to be far greater than people expect. As a consequence, identifications after a significant delay can be quite problematic.”) (internal citations omitted)); Deffenbacher, supra note 102, at 380; Meissner et al., supra note 317, at 11–12 (“For example, Ellis, Shepherd, and Davies had participants describe one face immediately after viewing it, and another either 1 hour, the next day, or 1 week following exposure. Participants remembered significantly fewer details after 1 week compared with the two shorter retention intervals . . . .” (internal citation omitted)).

341 See Wells & Olson, supra note 13, at 282 (“Clearly, at the extreme of low light levels there is a point at which a face cannot be perceived well enough to be recognized later.”).

342 See Deffenbacher et al., supra note 102, at 699 (noting that the authors' meta-analysis supported the hypothesis that high levels of stress negatively affect both identification accuracy and the eyewitness's ability to recall crime details).

343 See Martin A. Safer et al., Tunnel Memory for Traumatic Events, 12 APPLIED COGNITIVE PSYCHOL. 99, 99–100 (1998) (explaining that “tunnel vision” refers to a narrowing of attention to particular aspects of a situation, which often occurs in stressful situations).

344 Id.

345 See Deffenbacher et al., supra note 102, at 699.
eyewitness’s ability to pay attention and process information.\textsuperscript{346}

IX. THE ADMISSIBILITY OF EYEWITNESS IDENTIFICATIONS AT TRIAL

The previously discussed scientific findings about eyewitness testimony also support several changes in current practices for when eyewitness identifications should be admitted at trial. These changes include the following:

1. If a pretrial identification was made at a procedure that included significant risk of contamination,\textsuperscript{347} the prosecutor should not be permitted to introduce evidence of it at trial unless the use of that procedure was prompted by investigative necessity.\textsuperscript{349}

2. A prosecutor should be precluded from offering evidence of a subsequent pretrial identification by the eyewitness whose memory has been contaminated at an earlier procedure, even if the later identification procedure was fair and nonsuggestive.\textsuperscript{350}

3. Where significant risk of contamination occurred, the judge should preclude the eyewitness from making an in-court identification unless the prosecutor persuades the judge that the identification will be the product of the eyewitness’s memory of the crime, unaffected by the contamination.\textsuperscript{351}

The Supreme Court has made it clear that the trial judge has a

\textsuperscript{346} See \textit{Weiten}, \textit{supra} note 14, at 289–90.

\textsuperscript{347} Perfection cannot be demanded or expected, but courts should insist that the police or prosecution avoid substantial bias or suggestiveness in their procedures.

\textsuperscript{348} Defense counsel should be permitted to introduce evidence of a pretrial identification procedure that had a significant risk of contamination to show how its suggestiveness tainted the eyewitness’s trial testimony.

\textsuperscript{349} Investigative necessity may arise, for example, during a street showup: shortly after the crime, the police apprehend someone nearby who fits the description the eyewitnesses gave of the perpetrator. In this situation, police need to know quickly whether to arrest the suspect, or release him with apologies and continue to search for the perpetrator. Such necessity may also arise where a key eyewitness is too ill to attend a lineup, and a hospital-room showup is necessary. \textit{See e.g.}, \textit{Stovall v. Denno}, 388 U.S. 293, 295 (1967) (noting that, to obtain an identification, the police arranged with the surgeon of a stabbing victim to bring the alleged assailant into the victim’s hospital room). The Supreme Court acknowledged that though the procedure was exceptionally suggestive, it was nonetheless justified by exigent circumstances, given concerns that the eyewitness-victim might die. \textit{Id.} at 302.

\textsuperscript{350} Substantial research documents that once an eyewitness’s identification of a suspect has been contaminated, the damage cannot be repaired. \textit{See} \textit{Wells et al., From the Lab, supra} note 15, at 582–83; \textit{Wise et al., Tripartite Solution, supra} note 19, at 845–47; \textit{see also supra} Table 1, Step 2.B. Indeed, the Supreme Court acknowledged this in 1967. \textit{See United States v. Wade}, 388 U.S. 218, 228–29 (1967).

\textsuperscript{351} For example, the prosecutor could argue that the viewing conditions were exceptionally good because the kidnapping victim had prolonged repeated exposure to the perpetrator or the eyewitness knew the perpetrator prior to the crime. \textit{See supra} Table 1, Step 2.C.
constitutional duty to protect against convictions based on unreliable evidence. Given what is now known about the irreparability of contaminated identifications and the frequency with which erroneous convictions are based on contaminated identification testimony, a strong argument exists to preclude any eyewitness from giving identification testimony when a serious risk exists that contamination has occurred—even if that contamination resulted from investigative necessity, rather than sloppy police work or reliance on discredited procedures.

We decline to adopt that position for now. But courts must do more than pay lip service to their responsibility of vetting the reliability of eyewitness identifications. If a judge does permit an eyewitness to make an in-court identification after he or she has identified the defendant at a seriously flawed pretrial identification procedure, the judge should inform the jury of the risks involved in the eyewitness’s in-court testimony—either by permitting the defense to call an eyewitness expert, or by instructing the jury that they should be cautious about accepting an eyewitness’s in-court identification where there had been a seriously flawed pretrial identification, or both. Where a judge admits eyewitness identification testimony despite a pretrial identification process that was unnecessarily and significantly suggestive, such an instruction should

352 See discussion supra Part II.A.2.
353 See supra note 348.
354 See Wade, 388 U.S. at 229 (“[T]he influence of improper suggestion upon identifying witnesses probably accounts for more miscarriages of justice than any other single factor—perhaps it is responsible for more such errors than all other factors combined.”).
355 See supra note 346 and accompanying text.
356 The current judicial skepticism or antagonism toward expert testimony on this subject is no longer justified. See supra Part II.D. Nevertheless, expert testimony is a problematic solution in many cases, first, because there are not enough experts to provide such testimony in every case where it would be relevant, and second, because many defendants would be unable to afford even a modest fee for the expert. Finally, eyewitness expert testimony in its current form frequently results in increasing juror skepticism rather than increasing juror sensitivity to the relevant eyewitness factors in a case. See Wise et al., Tripartite Solution, supra note 19, at 840. Accordingly, the most potent means available to the criminal justice system to prevent eyewitness error is to conduct fair and unbiased eyewitness interviews and identification procedures. Id. at 865.
357 As a rule, the weight to be given to any eyewitness’s testimony is for the jury, not the judge, to decide. See, e.g., Chesapeake & Ohio Ry. Co. v. Martin, 283 U.S. 209, 216 (1931); Dunbar v. United States, 156 U.S. 185, 196 (1895); see also CLIFFORD S. FISHMAN, JONES ON EVIDENCE §§ 3:33 (civil cases), 5:15 (criminal cases) (7th ed. 1992); 1 JOHN WILLIAM STRONG ET AL., MCCORMICK ON EVIDENCE § 328 (West Publishing Co., 4th ed. 1992); 81 AM. JUR. 2D Witnesses § 995 (2004). In criminal cases, however, it is common for the judge to admonish a jury to view certain eyewitnesses’ testimony with particular caution. Many jurisdictions, for example, require a judge to give a cautionary instruction when an erstwhile accomplice testifies for the state against the defendant. See FISHMAN & MCKENNA, supra note 76, § 5:55. Similarly, some courts permit or require a judge to give a cautionary instruction if the eyewitness is a drug addict. 2 BARBARA E. BERGMAN & NANCY HOLLANDER, WHARTON’S CRIMINAL EVIDENCE § 9-9 (15th ed. 1998). The same is true if the witness is a young child. Id. § 7:16.
include an admonition that because an eyewitness's memory and confidence are highly malleable, an eyewitness may not be able to accurately recall at trial (1) the quality of his or her view of the crime; (2) the amount of attention he or she was able to pay to the crime; (3) how much he or she remembers about the details of the perpetrator's face; (4) his or her reason for selecting the suspect at the pretrial identification procedure; (5) how quickly or easily he or she identified the suspect at that procedure; (6) his or her degree of confidence in the accuracy of the identification when the identification was made; and (7) whether the lineup administrator influenced his or her selection of the suspect.\textsuperscript{358}

X. CONCLUSION

The method described in this Article provides judges and attorneys with a practical and comprehensive means of analyzing the accuracy of eyewitness testimony. Defense attorneys and prosecutors can also use this method when seeking either to bolster or attack the accuracy of eyewitness testimony at trial. Thus, prosecutors can use it to analyze eyewitness testimony in a case to determine the factors that likely increased the accuracy of the eyewitness testimony. For example, they can argue at trial that the eyewitness testimony in the case is likely to be accurate because proper procedures were followed in conducting the eyewitness interviews and identification procedures. In addition, the prosecutor can point out to the trier of fact the eyewitness factors during the crime, such as good lighting, the absence of a disguise, and the long time the eyewitness had to observe the perpetrator, that support the likely accuracy of the eyewitness's testimony.

This method also provides defense attorneys with a method for systematically and comprehensively analyzing the weaknesses of the State's eyewitness evidence. Thus, a defense attorney can specify the factors that made the eyewitness interview and identification procedures unfair and biased and the eyewitness factors present during the crime that probably decreased the eyewitness's accuracy, such as a weapon, a disguise, and a high level of stress.

In addition, this method, by emphasizing the importance of conducting fair and unbiased eyewitness interviews and identification procedures, exerts pressure on the legal system to take steps to improve the fairness of

\textsuperscript{358} For studies documenting these difficulties, see Wells & Bradfield, \textit{supra} note 118, at 374; Wise et. al., \textit{Tripartite Solution, supra} note 19, at 869. Lawyers frequently question whether juries are able to understand or follow cautionary or limiting instructions, and experience may prove that they are little help in the eyewitness identification context, but use of such instructions is an experiment worth trying—particularly where the alternatives are either categorical exclusion of a particular eyewitness's identification testimony, on the one hand, or acquiescence in the high percentage of wrongful convictions based on erroneous eyewitness identification testimony, on the other.
interviews and identification procedures. Because improving the fairness of eyewitness interviews and identification procedures is the most potent means available to the legal system to prevent eyewitness error, this method can encourage changes in interviews and identification procedures that will significantly reduce eyewitness error. This method is also congruent with evidentiary rules that provide that trace evidence is admissible at trial only if the State followed proper scientific procedures in collecting the evidence.

Using this method for analyzing the accuracy of eyewitness testimony is not limited to attorneys and judges. Law enforcement officers and jurors can also use it to assess the likely accuracy of eyewitness testimony. Moreover, jurors' use of this method may not only produce more accurate assessments of eyewitness testimony, but it may also reduce the need for eyewitness expert testimony in criminal cases and, when used in conjunction with expert testimony, may enhance its effectiveness.

In applying the guidelines in this Article, it is important to remember that researchers are continually making new discoveries about the causes and remedies for eyewitness error. Accordingly, the guidelines and eyewitness factors delineated in this Article will undoubtedly have to be modified in the future to accommodate new research findings. For example, some research has shown that certain factors, such as how quickly an eyewitness makes an identification and the manner in which an eyewitness identifies a suspect, may be useful indicators of eyewitness accuracy. If additional research confirms the usefulness of these or other

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359 Wise et al., Tripartite Solution, supra note 19, at 865.
360 FED. R. EVID. 403, 702, 901.
361 See Penrod & Cutler, supra note 169, at 114–15. As Cutler and Penrod stated, even experts have difficulty applying their knowledge to the facts of a case. Id. The method discussed in this Article would give jurors a means for applying the relevant eyewitness factors discussed by an eyewitness expert to the facts of a criminal case. Therefore, it might improve the effectiveness of expert testimony in helping jurors to assess eyewitness accuracy.
362 Caputo & Dunning, supra note 337, at 435–36. For example, Caputo and Dunning point out that some researchers have found that eyewitnesses who make an identification of a suspect between ten and twelve seconds after being exposed to a lineup tend to be more accurate than eyewitnesses who take longer to make an identification. Id. at 436–37. There is, however, as they point out, other research that has not supported this conclusion. Id. at 437. “More recent research . . . has shown that the 10–12 second rule is not stable across variations in witnessing and lineup conditions.” Wells et al., Eyewitness Evidence, supra note 13, at 67. “Weber et al. found that maximally discriminating time ranged from 5 seconds to 29 seconds across variations in conditions. Furthermore, eyewitnesses who responded faster than the optimal time boundaries did not show particularly high probabilities of being accurate . . . .” Id. at 67–68 (citations omitted). Research has also indicated that eyewitnesses tend to be more accurate when their identifications are “automatic and absolute” rather than “conscious, effortful, and relative.” Caputo & Dunning, supra note 337, at 434. Identifications are automatic when an eyewitness makes the identification without any conscious effort. Id. “Absolute” means that the eyewitness made the identification because the suspect matched their memory of the perpetrator of the crime rather than choosing the suspect because he or she most closely resembles the perpetrator. Wells et al., From the Lab, supra note 15, at 585–86. As Caputo and Dunning point out, however, the determination of the manner in which an eyewitness makes an identification can be difficult to accurately assess because self-reports of the method used to make an identification are frequently
post-dictors in a wide array of eyewitness conditions, they can be incorporated into the present method for analyzing eyewitness accuracy.363

The method discussed in this Article also suggests that there needs to be a paradigm shift in the thinking of law enforcement and prosecutors about eyewitness testimony. Law enforcement frequently conducts eyewitness interviews and identification procedures in a manner that unintentionally contaminates the eyewitness’s memory of the crime and impairs the eyewitness’s ability to identify the perpetrator of the crime. In addition, eyewitnesses often observe crimes under poor eyewitness conditions.364 Because of these limitations in many criminal cases, this method indicates that the State needs to minimize the number of criminal cases that it brings where the sole or primary evidence of the defendant’s guilt is eyewitness testimony. Furthermore, in criminal cases that rely heavily on eyewitness testimony for proof of the defendant’s guilt, the State needs to be especially careful that its eyewitness interviews and identification procedures are fair and unbiased and that the eyewitness conditions during the crime were conducive to an accurate identification.

This method also suggests that law enforcement and prosecutors need to pay more attention to instances where an eyewitness either misidentifies a filler in a lineup as the perpetrator or determines that the perpetrator is not in the lineup. Such misidentifications and non-identifications frequently provide useful information that should cause law enforcement and prosecutors to consider the possibility that the suspect is innocent rather than elicit a reflexive response that the eyewitness made an error.365

inaccurate. “It has long been known that people are notoriously unskilled at accurately describing how they reach their decisions. In the eyewitness context, researchers have observed participants comparing photographs, only to be told by participants later that no comparison had occurred.” Caputo & Dunning, supra note 337, at 436 (citations omitted); Wells et al., Eyewitness Evidence, supra note 13, at 68.

Overall, it appears that postdiction has not been highly successful for eyewitness identification . . . . This underscores the primary message of the system-variable approach—namely, that it would be better to use procedures that help prevent mistaken identifications from occurring in the first place than to try to detect errors after the fact.

Id. This is another reason why the present method for assessing eyewitness accuracy discussed in this Article emphasizes the importance of law enforcement conducting fair and unbiased eyewitness interviews and identification procedures.

363 If additional empirical research establishes that these or other postdictors are useful and practical indicators of eyewitness accuracy, they could be incorporated into the current method by evaluating them after the fairness of the eyewitness interview and identification procedures are examined and before assessing the eyewitness factors during the crime that may have affected identification accuracy.

364 See Wells et al., Eyewitness Evidence, supra note 13, at 45 (“Many of the experiments conducted in the late 1970s and throughout the 1980s resulted in articles by psychologists . . . [explaining that] the validity of eyewitness reports depends a great deal on the procedures that are used to obtain those reports and that the legal system was not using the best procedures.”).

365 See Caputo & Dunning, supra note 337, at 438 (“Depending on the circumstances . . . positive identification of [an irrelevant] distractor [in a lineup might actually be worthwhile] evidence that the suspect is innocent.”); see also Steve Charman & Gary L. Wells, Applied Lineup Theory, in 2
The most egregious error any legal system can make is to convict an innocent defendant. Moreover, a wrongful conviction is not just a tragedy for the innocent defendant and his or her family, but also for the victims of crimes that occur because the true perpetrator of a crime was never brought to justice. Wrongful convictions also undermine the credibility of a legal system, especially when it fails to implement safeguards that could help prevent them. By using the method described in this Article for analyzing the accuracy of eyewitness testimony, judges and attorneys can take a major step in reducing the number of wrongful convictions from eyewitness error.

HANDBOOK OF EYEWITNESS PSYCHOLOGY: MEMORY FOR PEOPLE 219 (Rod C. L. Lindsay et al. eds., 2006). “For example, it is quite possible that criminal investigators too readily dismiss nonidentifications for their exonerating qualities while readily accepting identifications of the suspect for their incriminating qualities.” Id. at 220–21. “When properly designed and interpreted, a lineup procedure has not only incriminating powers, but exonerating powers as well. In fact, there is clear proof using mathematical formulations that any lineup that has incriminating value from the identification of the suspect must also have exonerating value from a nonidentification.” Id. at 222.

366 As Risinger explains:

When the wrongful conviction is the product of an official inquiry by a court even in a petty criminal or quasi-criminal context, it not only imposes pain that has a moral claim to our recognition, but it is also seriously corrosive to the respect for law of the wronged individuals, and that of all those around them who believe the convicted were in fact innocent.

Risinger, supra note 11, at 789.
FORM FOR EVALUATING THE ACCURACY
OF EYEWITNESS TESTIMONY

I. EYEWITNESS INTERVIEW
   (Evaluate separately each interview of an eyewitness.)

A. Factors that Indicate the Interview Was Complete, Fair, and Did Not Increase Eyewitness Confidence
   1. List Factors that Indicate the Interview Obtained the Maximum Amount of Information from the Eyewitness
   2. List Factors that Indicate the Interview Was Fair and Did Not Contaminate the Eyewitness’s Memory of the Crime
   3. List Factors that Indicate the Interview Did Not Increase Eyewitness Confidence

B. Factors that Indicate the Interview Was Incomplete, Biased, and Increased the Eyewitness’s Confidence
   1. List Factors that Indicate the Interview Did Not Obtain the Maximum Amount of Information from the Eyewitness
   2. List Factors that Indicate the Interview Was Biased and Contaminated the Eyewitness’s Memory of the Crime
   3. List Factors that Indicate the Interview Increased the Eyewitness’s Confidence

II. IDENTIFICATION PROCEDURES
   (Conduct a separate analysis for each identification procedure.)

A. List Factors that Indicate the Identification Procedure Was Fair and Impartial

B. List Factors that Indicate the Identification Procedure Was Biased
C. If the interviews and identification procedures were substantially fair and unbiased or an exception applies (e.g., the eyewitness knew the perpetrator prior to the crime or had prolonged, repeated exposure to the perpetrator, or there is reliable, valid corroborating evidence of the accuracy of the eyewitness testimony), go on to Part III. If an interview or an identification procedure was significantly unfair and biased, and no exception applies, the eyewitness testimony or any subsequent identification of the defendant by the eyewitness has no probative value and should not be considered in the determination of the defendant’s guilt.

III. EYEWITNESS FACTORS DURING THE CRIME THAT LIKELY AFFECTED IDENTIFICATION ACCURACY

A. List Eyewitness Factors During the Crime that Likely Increased Eyewitness Accuracy

B. List Eyewitness Factors During the Crime that Likely Decreased Eyewitness Accuracy

IV. CONCLUSIONS

A. Was the maximum amount of information obtained from the eyewitness during the interviews?
   1. Yes  2. No

B. Was a statement of the eyewitness’s confidence in the accuracy of the identification obtained prior to any feedback?
   1. Yes  2. No

C. Is there a high, medium, or low probability that the eyewitness testimony was accurate?

D. Is there a high, medium, or low probability that the eyewitness identification was accurate?