

EYEWITNESS IDENTIFICATION: SYSTEMIC REFORMS

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The vagaries of eyewitness identification are well known; the annals of criminal law are rife with instances of mistaken identification.

BACKGROUND

It has long been conjectured that eyewitness identification evidence is a major cause of the conviction of innocent persons. Although the empirical foundations for Justice Brennan's claim were not in place in the 1960s, by the 1980s there were substantial analyses showing that mistaken eyewitness identification was the major source of wrongful convictions.¹ Even more compelling evidence has developed over the last decade based on postconviction forensic DNA tests. Case analyses of people in the United States who were convicted of crimes that they did not commit (as revealed through later DNA tests) show that mistaken identifications account for more of these wrongful convictions than all other causes combined.²

In the mid 1970s, experimental psychologists began conducting scientific experiments to examine the conditions under which eyewitness

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1. Arye Rattner, *Convicted But Innocent: Wrongful Conviction and the Criminal Justice System*, 12 LAW & HUM. BEHAV. 283, 289 (1988).

2. EDWARD CONNORS ET AL., NAT'L INST. OF JUSTICE, CONVICTED BY JURIES, EXONERATED BY SCIENCE: CASE STUDIES IN THE USE OF DNA EVIDENCE TO ESTABLISH INNOCENCE AFTER TRIAL 15 (1996), available at <http://www.ncjrs.org/pdffiles/dnaevid.pdf>; JIM DWYER ET AL., ACTUAL INNOCENCE: FIVE DAYS TO EXECUTION AND OTHER DISPATCHES FROM THE WRONGLY CONVICTED (2000); Gary L. Wells et al., *Eyewitness Identification Procedures: Recommendations for Lineups and Photospreads*, 22 LAW & HUM. BEHAV. 603, 605 (1998) [hereinafter Wells et al., *Eyewitness Identification Procedures*]. For the most recent statistics on DNA exonerations, see Innocence Project, <http://www.innocenceproject.org> (last visited Mar. 10, 2006). As of the date of this writing, the DNA exoneration cases totaled 175.

identification evidence is more reliable or less reliable.³ Using controlled research methods in which events (for example, staged crimes and video events) were created for unsuspecting people, eyewitness researchers began isolating variables that could help explain and perhaps control the phenomenon of eyewitness misidentification.⁴ This research has proven the general thesis that mistaken eyewitness identifications can be very common under certain conditions.⁵ A major line of this research has focused on “system variables,” which are factors affecting the reliability of eyewitness identifications that the criminal justice system could (or should) control.⁶ Today, there is a vast body of knowledge in scientific psychology about improving the reliability of eyewitness identification evidence.⁷ Several recommendations that scientific psychologists have made for improving how lineups are conducted are particularly compelling.⁸ These advances in our understanding of how to improve eyewitness identification evidence have resulted in some jurisdictions making dramatic changes to the procedures used to collect and preserve eyewitness identification evidence.⁹

This Article describes a somewhat expanded set of reform recommendations regarding how lineups are conducted and discusses the

3. See, e.g., Elizabeth F. Loftus & John C. Palmer, *Reconstruction of Automobile Destruction: An Example of the Interaction Between Language and Memory*, 13 J. VERBAL LEARNING & VERBAL BEHAV. 585, 588 (1974).

4. *Id.* at 585-86.

5. See *id.* at 588.

6. Gary L. Wells, *Applied Eyewitness-Testimony Research: System Variables and Estimator Variables*, 36 J. PERSONALITY & SOC. PSYCH. 1546, 1548 (1978).

7. See, e.g., BRIAN L. CUTLER & STEVEN D. PENROD, *MISTAKEN IDENTIFICATION: THE EYEWITNESS, PSYCHOLOGY, AND THE LAW* (1995); Gary L. Wells & Elizabeth A. Olson, *Eyewitness Testimony*, 54 ANN. REV. PSYCHOL. 277, 290 (2003).

8. Gary L. Wells et al., *Recommendations for Properly Conducted Lineup Identification Tasks*, in *ADULT EYEWITNESS TESTIMONY: CURRENT TRENDS AND DEVELOPMENTS* 223, 228 (David Frank Ross et al. eds., 1994) [hereinafter Wells et al., *Recommendations*]; Wells et al., *Eyewitness Identification Procedures*, *supra* note 2, at 627.

9. The first state to adopt these reforms was New Jersey. Gina Kolata & Iver Peterson, *New Jersey Is Trying New Way for Witnesses to Say, 'It's Him,'* N.Y. TIMES, July 21, 2001, at A1. On April 18, 2001, New Jersey Attorney General John Farmer issued a directive to all police in New Jersey to begin conducting lineups using the methods that have been developed in scientific psychology. Memorandum from John J. Farmer, Jr., N.J. Attorney Gen., to All County Prosecutors, Police Chiefs, Law Enforcement Chief Executives, and Col. Carson J. Dunbar, N.J. State Police Superintendent (Apr. 18, 2001), available at <http://www.psychology.iastate.edu/faculty/gwells/njguidelines.pdf> [hereinafter Memorandum from John J. Farmer to Carson J. Dunbar et al.]. Within 180 days, all law enforcement agencies in New Jersey were to enact the new procedures. *Id.* More information about New Jersey's reforms and the reforms that have been made in other jurisdictions is provided *infra* Part II.

logic behind each recommendation. The logic, however, depends at least in part on understanding some basic psychological processes that influence mistaken identifications. Hence, I first describe one of the processes by which mistaken identifications occur, namely the “relative-judgment” process, in simple, nontechnical terms. The purpose of this description is to help promote an understanding of the problem and to assist in explaining how certain improvements to lineup procedures can reduce the chance of mistaken identification. Second, I describe the problem of false confidence. False confidence refers to the phenomenon in which eyewitnesses have high confidence (or certainty) that they made an accurate identification when in fact the identification was mistaken. Third, I describe six procedural recommendations that jurisdictions should consider in their attempts to improve the reliability of eyewitness identification evidence. These six recommendations for identification procedures are relatively costless, but not totally without cost. The double-blind recommendation, for instance, can place some manpower costs on a department, depending on how it is implemented. Also, the sequential procedure can result in some reduction in the frequency of identifications of the suspect. Fourth, I describe difficulties that have prevented these recommendations from being utilized to the betterment of criminal justice on a widespread scale. Next, I describe a new recommendation, a “reasonable-suspicion rule,” that, although not a part of the lineup procedure itself, can have a dramatic effect on reducing the chance of a mistaken identification. Finally, I discuss how some jurisdictions have managed to make these reforms and the advantages that accrue to jurisdictions that implement these reforms.

I. UNDERSTANDING LINEUPS AND RELATIVE JUDGMENTS

A. *The Lineup*

A typical police lineup in the United States is composed of six people, one is a suspect and the remainder are “fillers.”¹⁰ A filler (sometimes called a stand-in, distractor, or foil) is a nonsuspect person in the lineup who is there merely to help make the process fair to the suspect.¹¹ There are a number of variations on this: sometimes the

10. TECHNICAL WORKING GROUP FOR EYEWITNESS EVIDENCE, U.S. DEP'T OF JUSTICE, EYEWITNESS EVIDENCE: A GUIDE FOR LAW ENFORCEMENT 29 (1999), *available at* <http://www.ncjrs.org/pdffiles1/nij/178240.pdf>.

11. *See id.* The word “filler” should be distinguished from the word “suspect,” which throughout this Article is used to mean a person who is suspected of being the

lineup is a set of photographs (photo lineup), sometimes the lineup is live (live lineup).¹² All of the discussions in this Article apply to both live and photo lineups. Sometimes lineups contain more or less than six people, but six is the most common number. Sometimes a lineup contains more than one suspect, and some lineups have been composed totally of suspects, which is a very dangerous practice.¹³ The purpose of the lineup is to see if the eyewitness will identify the suspect as being the offender rather than identifying one of the known-innocent fillers.¹⁴

B. *Relative Judgments*

Although the cognitive processes underlying human recognition memory are complex and beyond the scope of this Article, there is one underlying process that is both simple to understand and highly informative. Specifically, people have a tendency to select the person who looks most like the offender *relative* to the other members of the lineup.¹⁵ At first glance, this relative-judgment process would seem to be nonproblematic. In fact, however, the relative-judgment process is extremely problematic. The problem is made apparent by considering the fact that there is always someone who looks more like the offender than the remaining members of the lineup, even when the lineup does not include the offender. In these cases, eyewitnesses have a tendency to select that innocent person and confuse this relative-judgment process with recognition memory.¹⁶

offender, but might or might not actually be the offender. Readers must not assume that the word suspect means offender, culprit, or perpetrator.

12. *Id.* at 29-30.

13. See generally Gary L. Wells & John W. Turtle, *Eyewitness Identification: The Importance of Lineup Models*, 99 PSYCHOL. BULL. 320 (1986) (evaluating the potential error rates in single-suspect versus all-suspect lineup models). A proper lineup has one suspect (who might or might not be the perpetrator), and the remaining lineup members are merely fillers. *Id.* at 328. If the eyewitness picks a filler, the error is relatively harmless. *Id.* at 321. Having more than one suspect in a lineup, in contrast, is one of the worst possible procedures. *Id.* at 328. Analyses show that the chance of a mistaken identification increases dramatically when lineups include multiple suspects. *Id.* Consider, for example, a lineup in which all members are suspects. In such a case, the eyewitness cannot “fail” the test because any person who is identified is considered a suspect. The beauty of a proper (single-suspect) lineup is that if the eyewitness is merely guessing or has a weak memory, the eyewitness will likely err and choose a filler.

14. TECHNICAL WORKING GROUP FOR EYEWITNESS EVIDENCE, *supra* note 10.

15. See Gary L. Wells, *The Psychology of Lineup Identifications*, 14 J. APPLIED SOC. PSYCHOL. 89, 92-93 (1984).

16. *Id.*

The relative-judgment problem is well illustrated in an experiment in which a crime was staged 200 times for 200 separate witnesses.¹⁷ All of the witnesses were then shown one of two lineups.¹⁸ Every witness was warned that the offender might or might not be in the lineup.¹⁹ Half of the witnesses viewed a six-person lineup in which the offender was present. Of these 100 witnesses, 21% made no selection at all, 54% picked the offender, 13% picked a particular filler, and the remaining witnesses spread their choices across the other lineup members.²⁰ The other half of the witnesses viewed a lineup in which the offender was removed and was not replaced.²¹ The critical question in this scenario is what happened to the 54% of witnesses who would have chosen the offender had he been present; did they shift to the no-choice category, thereby causing 75% to make no choice? No.²² Of these 100 witnesses, the no-choice rate increased to only 32% whereas the person who was previously picked only 13% of the time was now picked 38% of the time.²³ In other words, even though all of the witnesses were warned that the offender might not be in the lineup, removing the offender from the lineup led witnesses to shift to the “next best choice,” nearly tripling the jeopardy of that person.²⁴ Controlled eyewitness experiments consistently show that the most difficult problem for eyewitnesses is recognizing the *absence* of the offender because, even when the offender is not in the lineup, there is still someone who looks most like the offender relative to other members of the lineup.²⁵

The majority of DNA exoneration cases represent instances in which the actual offender was not in the lineup.²⁶ This is precisely what

17. Gary L. Wells, *What Do We Know About Eyewitness Identification?*, 48 AM. PSYCHOLOGIST 553, 560-61 (1993).

18. *Id.* at 561.

19. *Id.*

20. *Id.*

21. *Id.*

22. *Id.*

23. *Id.*

24. *See id.* Studies reveal that different eyewitnesses might have different recollections of who the “next best” person is when the offender is removed. Hence, it is not always the case that the most commonly picked person (after the offender) in an offender-present lineup will be the one that most witnesses will shift to when the offender is removed. The point, however, is that a substantial proportion of witnesses who pick the offender when he or she is present would have picked someone else (rather than making no choice) if the offender was not in the lineup.

25. Wells et al., *Eyewitness Identification Procedures*, *supra* note 2, at 613-14.

26. *See* Innocence Project: Mistaken I.D., <http://www.innocenceproject.org/causes/mistakenid.php> (last visited Mar. 12, 2006). According to the Innocence Project at the Benjamin N. Cardozo School of Law:

eyewitness researchers had predicted based on data from controlled experiments.²⁷ Unfortunately, there are hundreds of circumstances under which police might unknowingly place an innocent suspect in a lineup. Sometimes police place an innocent suspect in a lineup because they received an anonymous but erroneous tip that the person was the offender; sometimes an innocent suspect is placed in a lineup merely because the person fits the general physical description and was in the vicinity of the crime; sometimes an innocent person came into possession of something linked to the crime; and sometimes one or more detectives places a suspect in a lineup based on a “hunch.” Whatever the cause, it can never be presumed that the suspect is the offender; if police knew that, they would not need the lineup at all. In Part III of this Article, I use this point to discuss the need for a “reasonable-suspicion” criterion for placing suspects in lineups.

C. False Confidence

The confidence (or certainty) that an eyewitness expresses in his or her identification during a lineup is a powerful determinant of whether police, prosecutors, judges, and jurors will accept the identification as proof that the identified person is the actual offender. Controlled experiments, however, show that eyewitnesses can be both highly confident (even “positive”) and yet totally mistaken in an eyewitness identification.²⁸ Meta-analyses, which combine the results of a large number of controlled experiments, show that the correlation between confidence and accuracy in eyewitness identification is likely to be somewhere in the range of +.40, where +1.0 is a perfect correlation and 0.0 is no correlation at all.²⁹ This means that a confident witness is more likely to be accurate than is a nonconfident witness. However, the +.40 correlation is far from perfect (+1.0), indicating that there are many

Mistaken eyewitness identification played a role in the vast majority of the postconviction DNA exonerations in the United States. Studies of eyewitness identification over the past three decades have consistently shown the fallibility of eyewitness identifications as well as the unwitting contamination of witness recall through many standard eyewitness identification procedures.

Id.

27. See, e.g., Wells et al., *Eyewitness Identification Procedures*, *supra* note 2, at 629.

28. See, e.g., Siegfried Ludwig Sporer et al., *Choosing, Confidence, and Accuracy: A Meta-Analysis of the Confidence-Accuracy Relation in Eyewitness Identification Studies*, 118 PSYCHOL. BULL. 315, 324 (1995) (concluding that “confidence may be a very poor and even useless or misleading indicator of witness accuracy”).

29. *Id.* at 319.

confident witnesses who are inaccurate and many nonconfident witnesses who are accurate.

In practice, the problem with using eyewitness confidence to infer accuracy is even more problematic than the +.40 correlation suggests. Recent research shows that “feedback” to eyewitnesses who have made mistaken identifications can lead them to inflate their confidence dramatically.³⁰ In these experiments, eyewitnesses who had made mistaken identifications were simply told, “Good, you identified the actual suspect” (confirming feedback) or were told nothing (a control condition).³¹ Later, they were asked a series of questions about their identifications, including how certain they were at the time that they had identified the actual gunman.³² In the control condition, 15% of these mistaken eyewitnesses said that they were positive or nearly positive that they identified the actual gunman.³³ However, in the confirming feedback condition, 50% of the mistaken witnesses reported that they were positive or nearly positive.³⁴ This research also showed that most eyewitnesses denied that the feedback influenced them and that those who denied being influenced were just as influenced as those who admitted that they might have been influenced.³⁵

The confidence of an eyewitness should be based on the witness’s memory alone, not on feedback from the investigators. The case of Ronald Cotton, who was misidentified by Jennifer Thompson, illustrates

30. 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, 117 (2002); Carolyn Semmler et al., *Effects of Postidentification Feedback on Eyewitness Identification and Nonidentification Confidence*, 89 J. APPLIED PSYCHOL. 334, 342-43 (2004); Gary L. Wells & Amy L. Bradfield, *Distortions in Eyewitness’ Recollections: Can the Postidentification Feedback Effect Be Moderated?*, 10 PSYCHOL. SCI. 138, 140-42 (1999); 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, 372-73 (1998) [hereinafter Wells & Bradfield, *Feedback Distorts*]; Gary L. Wells et al., *Distorted Retrospective Eyewitness Reports as Functions of Feedback and Delay*, 9 J. EXPERIMENTAL PSYCHOL. APPLIED 42, 51-52 (2003).

31. Wells & Bradfield, *Feedback Distorts*, *supra* note 30, at 363. In some instances, the experimenter also gave “disconfirming feedback” by telling the participant “Actually, the suspect was number ___.” *Id.*

32. *Id.*

33. *Id.* at 374.

34. *Id.*

35. *Id.* at 372. Confidence inflation is not the only consequence of this feedback. Confirming feedback (versus no feedback) from the lineup administrator also leads witnesses to later report that they had a better view of the culprit, paid more attention to the culprit’s face, and to report other retrospective distortions of their witnessing experience. *Id.* at 372-73.

this point.³⁶ When Jennifer Thompson erroneously identified Ronald Cotton's photo from a photo lineup, the detectives turned and said to her, "We thought this might be the one."³⁷ At trial, Thompson was absolutely positive that Ronald Cotton was the man who raped her.³⁸ Like the eyewitnesses who received confirming feedback in the research experiments, there is no reason to think that she would be aware of the way this influenced her confidence.

In effect, the influence that feedback has on confidence shows the importance of establishing protocols for lineups that police should follow. As described in the recommendation for double-blind testing in the next section, confidence inflation is controllable.³⁹

D. Six Recommendations for Lineups

Trace evidence is usually construed as a *physical* trace, such as blood, semen, fibers, or fingerprints, that might help establish the identity of the offender.⁴⁰ The reliability of eyewitness evidence would improve if the justice system were to begin thinking of human memory as a form of trace evidence.⁴¹ In the case of eyewitness memory, the trace left behind by the offender exists in the brain of the eyewitness.⁴² Of course, the memory-as-trace-evidence idea is largely a metaphor at this point because physical changes in the brain cannot yet be linked to having seen a specific offender.⁴³ Instead, the trace is examined through the verbal behaviors of the eyewitness.⁴⁴ Nevertheless, the metaphor is valuable and informative. Human memory can be as fragile, if not more so, as various types of physical trace evidence.⁴⁵ Like physical trace evidence, memory traces can be tampered with, destroyed, lost, distorted, or contaminated by the procedures that are used to collect it. There should be at least as much attention given to the development of proper

36. Innocence Project Case Profiles: Ronald Cotton, http://www.innocenceproject.org/case/display_profile.php?id=06 (last visited Mar. 12, 2006).

37. Frontline: What Jennifer Saw, <http://www.pbs.org/wgbh/pages/frontline/shows/dna/interviews/thompson.html> (last visited Mar. 12, 2006).

38. *Id.*

39. *See infra* Part I.D.5.

40. *See, e.g.*, Gary L. Wells, *Scientific Study of Witness Memory: Implications for Public and Legal Policy*, 1 PSYCHOL. PUB. POL'Y & L. 726, 726 (1995).

41. *Id.* at 726, 730.

42. *Id.* at 726.

43. *Id.*

44. *Id.*

45. *Id.* at 727.

protocols for collecting memory trace evidence as there is to the protocols for collecting blood, semen, fibers, and other physical trace evidence. Some progress in this direction was made by the National Institute of Justice's guide (the "NIJ guide") for eyewitness evidence that was published in October 1999, an effort that I was heavily involved in.⁴⁶ However, the NIJ guide falls well short of pressing the full set of six recommendations that I describe here and is silent on the "reasonable-suspicion" criterion that is proposed in Part III of this Article. Furthermore, the vast majority of police departments have not changed their procedures even to the point of being consistent with the NIJ guide, let alone made the kinds of changes required to bring eyewitness identification evidence up to the levels that should be achieved.

1. ONLY ONE SUSPECT PER LINEUP

A lineup should contain only one suspect with the remaining persons being known-innocent fillers.⁴⁷ A lineup that contains only suspects (no fillers) is like a multiple-choice test with no "wrong" answer. In an all-suspect lineup, charges may be brought against anyone whom the witness identifies. If there are fillers, however, an eyewitness who is prone to simply pick someone is likely to pick a filler. Because it is known that the identification of a filler is a mistake, charges will not be brought against a filler and the unreliability of the witness is revealed. Although fundamental and seemingly elementary, this safeguard against mistaken identification is commonly violated. The one-suspect recommendation applies under all circumstances. For instance, if there are multiple suspects even though there was only one offender, each suspect should appear in his or her own lineup along with fillers selected for that lineup. If there were multiple offenders, each suspect should still appear in his or her own lineup.

2. THE SUSPECT SHOULD NOT "STAND OUT"

Merely having fillers is not in itself a guarantee that they will serve their function of helping to prevent mistaken identifications.⁴⁸ Consider, for instance, a case in which the eyewitness described the offender as

46. See TECHNICAL WORKING GROUP FOR EYEWITNESS EVIDENCE, *supra* note 10, at 3-4.

47. *Id.* at 29.

48. See R.C.L. Lindsay & Gary L. Wells, *What Price Justice? Exploring the Relationship of Lineup Fairness to Identification Accuracy*, 4 LAW & HUM. BEHAV. 303, 313 (1980).

being a tall, thin male with dark hair and a moustache. Suppose now that the suspect fits this description but some fillers in the lineup are short, others do not have moustaches, and others have light hair. In this case, the suspect will stand out to the witness as being the person who looks most like the offender relative to the other lineup members, regardless of whether the suspect is the actual offender or not. Research shows that placing an innocent suspect who fits the description of the offender in a lineup in which the fillers do not fit the description results in a high rate of mistaken identifications of that person, even when absolute similarity between the innocent person and the offender is only moderate.

The problem of choosing fillers for lineups becomes more complex under various circumstances, such as when there are multiple witnesses who give different descriptions, when the suspect himself does not fit the description, when the suspect has unique features that are not easily matched by fillers, or when the person became a suspect because he or she resembled a composite drawing. However, there are appropriate methods for choosing fillers under all of these circumstances. This is one domain where there is a need for police training because of the complex possibilities. In any case, the test for whether the fillers are serving their purpose of helping to protect against mistaken identification is whether a nonwitness could pick the suspect out from the lineup by merely knowing the description that the eyewitness gave of the offender or by answering the question of who stands out in the lineup.⁴⁹ If the answer is “yes,” the fillers are not serving their purpose in the lineup.

3. CAUTION THAT THE OFFENDER MIGHT NOT BE IN THE LINEUP

Eyewitnesses approach lineups with the goal of finding the offender.⁵⁰ They should be cautioned that the offender might not be in the lineup because they need to understand that they are not “failing” if they do not choose someone; after all, the correct answer might be “none of the above.” Importantly, research shows that giving eyewitnesses the instruction that the offender might or might not be in the lineup serves to lower rates of choosing when the offender is not in the lineup, but it has

49. An entire issue of the journal *Applied Cognitive Psychology* was devoted to the problem of measuring the fairness of a lineup. See Special Issue, *Measuring Lineup Fairness*, 13 *APPLIED COGNITIVE PSYCHOL.* (1999). The issues are far more complex than presented here, but the overarching idea is that nonwitnesses should be unable to pick the suspect out from among the fillers.

50. Roy S. Malpass & Patricia G. Devine, *Eyewitness Identification: Lineup Instructions and the Absence of the Offender*, 66 *J. APPLIED PSYCHOL.* 482, 486 (1981).

little effect on reducing the chance of identifying the offender when the offender is present in the lineup.⁵¹

4. THE SEQUENTIAL PROCEDURE

Eyewitness researchers call the standard method for lineups a “simultaneous lineup.”⁵² In a simultaneous lineup, all of the lineup members are displayed to the eyewitness at once.⁵³ For instance, in a simultaneous photo lineup the suspect’s photo and five filler photos might be arranged in two rows of three photos, all mounted on a cardboard folder. This easily permits eyewitnesses to examine all six photos at once and determine who looks the most like the offender, which tempts them to make a decision based on relative judgments.⁵⁴ A sequential lineup, on the other hand, shows the eyewitness only one person at a time and requires the eyewitness to make a “yes,” “no,” or “not sure” response to each one before moving on to the next.⁵⁵

The psychological experience for the eyewitness is dramatically different using the sequential procedure than it is using the simultaneous procedure.⁵⁶ Using the sequential procedure, the eyewitness cannot simply compare one photo to another and decide who looks the most like the offender relative to the others.⁵⁷ Although the eyewitness can mentally compare the current photo to those presented previously, the eyewitness cannot be sure what the next photo will look like; maybe the next one will look even more like the offender.⁵⁸ The sequential procedure is conducted such that the witness does not know when the last photo is being shown.⁵⁹ As a result, the sequential procedure appears to lead eyewitnesses to set higher criteria for making a positive identification because they cannot be sure that they have seen all of the lineup members.

51. *Id.* at 486-87; Nancy M. Steblay, *Social Influence in Eyewitness Recall: A Meta-Analytic Review of Lineup Instruction Effects*, 21 *LAW & HUM. BEHAV.* 283, 283, 285-86 (1997).

52. Nancy M. Steblay et al., *Eyewitness Accuracy Rates in Sequential and Simultaneous Lineup Presentations: A Meta-Analytic Comparison*, 25 *LAW & HUM. BEHAV.* 459, 459 (2001).

53. *Id.*

54. *Id.*

55. R.C.L. Lindsay & Gary L. Wells, *Improving Eyewitness Identifications from Lineups: Simultaneous Versus Sequential Lineup Presentation*, 70 *J. APPLIED PSYCHOL.* 556, 559 (1985).

56. *Id.*

57. *Id.*

58. *Id.* at 563.

59. *Id.* at 559.

Research comparing the simultaneous lineup procedure to the sequential lineup procedure shows that using the sequential lineup procedure produces fewer mistaken identifications.⁶⁰ Recently, some research evidence has also suggested that there are conditions under which the sequential procedure might not be superior to the simultaneous procedure.⁶¹ In particular, there is some concern that the rate of accurate identifications could be lower using the sequential lineup.⁶² However, there does not appear to be any evidence that the sequential procedure produces a worse *ratio* of accurate to mistaken identifications than does the simultaneous procedure. Using the data from the meta-analysis by Professor Nancy Steblay and her colleagues, there are two ways to calculate this ratio. The first way is to divide the accurate identification rate for culprit-present lineups by the average identification rate of any given person in the culprit-absent condition. Using that method, the simultaneous procedure yields an accurate-identification ratio of $.50/.085 = 5.88$ and the sequential procedure yields an accurate-identification ratio of $.35/.0467 = 7.49$. The other method of calculating the ratio of accurate to mistaken identifications is to use the rate of identifying the known-innocent suspect in the culprit-absent condition as the denominator. Using this method, the simultaneous procedure yields an accurate-identification ratio of $.50/.27 = 1.85$ and the sequential procedure produces an accurate-identification ratio of $.35/.09 = 3.89$. In other words, in spite of some reduction in accurate identifications, the sequential appears to improve the *odds* that a suspect, if identified, is the actual culprit. This is consistent with the idea that the sequential procedure is more conservative than the simultaneous procedure.

In actual practice, jurisdictions that have adopted the sequential procedure have generally permitted an eyewitness who makes a request

60. Brian L. Cutler & J. Steven D. Penrod, *Improving the Reliability of Eyewitness Identification: Lineup Construction and Presentation*, 73 J. APPLIED PSYCHOL. 281, 288 (1988); Lindsay & Wells, *supra* note 55, at 562; R.C.L. Lindsay et al., *Biased Lineups: Sequential Presentation Reduces the Problem*, 76 J. APPLIED PSYCHOL. 796, 800 (1991); R.C.L. Lindsay et al., *Sequential Lineup Presentation: Technique Matters*, 76 J. APPLIED PSYCHOL. 741, 744 (1991); R.C.L. Lindsay et al., *Simultaneous Lineups, Sequential Lineups, and Showups: Eyewitness Identification Decisions of Adults and Children*, 21 LAW & HUM. BEHAV. 391, 397 (1997) [hereinafter Lindsay et al., *Simultaneous Lineups*]; Siegfried Ludwig Sporer, *Eyewitness Identification Accuracy, Confidence, and Decision Times in Simultaneous and Sequential Lineups*, 78 J. APPLIED PSYCHOL. 22, 30 (1993); *see also* Steblay et al., *supra* note 52, at 471 (noting that “correct rejection rates are significantly higher for sequential than simultaneous lineups” but concluding that the “[i]dentification of perpetrators from target-present lineups occurs at a higher rate from simultaneous than from sequential lineups”).

61. *See, e.g.*, Steblay et al., *supra* note 52, at 471.

62. *Id.*

to view the lineup members again.⁶³ However, a record must be made showing that the eyewitness could not make a positive identification using the sequential procedure.⁶⁴ Any identification made on a second or later viewing of the lineup should thereby be accorded less credibility because the eyewitness apparently felt the need to see all photos before deciding. Why should an eyewitness need to know that they have seen all photos before deciding? Presumably, the eyewitness is making a relative judgment, deciding who looks *most* like the culprit. Data collected from Hennepin County, Minnesota in actual crime cases using the sequential procedure are consistent with this presumption.⁶⁵ Witnesses who made an identification on the first viewing of the person (that is, not needing to see the remaining photos before making a positive identification) rarely chose a filler (8%).⁶⁶ However, witnesses who could not decide on the first viewing and took a second “lap” through the photos revealed higher rates of filler identifications, an upward trend in filler identifications that continued to increase with subsequent viewings.⁶⁷

The sequential lineup procedure appears to be one that good eyewitnesses have no trouble with, but gives eyewitnesses whose memories are weaker some difficulty. As a result, there could be some loss in accurate identifications using the sequential procedure on the first “lap.” Permitting witnesses to return to the set for a second “lap” could pick up any lost accurate identifications, but the second lap also makes the lineup a de facto simultaneous procedure. Hence, careful records must be kept to document whether the witness made the identification in the pure sequential fashion or not. Ultimately, policy makers will need to balance the chance that a guilty person might not be identified using

63. The sequential procedure is used in New Jersey, *see* Memorandum from John J. Farmer to Carson J. Dunbar et al., *supra* note 9, North Carolina, *see* N.C. Actual Innocence Comm’n, Recommendations for Eyewitness Identification, <http://www.ncids.org/News%20&%20Updates/Eyewitness%20ID.pdf> (last visited Mar. 29, 2006), and Wisconsin, *see* Avery Task Force, Eyewitness Identification Procedure Recommendations, http://www.law.wisc.edu/fjr/innocence/eyewitness_guidelines.htm (last visited Mar. 13, 2006).

64. *See, e.g.*, TECHNICAL WORKING GROUP FOR EYEWITNESS EVIDENCE, *supra* note 10, at 38; N.C. Actual Innocence Comm’n, *supra* note 63; Avery Task Force, *supra* note 63.

65. *See* Amy Klobuchar & Hilary Lindell Caligiuri, *Protecting the Innocent/Convicting the Guilty: Hennepin County’s Pilot Project in Blind Sequential Eyewitness Identification*, 32 WM. MITCHELL L. REV. 1, 23-24 (2005) (discussing results from the actual application of sequential lineups in the field).

66. *Id.*

67. Amy Klobuchar, Nancy M. Steblay & Hilary Lindell Caligiuri, *Improving Eyewitness Identifications: Hennepin County’s Blind-Sequential Lineup Pilot Project*, 4 CARDOZO PUB. L., POL’Y & ETHICS J. (forthcoming 2006).

the sequential lineup procedure against the odds that an innocent person will be identified using a simultaneous lineup.

It is important to note that the sequential lineup procedure is not at all similar to the “show-up.” A show-up is a procedure in which police show the eyewitness one person.⁶⁸ Show-ups tend to occur when a suspect who fits the description is found close to a crime scene shortly after the crime. The sequential procedure is qualitatively different from the show-up because it is made clear to the eyewitness in the sequential procedure that there are multiple persons to be viewed. The idea behind using a show-up is to present the suspect to the witness while the witness’s memory is still fresh. Research indicates, however, that show-ups produce higher rates of mistaken identification than do simultaneous lineups or sequential lineups, even when the witness is tested soon after the witnessed event.⁶⁹ The reason for the higher rate of mistaken identifications when using show-ups is mainly because show-ups do not include fillers that protect an innocent suspect.⁷⁰

5. DOUBLE-BLIND TESTING

The person who administers a lineup should not know which person in the lineup is the suspect.⁷¹ In social and medical sciences, this type of procedure is called “double-blind” testing.⁷² Consider, for instance, the use of placebo control conditions in testing new drugs. Not only is the patient unaware of whether he or she received the drug or a placebo (single-blind), but so are any medical personnel who examine the patients (hence, the term “double-blind”). In this context, “blind” is figurative, not literal. Although the reason for keeping the patient blind

68. See Wells et al., *Eyewitness Identification Procedures*, *supra* note 2, at 630.

69. Dawn J. Dekle et al., *Children as Witnesses: A Comparison of Lineup Versus Showup Identification Methods*, 10 *APPLIED COGNITIVE PSYCHOL.* 1, 10 (1996); Lindsay et al., *Simultaneous Lineups*, *supra* note 60, at 402; A. Daniel Yarmey et al., *Accuracy of Eyewitness Identifications in Showups and Lineups*, 20 *LAW & HUM. BEHAV.* 459, 475 (1996). In Richard Gonzalez et al., *Response Biases in Lineups and Showups*, 64 *J. PERSONALITY & SOC. PSYCHOL.* 525 (1993), the authors suggest that show-ups do not result in higher misidentification rates than lineups. However, under the assumption of a single-suspect lineup, the rates of misidentifying a suspect must be divided by six (the number of lineup members), which makes the rate of suspect identifications lower for lineups than for show-ups.

70. See Michael S. Wogalter et al., *Suggestiveness in Photospread Line-ups: Similarity Induces Distinctiveness*, 6 *APPLIED COGNITIVE PSYCHOL.* 443, 444 (1992) (“[L]ine-ups are more fair than show-ups because the probability of choosing an innocent suspect is distributed across several faces of a line-up.”).

71. See Wells et al., *Recommendations*, *supra* note 8, at 236; Wells, *supra* note 15, at 93.

72. See Bradfield et al., *supra* note 30, at 118.

as to whether he or she received the drug or a placebo is obvious, the need to keep the tester blind is less obvious.

The reason for keeping the tester blind is to prevent the tester from *unintentionally* influencing the outcome of the results. The double-blind testing recommendation for lineups does not assume that the tester intends to influence the eyewitness, or is even aware of any such influence. This is not an integrity issue. Instead, it is merely an acknowledgment that people in law enforcement, like people in behavioral and medical research, are influenced by their own beliefs and unknowingly “leak” this information, both verbally and nonverbally, in ways that can influence the person being tested.⁷³ Vast scientific literature shows that the need for double-blind testing procedures is particularly crucial when there is close face-to-face interaction between the tester and the person being tested.⁷⁴

The need for double-blind lineup testing is particularly critical for photo lineups. This is because, unlike live lineups, there is no right to the presence of defense counsel in photographic identification procedures and, hence, no one to observe possible suggestiveness in the procedure⁷⁵ Typically, the primary police investigator in the case will assemble the photo lineup, contact the eyewitness, and meet with the eyewitness for the purpose showing these photos. The investigator, of course, knows which person in the photo lineup is the suspect.

There are innumerable ways that an investigator can influence an eyewitness when administering a lineup. Suppose, for instance, the investigator placed his or her suspect in position three. Upon viewing the lineup, suppose the witness utters, “Well, number two . . .” A natural and understandable response of the investigator might be, “Now, be sure you look at all the photos.” The investigator might simply think that the eyewitness is not examining all of the photos, but, in effect, the investigator is shaping the eyewitness to move off of picture two and consider another one instead. Now suppose what the investigator might do if the first words uttered by the witness were, “Well, number three . . .” Given this response, the investigator might say, “Tell me about number three.” Notice how the investigator’s knowledge that number two is a filler and number three is the suspect can shape the nature of the interaction such that the witness’s identification behavior is not coming strictly from memory, but instead is being influenced by the

73. ROBERT ROSENTHAL, *EXPERIMENTER EFFECTS IN BEHAVIORAL RESEARCH* (1976).

74. See, e.g., Monica J. Harris & Robert Rosenthal, *Mediation of Interpersonal Expectancy Effects: 31 Meta-Analyses*, 97 *PSYCHOL. BULL.* 363, 378 (1985).

75. *United States vs. Ash*, 413 U.S. 300 (1973).

investigator's knowledge that the fillers in the lineup are in fact "just fillers." Concerns about such influence are not restricted to verbal behaviors. Nonverbal behaviors, such as smiling, frowning, and leaning, are particularly difficult for the tester to inhibit. Yet, these cues can affect the eyewitness.

Double-blind lineup procedures are needed not only to prevent the investigator from unintentionally influencing which person the eyewitness picks, but also are needed to prevent the investigator from influencing the certainty of the eyewitness. The previous discussion of false confidence is particularly relevant here.⁷⁶ Giving eyewitnesses feedback suggesting that they identified the right person can cement false memories and erase any original uncertainty. This feedback is often explicit and verbal (for example, "Good, that is the guy we thought it was"), but can be nonverbal as well (such as facial expressions and posture). Many experienced police investigators will acknowledge that eyewitnesses who pick someone will sometimes turn to the investigator and ask, "Did I get him?" With double-blind testing, the answer would have to be "I don't know." Even better, by telling the eyewitness ahead of time that the lineup administrator does not know which person in the lineup is the suspect, the eyewitness will not be monitoring the lineup administrator for verbal and nonverbal cues that could affect their selection or affect the confidence the eyewitness expresses in that selection.

6. COLLECT A CONFIDENCE STATEMENT AT THE TIME OF THE IDENTIFICATION

At the time an eyewitness makes an identification, a statement should be obtained from the eyewitness indicating how confident he or she is that the person identified is the offender. Of course, this assumes double-blind testing: the statement should be obtained by a lineup administrator who does not know which lineup member is the suspect. The point is to assess the confidence of the eyewitness before the eyewitness can be influenced by other events, such as learning the status of the identified person. As discussed previously, the confidence of an eyewitness is the primary determinant of whether people will assume the identification to be accurate, even though the confidence of an eyewitness is readily influenced by feedback.

Eyewitnesses cannot be kept in the dark about their identification decisions forever. Victim-witnesses, for instance, probably have a right to know fairly soon whether the person they identified was the suspect or

76. See *supra* Part I.C.

a filler. However, this information need not be given to an eyewitness prior to getting a confidence statement. If needed, an eyewitness could be debriefed soon after this confidence statement is obtained, but an eyewitness should never be debriefed (or left to the influence of other events) prior to getting a confidence statement.

Jurors have a right to expect that an eyewitness's expression of confidence in an identification is based purely on the eyewitness's independent recollection. If the eyewitness was in fact uncertain at the time of the identification, that fact should be a matter of record that is known to the police, the prosecutor, the judge, and the jury. The eyewitness's initial uncertainty is lost forever, however, if it is not assessed in an unbiased manner at the time of the identification.

II. IMPLEMENTING PROCEDURES TO INCREASE THE RELIABILITY OF EYEWITNESS IDENTIFICATION

A. *Benefits of Implementation*

If implemented, these recommendations for lineups would advance justice in several ways. First, implementation of these recommendations would benefit innocent suspects because they would be less likely to be misidentified. Second, implementation of these procedures would help keep the focus of investigations on guilty persons. It is often forgotten that a mistakenly identified suspect usually also means that the actual offender is still at large, perhaps re-offending. Jennifer Thompson's misidentification of Ronald Cotton, for instance, stopped the search for the real rapist, Bobby Poole, who continued to assault victims.⁷⁷ Third, implementation of these procedures would be of assistance to those involved in evaluating the identification testimony (such as prosecutors, judges, and jurors). Although mistaken identifications can still happen even when these procedures are followed, prosecutors, judges, and jurors can be assured that the procedures themselves are not a contributing factor. Finally, the use of these procedures would lessen the need for expert testimony because expert testimony commonly focuses on the inadequacies of the procedures used in lineups.

77. See *supra* Part I.C.

B. *Costs of Implementation*

These procedural recommendations are largely costless.⁷⁸ With the possible exception of very small police departments, these changes to procedures could be readily implemented within current levels of funding in a department.⁷⁹ Continuing police training programs already exist and this material could simply be incorporated into existing training.

C. *The Difficulty of Implementation*

Given the high benefits and low cost of implementing these procedures, it seems odd that fundamental changes to the way lineups are conducted in the United States have not yet taken place. I believe that there are four main factors that account for why change has not happened faster. These four factors are: (1) a communication gap, (2) the police tradition, (3) a lack of direction from prosecutors and courts, and (4) the pervasiveness of local control.

1. COMMUNICATION GAP

These recommendations and their empirical foundations were developed within the field of experimental psychology, not law enforcement. Almost all of the research literature is published in scientific psychology journals, which is generally written at a technical level and is not readily accessible. Traditionally, law enforcement does not look to experimental psychology for direction, and experimental psychologists typically have no experience dealing with law enforcement. Hence, paths of communication are poorly cut and it takes time to clear those paths.

2. POLICE TRADITION

Second, like most professions, people in the police profession use procedures handed down to them from their predecessors.⁸⁰ Police usually learn to conduct lineups by watching an experienced officer or by

78. Gary L. Wells & Eric P. Seelau, *Eyewitness Identification: Psychological Research and Legal Policy on Lineups*, 1 PSYCHOL. PUB. POL'Y & L. 765, 786 (1995).

79. *See id.*

80. Gary L. Wells et al., *A Successful Application of Eyewitness Research*, 55 AM. PSYCHOL. 581, 591 (2000) (reporting that, once police are familiarized with the reform proposals and their benefits, they are receptive to the proposals, and suggesting reasons for the expected resistance from police).

simply using their own common sense and cursory understanding of the concept of a lineup. No one ever told them about the fragility of human memory, the subtle ways in which procedures influence witnesses, or the need for double-blind testing because the generation that preceded them was not told. Departmental procedure manuals are seldom consulted and, when they are, they do not contain these six procedural recommendations. Training on eyewitness identification in law enforcement is commonly a ten-minute discussion restricted to legal requirements, such as permitting counsel to be present at live lineups if the suspect has already been charged with the crime. In general, law enforcement has not developed significant expertise and direction from within law enforcement, as evidenced, for instance, by the absence of significant writings, research, and recommendations from within law enforcement on eyewitness identification issues.

3. LACK OF DIRECTION FROM PROSECUTORS AND COURTS

A third reason for slow change in how lineups are conducted is that there has been no significant pressure from prosecutors and courts to improve these procedures.⁸¹ Police typically look to the courts and to prosecutors who, in effect, tell them what is acceptable or unacceptable evidence for purposes of successful prosecution. Why have prosecutors not provided this leadership in improving lineup procedures? There seem to be several reasons. First, most prosecutors are not truly familiar with the issues.⁸² Furthermore, those prosecutors who are familiar with the issues usually develop this familiarity in the context of trying to keep an eyewitness expert from testifying for the defense.⁸³ In their attempts to keep eyewitness experts from testifying for the defense, prosecutors have come to perceive the issue erroneously as a defense issue.⁸⁴ Perhaps more importantly, some prosecutors seem to fear that any admission that new lineup procedures are better than the old procedures (for example, that sequential is better than simultaneous) would undermine confidence in the convictions that they have secured using the old procedures.⁸⁵ Along these same lines, some prosecutors feel that admitting that there are problems with past procedures might even open up grounds for appeal from persons who were convicted using those

81. Cf. Sean Gardiner, *Dynamics of Righting a Wrong: The DA's Role in Reversals*, *NEWSDAY* (Queens, N.Y.), Dec. 10, 2002, at A35 (describing an exception to the general attitude of prosecutors when reacting to possible wrongful convictions).

82. See Wells et al., *supra* note 80, at 591-92.

83. See *id.*

84. See *id.*

85. See *id.*

procedures.⁸⁶ There is no reason to believe that improving lineup procedures would in fact open up grounds for appeal in old cases. Indeed, no form of evidence improvement could ever occur if the legal system had to operate that way.

While the preceding paragraph helps explain why prosecutors have not shown leadership on the issue, why have trial judges not given directives to police to improve lineup procedures? The reasons are similar those affecting prosecutors. In addition, judges typically do not see it as their role to tell police how to collect evidence unless it concerns constitutional or state-mandated rights issues (such the right to counsel, the implementation of *Miranda* warnings, or state-specific due process protections). Furthermore, in jurisdictions where judges have tried to order improvements to how police conduct lineups along the lines of these six recommendations, opinions have been rendered suggesting that the judges do not have the authority to do so.⁸⁷

4. LOCAL CONTROL

There are about 13,000 law enforcement departments in the United States.⁸⁸ The vast majority of these departments are controlled locally, usually at the county or municipal level. How police conduct their investigations (and, hence, how a lineup would be conducted) is determined at this local level. Although the advantages for this local control probably outweigh the disadvantages, local control creates great difficulty for effecting widespread changes. New Jersey was able to effect change for the entire state because New Jersey law gives its attorney general authority over all police in the state.⁸⁹ That cannot be done in other states where these types of procedures are determined by individual departments. Occasionally, an individual department will show some leadership. For example, in March 2000, the Clinton, Iowa police chief ordered his department to follow the eyewitness identification procedures set out in the NIJ guide that was published in

86. *See id.*

87. Tom Perrotta, *First Sequential Lineup Is Held in Staten Island*, N.Y. L.J., Apr. 29, 2002, at 3 (noting that one Brooklyn judge agrees that courts have no jurisdiction over lineup procedures).

88. Bureau of Justice Statistics, U.S. Dep't of Justice, Law Enforcement Statistics, <http://www.ojp.usdoj.gov/bjs/lawenf.htm> (last visited Mar. 14, 2006).

89. *See* Memorandum from John J. Farmer to Carson J. Dunbar et al., *supra* note 9. The New Jersey attorney general distributed the memorandum in April 2000, promulgating new lineup procedures for all of the state's police departments. *Id.*

November 1999.⁹⁰ But, there is no program in place, nor is there one under consideration by any federal agency at this point, to educate local departments or assist them in any way in making these important changes to their lineup procedures. Accordingly, little change is happening on any level of national coordination.

III. THE REASONABLE-SUSPICION CRITERION: A NEW RECOMMENDATION

A seventh recommendation needs its own Part for two reasons. First, this recommendation, unlike the preceding six, does not concern lineup procedure per se in the same way that the preceding six do. Second, this recommendation is a new one, developed specifically for this issue of the *Wisconsin Law Review*.

The reasonable-suspicion recommendation for lineups is rather straightforward: the decision by crime investigators to conduct a lineup around an individual should be restricted, within certain limits, primarily to situations in which there is a reasonable belief that the individual is in fact the culprit. This reasonable belief that the individual is the culprit is what I call reasonable suspicion. For the most part, this recommendation is based on the proposition that there is inherent jeopardy to an innocent suspect who is the subject of any lineup procedure. In fact, however, full development of the reasonable-suspicion recommendation is much more complex than the simple proposition of inherent jeopardy. The remainder of this Part develops the reasonable-suspicion recommendation more fully.

A. *The Statistical Basis for Reasonable Suspicion*

The reasonable-suspicion recommendation for lineups states that a reasonable basis for suspecting a person should exist before placing that person (or his or her photo) into a lineup. What constitutes reasonable suspicion? In the lineup context, I mean something less than probable cause, which is also difficult to define. Hence, the definition of reasonable suspicion is necessarily a policy decision, not a scientific decision. The reasonable-suspicion recommendation is based in part on the proposition that, regardless of how pristine the lineup procedure, there is inherent jeopardy to an innocent suspect by being placed (or

90. See *supra* text accompanying note 46. Although there are no sources immediately available to document the actions of the Clinton, Iowa police department, the author worked personally with the law enforcement agency to implement the aforementioned changes.

having one's photo used) in a lineup and displayed to eyewitnesses. It is also based on the proposition that conducting lineups that do not contain the actual culprit has the probabilistic risk of ruining the eyewitness for later possible identifications if the actual culprit later becomes a focus of the investigation.

Previous empirical and conceptual writings have provided evidence to support the proposition that mistaken eyewitness identification rates are directly tied to the odds that the lineup contains the actual culprit in question.⁹¹ The odds that an eyewitness will be tested using a lineup that does not contain the culprit can be expressed as probabilities or percentages or base rates. For a single lineup, the language of probability is usually used, as in "What is the pre-lineup probability that this suspect is the actual culprit?" Across a large sample of lineups, the language of percentages or base rates is usually used, as in "What percentage of lineups contain the actual culprit and what percentage have an innocent suspect instead?" or "What is the base rate for lineups containing the actual culprit rather than an innocent suspect?" Here, I use the language of base rates. Regardless of the language, there is a direct mathematical relation between this base rate and the chance that an innocent suspect will be mistakenly identified as well as the chance that the actual culprit will be identified. This mathematical relation is readily expressed and displayed using Bayesian statistics.⁹²

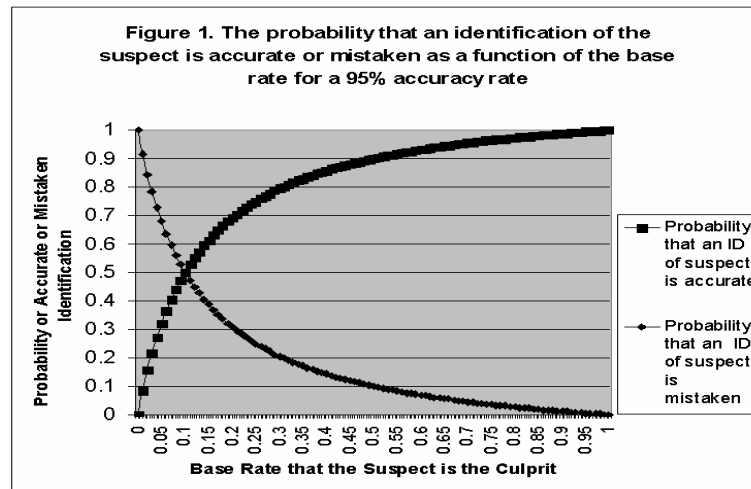
It is important to keep in mind that the base rate for exposing eyewitnesses to culprit-absent lineups is not a single figure. Instead, it is a variable that is influenced by jurisdictional practices. In some police departments, for instance, investigators might put together a photo lineup based on a mere hunch (for example, "Sounds like it might be Joe") whereas other departments might be reluctant to conduct any type of identification procedure until there are evidence-based reasons to believe that this particular individual is likely to be the culprit. For didactic purposes, I will call the former department the "low criterion" department and the latter the "high criterion" department. In this case, criterion refers to how much evidence each department needs (a low or high amount) to make an affirmative decision to construct a lineup and present it to the eyewitness(es).

91. Gary L. Wells & R.C.L. Lindsay, *On Estimating the Diagnosticity of Eyewitness Nonidentifications*, 88 PSYCHOL. BULL. 776, 776-77 (1980); Gary L. Wells & Elizabeth A. Olson, *Eyewitness Identification: Information Gain from Incriminating and Exonerating Behaviors*, 8 J. EXPERIMENTAL PSYCHOL. APPLIED 155, 155, 166 (2002); Wells & Turtle, *supra* note 13, at 320, 329.

92. For a general overview of Bayesian statistics, see J. ARTHUR WOODWARD ET AL., INTRODUCTION TO LINEAR MODELS AND EXPERIMENTAL DESIGN 14-15 (1990).

In order to fully appreciate the direct relation between the risk of an innocent suspect being mistakenly identified and the base rate problem, it is critical to keep in mind that a lineup includes only one suspect, who might or might not be the culprit, and the remaining lineup members are merely fillers.⁹³ Given this structure, a mistaken identification of an innocent suspect cannot occur when the actual culprit is in the lineup because the remaining members of the lineup are known-innocent fillers.⁹⁴ The identification of a filler is a mistake, of course, but not a mistake that would result in charges against the filler. By the same logic, an eyewitness cannot identify the actual culprit if the suspect is innocent because, by definition with a single-suspect lineup, the lineup does not contain the culprit. These unique properties to lineups permit some illuminating mathematical treatments that show how the base rate affects error rates.

Figure 1



I display two Bayesian curves in Figure 1 that illustrate the mathematical relation between the base rate and rates of errors for a particular level of eyewitness accuracy. The base rate represents the percentage of lineups that contain the actual culprit. Figure 1 is based on a constant rate of performance by the eyewitnesses, in this case a presumed 95% accuracy rate. For our purposes, this means that eyewitnesses will identify the suspect 95% of the time if suspect is the culprit and will not identify the suspect 95% of the time if the suspect is innocent. Although a 95% accuracy rate is considerably higher than

93. See TECHNICAL WORKING GROUP FOR EYEWITNESS EVIDENCE, *supra* note 10, at 29.

94. *See id.*

most eyewitness scientists would attribute to eyewitnesses, I use this high accuracy rate to illustrate that even when the accuracy rate is high, error rates can balloon if one permits a high frequency of innocent suspects to be placed in lineups. In Figure 1, the negatively decelerating curve (which starts 100% on the left and runs to 0% on the right) represents the probability that a suspect, if identified, is in fact innocent. The positively decelerating curve (which starts at 0% on the left and runs to 100% on the right) represents the probability that a suspect, if identified, is the actual culprit. Notice that the relation between the base rate and the probabilities of mistaken and accurate identifications is not linear, but is curvilinear. This curvilinear relation between base rates and posterior probabilities is beyond the intuitive grasp of most people.⁹⁵ And yet, it is extremely important for understanding fully how lineup base rates impact error rates.

Certain values in Figure 1 are useful to note. First, when the base rate is exactly 50%, the probability that a suspect, if identified, is the culprit is equal to the 95% performance accuracy rate of the eyewitnesses. As the base rate drops below 50%, the probability that the suspect, if identified, is the actual culprit drops. For instance, at a 30% base rate, the obtained probability that a suspect, if identified, is the actual culprit drops to less than 80%. When the base rate is 10%, where the two curves intersect, the chance that a suspect, if identified, is the actual culprit drops to 50% (a mere 50/50 proposition, despite an overall accuracy rate of 95%).

Operating at the low end of the base rate—where the percentage of lineups containing the actual culprit is low—yields some disturbingly high probabilities that an identification of a suspect is actually a mistaken identification of an innocent person. For instance, when the lineup base rate is 30%, the chance that an identification of a suspect is in fact mistaken rises above 20% despite a 95% accuracy rate for eyewitnesses in this example. This is a graphic illustration of why it is important to ask the question of what criteria are used to decide whether to conduct a lineup. A policy that permits individuals to be placed in lineups on mere hunches or wild guesses could very well yield a high rate of mistaken identifications.

Consider a concrete case in which there are five people—A, B, C, D, and E—who fit the eyewitness's description of the culprit who could have committed a crime. For simplicity, assume that no one other than these five people could have committed the crime. Suppose further that the detectives are aware of only one of them, person B, so they place

95. D. Kahneman & A. Tversky, *On the Psychology of Prediction*, 80 PSYCHOL. REV. 237, 237-51 (1973).

person B in a lineup. In this case, we could say that the base rate is a mere 20% because there is a 20% chance that B, who is in the lineup, is the actual culprit. Here, even if the eyewitness was 95% accurate, an identification of the suspect yields a 31% probability that suspect B is not the actual culprit. Consider a slight variation of the problem. Again, there are five suspects, but this time the detectives are aware of all five. Based on interviews with the suspects, the detectives decide that suspect B is twice as likely as any one of the other suspects to be the culprit. This means that suspect B has a 33.33% chance of being the culprit and each of the others has only a 16.67% chance of being the culprit. Based on this knowledge, the detectives decide to conduct a lineup including suspect B. In this instance, an identification of suspect B yields an approximately 18% chance that suspect B is not actually the culprit. Note that this is still a relatively high chance that the suspect, if identified, is not the culprit despite a 95% accuracy rate for the eyewitness. Suppose, however, the detectives investigate the case at a deeper level and discover circumstantial evidence that indicates that there is a 90% probability that suspect C committed the crime. Under these conditions, an identification of suspect C yields a chance of merely 1.2% that suspect C is not the actual culprit (and a 98.8% probability that suspect C is the culprit).

B. *The Order-of-Evidence Conundrum*

A purely mathematical treatment of the base rate problem does not itself dictate a need for reasonable suspicion to be obtained *prior* to the lineup. This is because the mathematics themselves are indifferent to the order in which the evidence is obtained. For example, if there is some non-eyewitness evidence indicating an 80% probability that an individual is the culprit and a 95% accurate eyewitness identifies that individual from a lineup, the probability that the individual is the culprit is 97.5% regardless of whether the non-eyewitness evidence was collected before or after the eyewitness attempted the identification. In other words, evidence has the commutative property found in multiplication. Hence, why should there be a reasonable-suspicion criterion in place *before* a lineup is conducted if the evidentiary basis for reasonable suspicion could be obtained *after* the lineup?

The order of the evidence makes no difference in many, if not most, situations. But, this is not the situation with lineups because of the problem of the “spent eyewitness.” Any time an eyewitness views a lineup there is some probability that the eyewitness will select a filler and this probability is higher if the lineup does not contain the culprit than if

it does contain the culprit.⁹⁶ Suppose that an eyewitness were shown a lineup in the absence of reasonable suspicion, the suspect is innocent, and the eyewitness selected a filler instead. Suppose now that additional investigation (or a tip) uncovers a new suspect, someone for whom there is a very strong reason to believe is the culprit. The eyewitness, having already picked a filler, is now considered “spent” or “spoiled” for purposes of conducting a lineup because that eyewitness has already misidentified a filler. Having shown the eyewitness the first lineup prematurely, the potential for credible identification evidence against the new suspect is forever lost. To prevent this result, the reasonable-suspicion criterion should be used prior to conducting a lineup.

How might the reasonable-suspicion recommendation be implemented in practice? I am suggesting that this reasonable-suspicion problem be included in the training of crime investigators in conjunction with other training on how to conduct lineups. Generally, larger police departments have multiple detectives working under a supervisor. In these departments, the supervisor could require that detectives present the supervisor with reasonable suspicion before conducting any type of identification procedure. Even if the supervisors did not exercise a veto, they could remind the detectives of the potential risks of showing the eyewitness a lineup that does not contain the actual culprit. For example, “If this isn’t the guy who did it, the witness might pick a filler and we would never be able to get an identification of the real guy. Are you sure that you are ready to show the eyewitness a lineup?” The point is that any system that requires investigators to recognize the dangers of doing lineups on a mere hunch would be better than the current situation in which there appears to be no formal consideration of the reasonable-suspicion idea at all.

IV. SUCCESSFUL REFORM EXPERIENCES

Successful eyewitness identification reforms have been made in a number of jurisdictions. I have already described the New Jersey reforms, which followed a model that other states are not generally able to replicate because, unlike New Jersey, other states do not have systems in which authority over police procedures are vested in a single entity.⁹⁷ Nevertheless, North Carolina has managed to effect widespread reform through the creation of a commission headed by the Chief Justice of the

96. Wells & Olson, *supra* note 91, at 161.

97. See, e.g., N.C. Actual Innocence Comm’n, *supra* note 63.

North Carolina Supreme Court, *I. Beverly Lake*.⁹⁸ Although this commission has no official authority over independent police departments across North Carolina, it is composed of credible and powerful individuals, such as the state attorney general, district attorneys, police chiefs, police trainers, and others. Through public hearings and press releases, the North Carolina Actual Innocence Commission has endorsed all six of the procedural recommendations described in Part I of this Article⁹⁹ and many police departments in North Carolina have now started to implement these reforms.¹⁰⁰ State police training, for both new recruits and continuing training of current police, now incorporates these reforms to eyewitness identification procedures.¹⁰¹

Wisconsin used a somewhat different approach. In addition to establishing a commission that recommended these reforms, the state attorney general used her justice department to develop recommendations and educate law enforcement across the state on the need to adopt these recommendations in their local jurisdictions.¹⁰² Although the Attorney General of Wisconsin does not have the authority to force these changes on local police jurisdictions, she realized that she had the “bully pulpit” and used it to great effect throughout the spring and summer of 2005. Some Wisconsin police departments have now adopted the reforms¹⁰³ and more will follow.

In Minnesota, although nothing significant has happened at the state level, the Hennepin County Attorney, Amy Klobuchar, in concert with the Minneapolis Police Department and other police departments in the county, took it upon themselves to begin using these reform procedures as a pilot project.¹⁰⁴ Their experiences and data from this project are

98. Matthew Easley, *Officers Weigh Stricter Policy; Suspects' IDs Are Conference's Focus*, NEWS & OBSERVER (Raleigh, N.C.), June 11, 2004, at B1.

99. See N.C. Actual Innocence Comm'n, *supra* note 63 (setting forth its recommendations). It should be noted, however, that the Commission did allow for multiple suspects in a lineup as long as the number of fillers was adjusted proportionally. *Id.* This is not a violation of the general principle underlying the single-suspect recommendation as long as each suspect has their own appropriate number of fillers.

100. See Easley, *supra* note 98 (discussing the various North Carolina police departments that have agreed to adopt the Actual Innocent Commission's recommendations).

101. See *id.*

102. PEG LAUTENSCHLAGER, WIS. ATTORNEY GEN., EYEWITNESS IDENTIFICATION BEST PRACTICES (2005), available at <http://www.doj.state.wi.us/dles/tns/ag%20letterintrodojweb.pdf>.

103. See Winn S. Collins, *Looks Can Be Deceiving: Safeguards for Eyewitness Identification*, WIS. LAW., Mar. 2004, at 8.

104. Klobuchar & Caligiuri, *supra* note 65, at 19.

very positive and are described in a recent article.¹⁰⁵ Similarly, although no significant action has been taken at the state level in Massachusetts, the Suffolk County District Attorney, in concert with the Boston Police Department and other police departments in the county, decided to adopt these reform procedures for eyewitness identification.¹⁰⁶ Other jurisdictions that have adopted these reforms include Northampton, Massachusetts,¹⁰⁷ Virginia Beach, Virginia (and now some other locations in Virginia),¹⁰⁸ and Santa Clara County, California.¹⁰⁹ Undoubtedly, there are some other small jurisdictions that have made these reforms, but there is no official tracking mechanism to document the reforms being made.

Importantly, the jurisdictions that have made these reforms are quite willing to share their experiences with other jurisdictions that are considering such reforms. For example, New Jersey's Deputy Attorney General, Lori Linskey, who has been at the center of New Jersey's lineup reforms, has provided her assistance to North Carolina and other jurisdictions.¹¹⁰ Chris Mumma, the Executive Director of the North Carolina Actual Innocence Commission,¹¹¹ has traveled extensively to potential reform jurisdictions to describe the successful methods used in North Carolina. Ken Patenaude, of the Northampton, Massachusetts Police Department, has generously appeared in different venues to describe his department's successful transition to these new identification procedures.¹¹² And Ken Hammond,¹¹³ of the Wisconsin Department of

105. *See id.* at 24.

106. Suzanne Smalley, *Police Update Evidence Gathering: Suspect Identification Is Focus of Changes*, BOSTON GLOBE, July 20, 2004, at B1.

107. *See* NORTHAMPTON POLICE DEP'T, ADMINISTRATION & OPERATIONS MANUAL: EYEWITNESS IDENTIFICATION PROCEDURE (2005), available at http://www.innocenceproject.org/docs/Northampton_MA_ID_Protocols.pdf.

108. *See* Karin Brulliard, *Revamping Va.'s Police Lineups: New Methods Urged to Curb Mistakes*, WASH. POST, Mar. 6, 2005, at C1.

109. *See* POLICE CHIEF'S ASS'N OF SANTA CLARA COUNTY, LINE-UP PROTOCOL FOR LAW ENFORCEMENT (2002), available at http://www.innocenceproject.org/docs/Santa_Clara_Lineup_Protocols.pdf.

110. *See* Eisley, *supra* note 98.

111. *See* Univ. of N.C. Law School Innocence Project, Advisors—Chris Mumma, <http://www.law.unc.edu/studentorganizations/IP/index.aspx?ID=131> (last visited Mar. 29, 2006).

112. TECHNICAL WORKING GROUP FOR EYEWITNESS EVIDENCE, DEP'T OF JUSTICE, EYEWITNESS EVIDENCE: A TRAINER'S MANUAL FOR LAW ENFORCEMENT (2003), available at <http://www.ncjrs.gov/nij/eyewitness/188678.pdf> (listing Detective Lieutenant Kenneth A. Patenaude as the co-chair of the Identification Team responsible for authoring the manual).

113. Univ. of Wis., New Criminal Justice Commission Formed for Wisconsin (Aug. 30, 2005), <http://www.news.wisc.edu/11471.html>.

Justice Training and Standards Bureau, is very willing to share Wisconsin's guidelines and successful implementation strategies with other states.

CONCLUSION

Mistaken identification is the primary cause of convicting the innocent and we have learned a great deal about how to enhance the reliability of eyewitness identification evidence. Hence, in the quest to improve the criminal justice system through preventing the conviction of the innocent and facilitating conviction of the guilty, reforms to how eyewitness identification evidence is collected, preserved, and used must take center stage. These reforms include using the reasonable-suspicion criterion to avoid lineups when it is not likely that the suspect is the culprit, using only one suspect per lineup, using sequential rather than simultaneous lineups, instructing witnesses that the culprit might not be in the lineup, selecting fillers that do not make the suspect stand out, using a double-blind lineup administrator, and recording a certainty statement at the time of the identification.

Psychological scientists have been working diligently on procedures to improve eyewitness identification accuracy, but the gap between what we know from this science and the implementation of reform is a wide one. There are no national mechanisms to institute reform because crime investigation procedures are locally controlled. Even at the state level, there is only one state that has statutory control over local police departments. Accordingly, reform of lineup procedures is proceeding on a jurisdiction-by-jurisdiction basis largely by a process of persuasion. How this will ultimately play out on a widespread basis is yet to be learned.