EYEWITNESS IDENTIFICATION:
Psychological Research and Legal Policy on Lineups

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The risk of eyewitnesses making false identifications is influenced by the methods used to construct and conduct lineups. The legal system could impose 4 simple rules to reduce false identifications: (a) Eyewitnesses should be informed that the culprit might not be in the lineup, (b) the suspect should not stand out in the lineup, (c) lineups should be administered by someone who does not know who the suspect is, and (d) witnesses should be asked how certain they are of their choice before other information contaminates their judgment. The U.S. Supreme Court has acknowledged the dangers of mistaken identification but has not used exclusionary rules to control unnecessary risk. Judicial rulings should focus on risky lineup methods and impose standards to eliminate potential justice system contributions to false identification.

In 1984, Frederick Rene Daye was identified from a set of photos and served 10 years in a California prison for a rape, kidnapping, and robbery that he did not commit. Daye was released in 1994 after a DNA test proved his innocence. In 1980, James Newsome was convicted of murder on the basis of eyewitness evidence. Fifteen years later, he was released after his fingerprints were submitted to new computer technology that implicated someone else as the murderer.

Although there is no way to estimate the frequency of mistaken identification in actual cases, numerous analyses over several decades have consistently shown that mistaken eyewitness identification is the single largest source of wrongful convictions (see Borchard, 1932; Brandon & Davies, 1973; Frank & Frank, 1957; Huff, Rattner, & Sagarin, 1986; Rattner, 1988). Rattner’s review of 205 cases of proven wrongful conviction, for example, showed that 52% were associated with mistaken eyewitness identification. Although we cannot be certain that these cases are representative of all cases of wrongful conviction, they provide our best estimate of the proportion of wrongful convictions that are attributable to eyewitness identification error. Assuming that false eyewitness identification accounts for half of all wrongful convictions, there ought to be considerable interest in the study of factors that can reduce the likelihood of false identifications.

This article reviews much of what we have learned from experiments in which people witness a staged crime or other event and later are asked to identify the target person. It is not the thesis of this article that eyewitness identification is unreliable, but rather, that the reliability of eyewitness identification is significantly influenced by methods used to obtain the identification that are controllable by the criminal.
justice system. In the eyewitness identification research literature, variables that can be controlled by the justice system and that can influence the accuracy of eyewitnesses are called system variables (Wells, 1978). Variables that affect eyewitness accuracy but are not under the control of the justice system, such as whether the eyewitness and culprit are of the same race, are called estimator variables. Estimator variables, although important for expert testimony, are not central to the thrust of this article and are not discussed further.

Some readers might be unfamiliar with the idea of lineups and photospreads, but most will at least have seen a movie or television show in which a suspect is placed among other people and an eyewitness, usually standing behind one-way glass, is asked to try to identify the culprit. The idea is that the eyewitness will simply look at these people and, if the suspect is the culprit in question, identify the culprit. The purpose of the other people in the lineup is to make sure that the witness is able to actually recognize the culprit and is not merely identifying whoever is present. Later, at trial, the eyewitness is almost always asked to identify the culprit again in court. This in-court identification is a mere formality, of course, and should not be given much credence, because it is usually obvious who is on trial. Furthermore, the eyewitness need only recall features of the person who was identified from the lineup rather than remember the original event that was witnessed in order to make the in-court identification.

Somewhat less common on television or in movies is the use of a photospread rather than a live lineup. In actual cases, photospreads are quite common and, as evidence, hold up in court just as well as live lineups. (Surprisingly, the research literature does not show photospreads to be inferior to live lineups; see Cutler, Berman, Penrod, & Fisher, 1994, for a meta-analysis.) Using photospreads in lieu of live lineups seems to be an increasingly common practice in police departments, either because the suspect has no right to counsel at photospreads or because of the greater ease of assembling photographs rather than using actual people (Wells, in press). Generally, a photospread will use 6–12 photographs, whereas a live lineup will use 5–8 people. For the remainder of this article, the term lineup is used to refer to both lineups and photospreads, because the principles governing both are believed to be the same (see Wells, Seelau, Rydell, & Luus, 1994).

Throughout this article, our analyses and arguments are based on a single-suspect lineup. A single-suspect lineup is a lineup in which there is only one suspect and the remainder are fillers, distractors, or foils who are known to be innocent of the offense in question. Our analyses do not accommodate other lineup models, such as those in which all members of the lineup are suspects (the all-suspect model). Our focus on the single-suspect model follows from Wells and Turtle’s (1986) mathematical analysis of lineup models, which showed that the all-suspect model produces sharply inflated lineup false identification rates in comparison with the single-suspect model.

This article is divided into five parts. First, we sketch out a useful analogy between researchers conducting an experiment to test a theoretical hypothesis and police investigators conducting a lineup to test a hypothesis regarding the identity of a criminal culprit. Second, we review findings from eyewitness experiments to show that false identifications seem to be the result of a process of making relative judgments. The experiments also inform us about procedures that are especially likely to yield false identifications. Third, we review evidence indicating that eyewitnesses can be made to have high confidence in their false identifications, which
can be misleading to triers of fact. Fourth, we make recommendations for a set of simple rules that can largely eliminate the role that current police practices have in contributing to false identification and inflated confidence of eyewitnesses. Fifth, we compare the U.S. Supreme Court’s approach to lineup and photospread identifications, which predates the extant scientific literature, with our recommendations for improvement.

Lineup-as-Experiment Analogy

Scientists reading this article can easily appreciate some of the issues that arise in conducting lineups once they recognize the close analogy between police investigators conducting a lineup and psychologists conducting a scientific experiment. This analogy, implicit in much of the eyewitness identification literature in the 1970s and 1980s, was stated explicitly by Wells and Luus (1990b). The lineup-as-experiment analogy serves as a foundation for the general argument of this article, namely, that the validity of a result depends heavily on the methods that are used to obtain it.

Experiments are conducted to test a particular hypothesis. If the experiment is properly designed, the procedures properly controlled, the variables operationalized in a valid manner, and so on, then the result is informative. Of course, a result consistent with the hypothesis might occur for reasons other than the hypothesis being true, such as chance, demand characteristics, or confoundings. Accordingly, rules regarding acceptable and unacceptable methods must be carefully followed when conducting an experiment to eliminate alternative interpretations of the results.

Almost all of the elements of conducting a lineup can be likened to conducting a psychology experiment: Police investigators are like researchers who have a hypothesis (i.e., that the suspect is the culprit), the officer conducting the lineup is like an experimenter who administers the materials and “runs,” the eyewitness through the procedure, the police station or other location is like a laboratory, the eyewitnesses are like study participants, instructions to the eyewitness are like an experimenter’s protocol, the suspect (or a photo of the suspect) is the critical stimulus, the numbers and features of other members of the lineup as well as the ordinal positioning of the suspect are aspects of the design, the eyewitness’s choice of someone from the lineup and the certainty expressed by the eyewitness are the data that bear back on the original hypothesis, and so on.

Recognition of this analogy between a lineup and an experiment helps to clarify that much can go wrong with a lineup procedure, just as there is much that can go wrong with a psychology experiment. Factors that can create interpretation difficulties for an experiment can create similar problems for a lineup. These problems include the 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 on the basis of only one eyewitness), not using control groups (e.g., not determining whether even people who did not witness the crime 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 nonidentification), leaking of the hypothesis (e.g., making it obvious to the eyewitness which person in the lineup is the suspect), and a host of other possible confoundings.

The lineup-as-experiment analogy can be carried only so far, but the points at which the analogy breaks down are interesting and informative. First, the analogy breaks down when we consider the extent to which there are clearly articulated rules that govern lineups versus those governing experiments. The consumers of results from lineups, namely the courts, have not provided a clear set of rules for police investigators to follow. The result is an unstandardized set of practices in conducting lineups that do not meet reasonable standards for making confident inferences about the validity of the results. Perhaps scientific methods have not been incorporated into lineup practices because the practices themselves were in use long before there was any relevant scientific data on eyewitness identification processes. This is unlike some other forms of evidence, such as DNA profiling, which was borne out of science and hence uses procedures that are more congruent with scientific methods.

The lineup-as-experiment analogy also breaks down when one considers the scientific criterion of replicability. In a scientific psychology experiment, chance can be relegated to a minuscule consideration by the use of such things as large samples, statistical control, and independent replication in other laboratories. On the other hand, actual criminal cases might involve only one or two eyewitnesses, and police investigators cannot simply choose to run more individuals or replicate their result in some other way. Indeed, it is because of this latter fact that it is all the more important that there be sets of rules for conducting lineups. Consider, for instance, that it has been perfectly acceptable to the courts that the person conducting the lineup has full knowledge of which person in the lineup is the suspect. In an experiment, on the other hand, scientists have long acknowledged the importance of keeping an experimenter “blind” as to the condition that the study participant happens to be in (e.g., Rosenthal, 1976). Later, we argue that there are ways to introduce certain types of controls that help compensate for these differences between researchers conducting a scientific experiment and police investigators conducting a lineup.

The lineup-as-experiment analogy is useful for thinking about ways to help ensure that a lineup is conducted properly. The analogy itself, however, does not provide a complete understanding of some of the important psychological processes that govern eyewitness identifications. In the following section, we describe a simple psychological process that aids our understanding of eyewitness identification errors, and we suggest concrete ways to control such errors.

Relative Judgments and Culprit-Absent Lineups

Over the last 10 years there has been an evolving understanding that the lineup identification process is governed in large part by relative-judgment processes (Wells, 1984). A relative-judgment process in lineup identifications is one in which the eyewitness selects the member of the lineup who most resembles the eyewitness's memory of the culprit relative to the other members of the lineup. This process seems quite benign, and perhaps even highly appropriate, on initial consideration. After all, the actual culprit ought to be the one who most resembles the eyewitness's memory of the culprit relative to others in the lineup. A relative judgment, therefore, ought to be an efficient and acceptable strategy for identifying a culprit from a lineup.
Unfortunately, the relative-judgment process is effective only when the actual culprit is in the lineup. When this is not the case, there is still someone who resembles the culprit more than do the other lineup members, but this person is not the culprit. In other words, relative judgments alone cannot detect whether the actual culprit is in the lineup (or photospread). Relative judgments can be contrasted with absolute judgments in which the eyewitness compares each lineup member to his or her memory of the culprit and uses some type of criterion threshold to decide whether the person is the actual culprit (see related treatments by Cutler & Penrod, 1988; Dunning & Stern, 1994; Gonzalez, Ellsworth, & Pembroke, 1994; Lindsay, Lea, & Fulford, 1991; Lindsay & Wells, 1985; Sporer, 1993; Wells, 1993).

The danger of mistaken identification exists almost solely under conditions in which the actual culprit is not present in the lineup. Experimental designs in eyewitness identification experiments routinely include conditions in which the actual culprit is not in the lineup. When Bayesian statistical models are applied to actual data in which the presence or absence of the culprit is treated as a base rate and the eyewitness's selections are treated as likelihood ratios, most of the variance in the probability of a mistaken identification is attributable to the base rate for the presence or absence of the culprit in the lineup (Wells & Lindsay, 1980; Wells & Turtle, 1986). Eyewitnesses are fairly efficient at selecting the actual culprit when the culprit is in the lineup but have great difficulty not selecting someone when the culprit is not in the lineup.

In the remainder of this section, we review research on the effects of instructions, presence and absence of the culprit, dual lineups, characteristics of distractors, and sequential versus simultaneous presentation procedures to show that the relative-judgment process is a useful depiction of how false identifications occur. Implicit in many of these experiments are methods to reduce false identifications, which we return to in the Recommended Rules section.

**Instructions**

If eyewitnesses are prone to making relative judgments, then instructions that warn them explicitly that the culprit might not be present in the lineup should help them recognize that they should not rely solely on a relative-judgment process. Malpass and Devine (1981) were the first to demonstrate empirically the importance of the "might or might not be present" instruction. Following a staged crime, eyewitnesses were either led to believe that the culprit was in the lineup and were not given a none-of-the-above option on their identification form or were told that the culprit might not be in the lineup and had an explicit none-of-the-above option on their identification form. Not warning the eyewitness that the culprit might not be in the lineup resulted in 78% of the eyewitnesses attempting an identification from the culprit-absent lineup. This false identification rate dropped to 33% when the eyewitnesses were explicitly warned that the culprit might not be in the lineup. Warning the eyewitnesses that the culprit might not be in the lineup resulted in 78% of the eyewitnesses attempting an identification from the culprit-absent lineup. This false identification rate dropped to 33% when the eyewitnesses were explicitly warned that the culprit might not be in the lineup. Warning the eyewitnesses that the culprit might not be in the lineup still resulted in 87% of the eyewitnesses selecting someone when the culprit is not in the lineup. Results of this type reveal that if eyewitnesses approach the lineup with the presumption that the culprit is among the set, they simply select the person in the lineup whom they perceive is relatively more similar to the culprit than the others in the lineup.
Although instructing eyewitnesses that the culprit might not be present in the lineup seems to reduce the tendency to make relative judgments, such instructions are far from sufficient. A simple demonstration of this was reported by Wells (1993). Eyewitnesses to a staged crime were shown one of two photospreads. In one, the culprit was present and embedded among five other people. In the other photospread, the culprit was removed and was not replaced with anyone. All eyewitnesses were instructed that the actual culprit might not be present, regardless of which photospread they viewed. When the culprit was present, 21% of the eyewitnesses did not select anyone, 54% selected the culprit, 13% selected distractor number 2, and the remainder selected other distractors. If eyewitnesses were making absolute judgments, the removal of the culprit should have made the 54% who identified the culprit recognize the absence of the culprit, resulting in 75% of the eyewitnesses making no choice. In fact, however, removal of the culprit raised the “not there” responses to only 32%. The remaining eyewitnesses simply selected someone else when the culprit was removed. With the actual culprit removed, eyewitnesses tended to make an identification of the next best match (i.e., lineup member number 2), who then received 38% of the identifications (vs. 13% when the culprit was in the photospread). Hence, it is clear from data of this type that eyewitnesses’ identification decisions are products of relative judgments even under conditions where they are warned that the photospread might not contain the actual culprit.

Dual Lineups

If some eyewitnesses are especially prone to making relative judgments, then it should be possible to screen out those eyewitnesses who are merely making relative judgments with the use of a blank lineup. A blank lineup is conceptually distinct from a target-absent lineup. A culprit-absent lineup includes a suspect who is not the actual culprit. A blank lineup, on the other hand, does not include a suspect at all; every member of a blank lineup is known to be innocent of the offense in question. When using a blank lineup procedure, the eyewitness is not told that there is no suspect in the lineup but is given standard instructions emphasizing that the culprit might not be present. A blank lineup can, therefore, be considered a type of control lineup (or a “lure”) to see if the eyewitness is willing or able to resist the temptation to select someone when the actual culprit is not present. Experimental work provides support for the idea that a blank lineup can weed out eyewitnesses who are prone to make mistakes. Following a staged crime, eyewitnesses who were shown a blank lineup and rejected it were far less likely to make a false identification on the subsequent (actual) lineup than were those who failed the blank lineup test or those who were not given the blank lineup test at all (Wells, 1984). This dual lineup procedure had little effect on the frequency of accurate identifications; its effect was almost totally restricted to reducing false identifications.

The dual lineup procedure provides evidence that eyewitnesses are prone to make relative judgments even under conditions where they are told that the actual culprit might not be in the lineup. The dual lineup procedure relates to the previous discussion of the lineup-as-experiment analogy. In a memory experiment, researchers often use blank trials to control for or estimate response biases. Even when there is only one eyewitness and one suspect, it is possible to use certain types of control
lineups that serve the same functions in actual cases that control conditions serve in experiments.

**Effects of Distractors**

Distractors are foils or fillers in a lineup who are known a priori to be innocent of the offense in question. The use of the term *false identification* refers specifically to the identification of an innocent suspect rather than the mistake of identifying a distractor (Wells & Turtle, 1986). Although the identification of a distractor is an error, it is a much less harmful error than the identification of an innocent suspect because the identification of a distractor does not result in charges. In other words, identifications of distractors are known errors in the sense that it is known that the eyewitness has erred the moment that he or she selects a distractor. Distractor identifications are more likely to occur when the actual culprit is not in the lineup and hence are diagnostic of the ultimate question of whether the lineup's suspect is the actual culprit. Theoretically, the upper limit of probability that an eyewitness will identify an innocent suspect in a lineup composed of one suspect and five distractors is .167 (1/6). This theoretical limit assumes, however, that errors have an equal chance of occurring across all members of the lineup. Under some circumstances, the innocent suspect might have a much greater chance than the distractors of being identified by the eyewitness.

This problem has been discussed in a variety of ways but is perhaps best understood in the context of the relative-judgment process. Numerous researchers have noted that there is a problem when the suspect matches the eyewitness's description of the culprit whereas the distractors do not match that description. These conceptual and empirical analyses show that if the innocent suspect matches the description of the culprit whereas the distractors do not, the suspect stands out from the other lineup members in a way that increases the chances that he or she will be falsely identified (see Brigham & Brandt, 1992; Brigham, Ready, & Spier, 1990; Buckhout, Alper, Chern, Silverberg, & Slomovits, 1974; Doob & Kirshenbaum, 1973; Lindsay & Wells, 1980; Luus & Wells, 1991; Malpass, 1981; Malpass & Devine, 1983; Navon, 1990; Nosworthy & Lindsay, 1990; Wells, Leippe, & Ostrom, 1979; Wells & Luus, 1990a; Wells, Rydell, & Seelau, 1993). The use of distractors who match the description of the culprit reduces the chances of a false identification by increasing the chances that the eyewitness will select a distractor (rather than the suspect) as the relatively better match to the culprit.

The overall rate at which eyewitnesses select someone from a lineup (rather than make a no-identification response) is largely unaffected by manipulations to the distractors (i.e., the use of distractors who match the description of the culprit vs. those that do not match the description). This latter observation has important conceptual and practical implications. Conceptually, this observation indicates that manipulations to the characteristics of the distractors do not change the cognitive processes underlying the identification decision (eyewitnesses are still using a relative-judgment process). Manipulations to distractors, therefore, can be contrasted with procedural manipulations (such as the simultaneous vs. sequential procedure discussed in the next paragraph), which seem to change the process from a relative-judgment process to a more absolute-judgment process. That manipulations to distractors do not affect choosing rates has the important practical consequence that the use of proper distractors does not interfere with the likelihood of
eyewitnesses identifying the actual culprit in culprit-present lineups. In other words, using distractors who match the description of the culprit does not "protect the guilty."2

**Sequential Versus Simultaneous Lineups**

Among the predictions derived from the relative-judgment conceptualization of false identifications is that any procedure that could prevent relative-judgment processes and encourage absolute judgments should reduce the likelihood of false identifications. Lindsay and Wells (1985) reasoned that a sequential presentation procedure might prevent eyewitnesses from using a relative-judgment process and thereby force eyewitnesses to rely on an absolute threshold. The sequential lineup is one in which the eyewitness views only one lineup member at a time and must decide whether each member is the culprit before being shown the next lineup member. This is quite different from the traditional lineup in which all lineup members are shown simultaneously. Lindsay and Wells reasoned that an eyewitness could not make relative judgments with the sequential procedure. Although an eyewitness could judge that the lineup member being viewed at any one time is a better match to the culprit than were the previously viewed members, the eyewitness could not be certain that the next (not yet viewed) lineup member might not be an even better match to the culprit. Critical tests of this hypothesis have consistently shown that a sequential procedure produces fewer false identifications than does a simultaneous procedure with little or no decrease in rates of accurate identification (Cutler & Penrod, 1988; Lindsay, Lea, & Fulford, 1991; Lindsay, Lea, Nosworthy, et al., 1991; Lindsay & Wells, 1985; Sporer, 1993). The success of the sequential lineup seems to come from its ability to shift the judgment process from one in which comparisons are made between lineup members to one in which comparisons are made between each lineup member and the eyewitness's memory for the culprit's appearance.

**Additional Evidence on Relative Judgments**

The findings concerning manipulations of instructions, removal of the target without replacement, the use of dual lineups, the manipulation of distractors, and sequential versus simultaneous presentations all suggest that relative-judgment processes contribute to false identifications. Other forms of empirical evidence converge on the proposition that relative-judgment processes are less trustworthy than are absolute judgments. Dunning and Stern (1994) collected data on eyewitnesses' verbal descriptions of the process that they used to make an identification decision. Eyewitnesses who described their decision process as one of elimination (comparing the photos to each other to narrow the choices) were more likely to have

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2There are some caveats to this generalization about the effects of distractors. First, the use of distractors who are selected because they resemble the suspect (rather than because they match the verbal description of the culprit) can produce reductions in the likelihood of false identification (in a culprit-absent lineup) at a cost of reduced accurate identifications (in a culprit-present lineup), which is merely trading one type of error for another (Wells et al., 1993). Also, the use of distractors who match the eyewitness’s verbal description of the culprit is recommended only when the suspect also matches that description. If the suspect does not match the eyewitness’s verbal description of the culprit, other procedures for selecting distractors must be considered (Luus & Wells, 1991). In addition, if an eyewitness’s verbal description of the culprit leaves out certain features that have “default values,” the lineup could become biased against an innocent suspect (see Lindsay, Martin, & Webber, 1994).
made a false identification than were those who reported that the face "just popped out at me." Lindsay, Lea, Nosworthy, et al. (1991) reported similar results when they asked staged crime eyewitnesses to report on the process that they used to identify a suspect from a lineup. Those who reported using a relative-judgment process were more likely to have made a false identification than were those who reported using an absolute-judgment process. Along similar lines, Sporer (1993) reasoned that relative judgments should take longer than absolute judgments and, hence, decision time should be negatively correlated with identification accuracy. In fact, several researchers have found that quick identification decisions are less likely to be false than are slow identification decisions (Bothwell, Brigham, & Pigott, 1987; Kassin, 1985; Sporer, 1993, 1994).

Further evidence that the relative-judgment process contributes to the false-identification problem comes from the observation that the effects of the manipulated variables that have been discussed in this section are restricted primarily to the culprit-absent lineup. When the culprit is present in the lineup, the rate of accurate identifications is affected little, if any, by the instructions variable (Malpass & Devine, 1981), the distractors used (Wells, Rydell, & Seelau, 1993), or sequential or simultaneous presentation (Lindsay & Wells, 1985). Manipulations of instructions, distractors, and presentation procedures have strong effects, however, in cases where the culprit is not in the lineup. As Wells (1984) noted, relative and absolute judgments usually lead to the same decision when the lineup includes the culprit. When the lineup does not include the culprit, however, relative and absolute judgments can produce quite different decisions because the relative-judgment process has no mechanism for rejection of the entire lineup.

Eyewitness Confidence Malleability

In the late 1970s, researchers of eyewitness identification began to recognize the importance of eyewitness confidence. In particular, the argument emerged that false identifications per se would not be so problematic if they were made with little confidence by the eyewitness (Wells, Lindsay, & Ferguson, 1979). Accordingly, a great deal of research has been directed at the question of the statistical relation between the accuracy of an eyewitness’s identification and the confidence expressed by the eyewitness.

This focus on eyewitness identification confidence is more than just a theoretical interest. Surveys indicate that people believe that there should be a strong relation between eyewitness identification confidence and eyewitness identification accuracy (see Deffenbacher & Loftus, 1982; McConkey & Roche, 1989; Noon & Holin, 1987). Furthermore, the confidence that an eyewitness expresses in his or her identification during testimony is the single most powerful determinant of whether testimony observers believe that the eyewitness made an accurate identification (e.g., see Leippe & Romanczyk, 1987, 1989; Leippe, Manion, & Romanczyk, 1991; Lindsay, Wells, & Rumpel, 1981; Turtle & Wells, 1988; Wells, Ferguson, & Lindsay, 1981; Wells, Lindsay, & Ferguson, 1979; Wells & Murray, 1984). The typical observer is not the only one to believe that eyewitness identification confidence and accuracy are closely related. The U.S. Supreme Court explicitly listed eyewitness certainty as one of the five factors that should be considered in making judgments about the accuracy of an eyewitness identification (Neil v. Biggers, 1972). These observations highlight the considerable importance that has been attached to the question of the extent to
which eyewitness identification confidence is diagnostic of eyewitness identification accuracy.

A common metric for the eyewitness identification confidence-accuracy literature has been to express the relation as a point-biserial correlation (with accuracy as a dichotomous variable and confidence as a continuous variable). Over the years, many studies have reported correlations that are not reliably different from zero, but the direction of the correlation has almost invariably been positive. This is an ideal situation for a meta-analysis, and two major meta-analyses have been conducted (Bothwell, Deffenbacher, & Brigham, 1987; Sporer, Penrod, Read, & Cutler, 1995). We do not review the confidence-accuracy literature here because it is explored in depth in an article in this issue by Steven Penrod and Brian Cutler. Instead, we focus on one aspect of the problem with eyewitness confidence, namely confidence malleability. 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. The confidence malleability problem is particularly important because actors in the legal system can contaminate the confidence of an eyewitness in ways that can make an eyewitness’s in-court expression of confidence a meaningless indicator of the goodness of the eyewitness’s memory.

An eyewitness who expresses high confidence in an identification is expressing a strong belief that the identified person is the culprit. Clearly, an eyewitness’s belief that the identified person is the culprit can arise out of pure memory judgments, that is, a perception of remarkable resemblance between the identified person and the eyewitness’s memory of the culprit (Leippe, 1980; Wells et al., 1981). An eyewitness’s belief that the identified person is the culprit can also arise for reasons other than the eyewitness’s memory (Leippe, 1980; Wells et al., 1981).

In a dramatic illustration of this idea, Luus and Wells (1994) used a staged-crime methodology to secure false identifications from 136 eyewitnesses.³ Pairs of eyewitnesses viewed a theft and were separated shortly afterward, at which time the false identifications were obtained using a photospread procedure. The eyewitnesses were not made aware that they had made a false identification, of course, and after doing so they were randomly assigned to one of several conditions. In a control condition, eyewitnesses were told nothing about the identification decision of their co-witness. In various experimental conditions, eyewitnesses were given information that their co-witness ostensibly identified the same person or someone else or indicated that the culprit was not in the lineup.⁴ They were then interviewed by a police officer (actually a confederate in the experiment) who asked them a series of questions about the theft, including a critical question asking them how confident they were that the person that they identified was the thief. Each eyewitness was videotaped while giving statements to the police officer.⁵ The results indicated dramatic

³There were 140 total eyewitnesses, and the high rate of false identification was obtained by making use of some of the variables already discussed, such as using only culprit-absent lineups, not warning the eyewitnesses that the culprit might not be in the lineup, and using distractors who did not match the description of the culprit.

⁴There were another five conditions in this study, including conditions in which this initial information about the co-witness was retracted. Retractions of the information had no salutary effect, indicating that the effects of this information are not easily reversed.

⁵Subject-jurors also viewed these videotapes and made several judgments about the eyewitnesses, including perceived accuracy and various measures of believability. All of these measures showed the same effects as the confidence measures.
increases in the confidence that eyewitnesses expressed in their false identifications in the condition in which eyewitnesses were told that their co-witness identified the same person (average confidence on a 10-point scale was 8.8 vs. 6.9 in the no-information condition). Conversely, the confidence that eyewitnesses expressed in their false identifications dropped dramatically in conditions where they were told that their co-witness identified a different person \((M = 4.7)\) or that their co-witness indicated that the actual culprit was not in the lineup \((M = 3.6)\).

That eyewitness identification confidence is malleable is of considerable importance. In particular, these findings speak to the question of whether the confidence that an eyewitness expresses in his or her identification is a reflection of the “goodness” of the eyewitness’s memory. What does it mean when an eyewitness says “I am highly confident that the person I identified is the person who committed the offense”? One interpretation is that the eyewitness is saying, “My memory of the culprit so closely resembles this person that I conclude that this person is in fact the culprit.” The Luus and Wells (1994) study, however, shows that high confidence can come from external sources and that it can be induced by giving the eyewitness other information about the accused.

System variables were defined nearly 20 years ago as “variables that are (or potentially can be) under the direct control of the criminal justice system” (Wells, 1978, p. 1548). As the discussion of confidence malleability makes clear, eyewitness identification confidence can be directly manipulated by those who conduct the lineup through the timing and content of statements that they provide to the eyewitness. Externally provided information can strongly inflate an eyewitness’s confidence in a false identification, which means that eyewitness confidence is at least partly controllable by the criminal justice system. Hence, eyewitness identification confidence has system-variable properties even though confidence has been considered traditionally to be merely an estimator variable. This has implications for our recommended rules regarding the procedures for conducting lineups.

**Recommended Rules**

The evidence reviewed in the previous sections makes a strong case that some procedures that can be used to obtain eyewitness identifications lead to increased risk of false identification or to eyewitness confidence being inflated through external sources. These procedures are under the control of the criminal justice system. Hence, any role of these procedures in contributing to false identification or false confidence could be eliminated by controlling the procedures in critical ways. The following four simple rules of procedure that follow from the scientific literature can largely relieve the criminal justice system of its role in contributing to eyewitness identification problems.

**Rule 1. Who Conducts the Lineup**

The person who conducts the lineup or photospread should not be aware of which member of the lineup or photospread is the suspect. This rule follows closely from the lineup-as-experiment analogy. All of the reasons for using double-blind procedures in behavioral experiments (see Rosenthal, 1976) apply equally well to conducting lineups and photospreads. Common practice is for the detective involved closely in the case, who knows which lineup member is the suspect, to administer the lineup.
This person contacts the eyewitness, tells the eyewitness about the impending lineup or photospread, instructs the eyewitness, maintains a physical presence with the eyewitness during the interview, answers questions that the eyewitness might have, asks the eyewitness to indicate a choice, records answers, and so on. This interaction between the lineup administrator and the eyewitness is a highly interpersonal process. Research on experimenter-expectancy effects shows how powerful such interpersonal processes can be, especially when close physical distance between the interactants, eye contact, visible facial expressions, and verbal exchanges are allowed to occur (Harris & Rosenthal, 1985). The absence of video recordings in these interactions makes it difficult or impossible to know what role might have been played by the lineup administrator in leading the eyewitness to select a particular lineup member.

We need not assume that a lineup administrator’s influence is conscious or deliberate in order to see the value of a rule that says the administrator should not know which person is the suspect. It is well established that people have natural propensities to test a hypothesis in ways that tend to bias the evidence toward confirming the hypothesis (e.g., Dawes, 1975; Fischhoff & Beyth-Marom, 1983; Klayman & Ha, 1987; Snyder, 1984; Snyder & Cantor, 1979; Wason & Johnson-Laird, 1972). The confirmation bias in human reasoning and behavior is the seed that gives birth to the self-fulfilling prophecy phenomenon in which a person’s assumption that a phenomenon will happen leads to behaviors that make the phenomenon happen (Plous, 1993). The simple use of procedures in which the person collecting the evidence is unaware of the “correct” answer is effective prevention.

Admittedly, we are aware of no database of actual cases from which to argue that lineup and photospread administrators affect the identification behaviors of eyewitnesses by virtue of their not being blind to the question of which person is the suspect. Hence, this rule has to be taken somewhat on face value and in conjunction with a few other observations. First, we know from experiments that a photospread administrator’s behaviors such as smiling and nonverbal reinforcement of a particular photograph can lead eyewitnesses to identify falsely that person as the culprit (Fanselow & Buckhout, 1976). Second, when the police who conduct lineups know who the suspect is, they may say things that focus the eyewitness on the suspect. In actual cases it is difficult to obtain evidence of the lineup administrator focusing the eyewitness on a particular suspect because nonpolice overseers of the process of identification often are not present at lineups and are virtually never present at photospreads (a matter discussed in the next section on legal rulings). Furthermore, lineup and photospread identification procedures are rarely recorded on video or by some other means. Fortunately there are exceptions, such as the case of Howard Haupt, who was identified as a murder suspect but was eventually acquitted. In Haupt’s case the interaction between the photospread administrator and the eyewitness was audiotaped and later transcribed. Consider the interaction between the lineup administrator (interviewer) and the eyewitness (John Picha) in this case:

The interviewer then turned to John Picha, asking him to go through the photos, beginning with number 1. “Definitely not,” he said to numbers 1 and 2. At number 3 he hesitated and said, “I’m stuck on . . . no, that one is too old. He didn’t seem to be that old.”
"Well, other than that?" the interviewer said. "I mean, is it similar?"
"Yeah."
Picha looked at numbers 4 and 5. Both were definite no's. At number 6 he said,
"The face has a resemblance and the glasses I think, but the hair doesn't."
"So the only two in here that kind of ring your bells are number 6 and number 3?"
the interviewer asked.
"Well, actually if you put that type of hairdo"—Picha pointed to number 3 "with
that type of a face"—he pointed to number 6 "I think you would come up with a clue."
"You like number 3's hair?"
"Yeah. I think that's . . ."
"How about the glasses on number 3?"
"It was more this type of glasses," Picha answered, pointing to number 6.
"You want number 6's glasses on number 3?"
"Yeah."
"Okay, and you think number 3 is too old. How old do you think number 3 is?"
"In his forties."
"What is your estimate of the age of number 6?"
"In his thirties."
"Okay. So what rules out number 3 to you is just that he looks too old?"
"And the sideburns. I don't remember because this guy was pretty much clear
shaven."
"But his hair is similar configuration?"
"The hair, yeah, from the color too."
"That's another thing about the color. What do you think about the color of
number 3's hair?" the interviewer asked.
"That's what I'm saying. I can't tell from this picture."
"It's difficult I know."
"Pictures are just so hard."
"But you don't see anyone there that you are positive of?"
"No. Number 1 I know is not. Number 2 I know isn't. Number 5. Number 6 . . .
I've seen so many, it's starting to get foggy. It's just so foggy now that I've seen so many
things and so many people."
"Okay."
"But I'd say number 3 would be the closest." (Loftus & Ketcham, 1991, pp.
171–173)
were audiotapes of the verbal exchange, it would often be difficult to determine whether the confirmation bias was influencing the exchange. It is not uncommon for eyewitnesses to take their time in looking over the lineup or photospread. Suppose the lineup or photospread administrator said, “I noticed that you paused on number 3.” would a lineup administrator who knows which person is the suspect say this to the eyewitness if the suspect were not number 3? If the eyewitness paused equally on numbers 2, 3, and 5, would the lineup administrator think these pauses were equally long and meaningful? Or is the lineup administrator merely subject to the same confirmation biases as other people? Having an audiotape of the identification session does not help us to resolve these questions. On the other hand, keeping the lineup administrator unaware of the identity of the suspect effectively takes care of this problem. If the lineup administrator were unaware of the identity of the suspect, statements such as “I noticed that you paused on number 4” or “You like number 3’s hair?” could be interpreted as indicators of the eyewitness’s self-directed behavior rather than as reflections of the lineup administrator’s knowledge or suspicions.

Directing the eyewitness in a way that can lead him or her to select the suspect is not the only problem addressed by Rule 1. Consider the practice of some lineup administrators of telling an eyewitness immediately after an identification, “Yes, that’s the guy” or “Good, that’s who we thought it was” or “Yes, that’s the guy who has a record for offenses of this type.” Later, the eyewitness is asked how confident he or she is that the person identified is the culprit. It is perhaps not surprising that an eyewitness would be highly confident at this point even if he or she was uncertain at the time of the lineup decision. Unfortunately, if a lineup administrator mentions other evidence against the identified person before asking about the eyewitness’s confidence, then it can no longer be assumed that the confidence of the eyewitness is based solely on the eyewitness’s own memory. Any confidence expressed at this point is hopelessly confounded with information provided externally rather than being a reflection of the eyewitness’s memory for the culprit. Suppose, however, the lineup administrator is blind as to whether the eyewitness’s selection was of a suspect or a distractor. Under these conditions, the lineup administrator could not reveal to the eyewitness any “facts” about the person selected. Hence, we could assume that a confidence question that is asked of the eyewitness by an administrator who does not know the identity of the suspect is a purer measure of the eyewitness’s memory-based confidence. An eyewitness’s confidence in the identification at that point should represent confidence in his or her own memory, not confidence based on other things that the lineup administrator might reveal about the identified person.

**Rule 2. Instructions on Viewing**

*Eyewitnesses should be told explicitly that the person in question might not be in the lineup or photospread and, therefore, should not feel that they must make an identification.* This rule follows from empirical data (e.g., Malpass & Devine, 1981) and from our general understanding that the dangers of false identification derive from a tendency for eyewitnesses to identify the person who best resembles the culprit relative to the others in the lineup (e.g., see Wells, 1984). In effect, this instruction serves to alert eyewitnesses about the possibility that the actual culprit is not among the people that they will view in the lineup, encourages eyewitnesses to not merely make relative judgments, and legitimizes the behavior of not identifying anyone. Implying in any way to eyewitnesses that the culprit is in the lineup or photospread (or that their task merely is to find the culprit among the set) is
tantamount to asking eyewitnesses simply to select the person who most looks like the culprit relative to the others.

Empirical data show that an explicit warning to eyewitnesses that the culprit might not be in the lineup or photospread has a selective effect. Specifically, such instructions reduce the rate of incorrect identifications in culprit-absent lineups but produce no appreciable reduction of accurate identifications in culprit-present lineups (Malpass & Devine, 1981). If lineups and photospreads always included the actual culprit, there would be little need for this rule and, relatedly, little concern about eyewitnesses using a relative-judgment process. This cannot be assumed, however, because it presumes the truth of the very hypothesis being tested. The purpose of the lineup or photospread is to test the hypothesis that the lineup’s suspect is the culprit. If investigators already know that the suspect is the culprit, what is the need for the eyewitness? There is no way to estimate the proportion of lineups and photospreads for which the actual culprit is not present, but it could be significant. Police do not need any real evidence against a potential suspect to place that person in a photospread. Warning eyewitnesses that the actual culprit might not be in the lineup or photospread is thereby essential to prevent the eyewitnesses from assuming that the police have the actual culprit and that their task merely is to find the suspect among the members of the lineup or photospread.

Rule 3. Structure of Lineup or Photospread

The suspect should not stand out in the lineup or photospread as being different from the distractors on the basis of the eyewitness’s previous description of the culprit or other factors that would draw extra attention to the suspect. This recommendation follows from our understanding of the relative-judgment process, from the lineup-as-experiment analogy, and from direct empirical tests of the rule. Consider first the lineup-as-experiment analogy. In a behavioral experiment, it is important that the materials, instructions, and so on not convey to the research participant what the experimenter’s hypothesis is because this could lead the participant to respond to the hypothesis itself rather than the stimuli. Suppose that a lineup somehow reveals to the eyewitness which person is the suspect. Perhaps the suspect stands out because he or she is the only one who fits the verbal description that the eyewitness had given to police earlier (Lindsay & Wells, 1980), the suspect is the only one dressed in the type of clothes worn by the culprit (Lindsay, Wallbridge, & Drennan, 1987), or the suspect’s photo was taken from a different angle than the other photos (Buckhout & Friere, 1975). The presence of features that make the suspect stand out from the distractors confounds the ability to conclude that the selection of the suspect was due to true recognition instead of some form of suggestion, demand, or inference.

The extent to which this rule has been met in a given lineup can be tested using a “mock witness” procedure (see Doob & Kirshenbaum, 1973; Malpass, 1981; Malpass & Devine, 1983; Wells et al., 1979). 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. If Rule 3 has been sufficiently met, a mock witness should not be able to select the suspect at a level that exceeds chance expectations based on the number of choices (number of lineup members) that could have been selected. If mock witnesses can deduce who the suspect is under these circumstances, then a concern is raised about whether an eyewitness’s ability to make this same selection
was a product of true recognition memory or was due merely to the same deduction process that the mock witnesses apparently used.

The idea of using distractors who match the eyewitness’s prior verbal description of the suspect also follows from our earlier discussion of the relative-judgment process. Specifically, if the suspect is the only person who matches the eyewitness’s verbal description of the culprit, then this sets a high prior probability that the suspect is relatively more similar to the culprit than are the other lineup members. Consequently, any propensities for the eyewitnesses to make relative judgments will be disproportionately focused on the innocent suspect. This, in turn, destroys the theoretical upper limit on the probability that an eyewitness will identify an innocent suspect because, in this case, errors would not have an equal chance of occurring across all members of the lineup.

The idea of using distractors who match the eyewitness’s prior description of the culprit may be one of the most commonly misunderstood recommendations that researchers on eyewitness issues have made. Recent writings have made clear that distractors should not necessarily be selected so as to look like the suspect, but instead should be selected so that they match the description that the eyewitness had given of the culprit (Luus & Wells, 1991; Wells et al., 1994). Selecting distractors so as to resemble the suspect is not a desirable practice. At some point, the use of a rule that says that the distractors should resemble the suspect reaches a point where the lineup would be composed of clones. Although selecting distractors so as to make them resemble the suspect can meet the standards of Rule 3 (and pass the mock-witness test), such practices might create undue homogeneity and interfere with recognition of the actual culprit. Using the match-description criterion, on the other hand, preserves sufficient variability across lineup members because verbal descriptions of culprits tend to be quite general and allow many people of different overall appearances to match the description. As a result, matching distractors to the verbal description does not risk creating a lineup of clones, does not interfere with recognition of the culprit, and yet does not make an innocent suspect stand out in the lineup (Wells et al., 1993. See Footnote 2 for some caveats to the idea of using the verbal description as the criterion for selecting distractors.)

**Rule 4: Confidence Statements**

*At the time of the identification and prior to any feedback, a clear statement should be taken from the eyewitness regarding his or her confidence that the identified person is the actual culprit.* This recommendation is based on the observation that confidence statements from eyewitnesses can be affected dramatically by postidentification events that have nothing to do with the witness’s memory. The confidence that an eyewitness expresses in his or her identification during testimony is the most powerful determinant of whether observers of that testimony will believe that the eyewitness made an accurate identification (e.g., see Leippe et al., 1991; Leippe & Romanczyk, 1987, 1989; Lindsay et al., 1981; Turtle & Wells, 1988; Wells et al., 1981; Wells et al., 1979; Wells & Murray, 1984). 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 in his or her identification of the defendant 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.
Simply thinking about how to answer questions about one's identification of the suspect can produce an inflation of false confidence (Wells et al., 1981), which further supports the idea of measuring confidence at the time of the identification. False confidence can also arise after the identification through learning that a co-witness has identified the same person (Luus & Wells, 1994). After the identification decision has been made by the eyewitness, giving the eyewitness any further information that implicates the accused is likely to increase the confidence that an eyewitness has in the identification. Hence, the eyewitness’s confidence on the witness stand at trial may not reflect the degree to which the eyewitness’s memory is trustworthy but instead reflect the timing, type, and extent of other evidence against the accused (of which the eyewitness has somehow become aware).

It is possible to argue that this other evidence is a legitimate influence on the eyewitness’s confidence to the extent that the other evidence increases the likelihood that the eyewitness was accurate. For instance, suppose an eyewitness makes a tentative (low confidence) identification of a suspect and later learns that the suspect has a criminal record for similar offenses. Is it not legitimate for the eyewitness to experience increased confidence that he or she made a correct identification? In one sense the answer must be “yes” because this information probably does increase the likelihood that the eyewitness identified the correct person. From a legal policy perspective, however, this influence is problematic. The jury or judge must decide the evidentiary value, if any, of the defendant’s prior record. The eyewitness should be giving testimony based on the goodness of his or her memory alone rather than incorporating other evidence that makes the eyewitness more or less confident about the identification decision.

Suppose, for instance, an eyewitness makes a tentative identification of a suspect and is told immediately that the suspect has a prior record for offenses of this type, thereby raising the confidence of the eyewitness. Suppose further that the prior record information was ruled inadmissible at trial. Because the prior record was not admissible, the jury would not hear about it. Indirectly, however, the prior record works against the defendant at trial by inflating the confidence of the eyewitness, whose confident eyewitness identification testimony in turn influences the jury. There are numerous means for the eyewitness to find out about evidence, admissible or not, against the accused prior to any trial testimony. Hence, there may be no way to prevent confidence inflation between the time of the identification and the trial. Nevertheless, a clean record could be made of the confidence of the eyewitness at the time of the identification. When this recommendation is combined with Rule 1 (lineup to be conducted by someone who does not know who the suspect is), there is reason to be optimistic that a measure of confidence taken at the time of identification is largely a memory-based judgment and has some utility as an index of identification accuracy. When this recommendation is violated by allowing events to intervene between the identification decision and the confidence judgment, however, the eyewitness’s confidence in his or her memory becomes confounded with other sources of confidence.

Legal Policy Concerns

The methods that police use in conducting lineups are a product of previous practices of largely unknown origin and some judicial rulings. In this section, we discuss key judicial rulings that bear on the methods used in lineups and photo-
spreads and then discuss why these judicial rulings do not address our recommenda-
tions.

**Key Supreme Court Rulings**

The U.S. Supreme Court largely ignored the issue of eyewitness identification until 1966. At that time, the Court agreed to address the issue as it related to the Sixth Amendment right to counsel, and some cases were considered the following year. In the first case (*United States v. Wade*, 1967), Wade was accused of a bank robbery and placed in lineup with five prisoners. In the second case (*Gilbert v. California*, 1967), Gilbert was accused of robbery and murder and placed in a 9–12 person lineup. In the *Wade* case, both eyewitnesses admitted seeing Wade “standing in the hall” shortly before the lineup. In the *Gilbert* case, the lineup was conducted in an auditorium for 100 people who had been victims to various robberies. These eyewitnesses talked to each other and called out the numbers of the men they could identify; in general, the procedure was poorly controlled. Although both of these cases involved questionable lineup procedures, the issue addressed by the Court was not whether the procedures were careless and biased, but rather, whether Wade and Gilbert had a right to counsel at their lineups. In both cases, defense counsel argued that the identifications should be quashed because the lineups were conducted without the presence of the defendants’ attorneys. The Court agreed that the defendants had a right to counsel at the lineups. The Court noted in *Wade* that defense lawyers frequently have difficulty getting the eyewitness to describe how the lineup was conducted, that “Neither witnesses nor lineup participants are apt to be alert for conditions prejudicial to the suspect,” and that these people are not likely to be “schooled in the detection of suggestive influences” (*United States v. Wade*, 1967, p. 230).

In both *Gilbert* and *Wade*, the Court commented on the procedures. The Court noted that there was reason for concern in allowing the eyewitnesses to get a glimpse of Wade in the presence of an officer prior to the lineup and expressed concern about allowing eyewitnesses to identify Gilbert in each other’s presence. In *Gilbert*, the Court also noted that an officer’s belief in the defendant’s guilt might somehow be communicated to the witnesses. Nevertheless, rather than ruling that these lineup practices are unacceptable, the Court ruled that defense counsel should have been present so as to help reveal the biases later in court in front of triers of fact. Hence, the Court did not issue a ruling regarding the dangers of certain practices in conducting lineups and photospreads, but instead argued that the defendant’s right to counsel at the lineup was a safeguard or remedy for unfair lineup practices.

The Court severely curtailed the right to counsel in two later cases. In *Kirby v. Illinois* (1972) and *United States v. Ash* (1973), the Court ruled that the right to counsel applies to only some lineups and never to photospreads. *Kirby* involved a showup (only the suspect was shown to the eyewitness; there were no distractors), but the use of a showup was of no consequence to the Court’s ruling. Again, the question was whether Kirby had a right to counsel at the showup, and the *Wade* (1967) ruling was used as the basis for the defense argument that counsel should have been present. The Court ruled that Kirby’s Sixth Amendment right to counsel was not violated in this case, because right to counsel does not begin until the initiation of judicial proceedings against the defendant. Although Kirby had been arrested, judicial proceedings had not been initiated. *Kirby* dissenters on the Court...
noted that the dangers outlined in *Wade* are equally present regardless of whether judicial proceedings have commenced. Nevertheless, from a strict constitutional perspective the Court’s ruling is consistent with its previous interpretation of the Sixth Amendment, in which it is assumed that right to counsel starts only after judicial proceedings have begun.

Further eroding the right to counsel at identification proceedings was the Court’s ruling in *United States v. Ash* (1973). Ash was accused of robbery, and four eyewitnesses made somewhat uncertain identifications of him from a set of five black-and-white mug shots. Almost 2 years later, on the eve of the trial, the eyewitnesses were shown five color photographs, and three of the four eyewitnesses identified Ash. Because the black-and-white photos were shown to the eyewitnesses prior to the commencement of judicial proceedings, there was no right to counsel at those identifications. Defense counsel argued, however, that the color photospread occurred long after judicial proceedings had started and that there should have been right to counsel at that identification session. The Court disagreed. Assistance of counsel, the Court argued, applies only to situations in which a defendant is present or has a right to be present; neither condition applied to the photospread. The Court also argued that “a photographic identification is quite different from a lineup, for there are substantially fewer possibilities of impermissible suggestion when photographs are used, and those unfair influences can be readily constructed at trial” (*United States v. Ash*, 1973, p. 324).

Other important Court rulings on eyewitness identification issues include *Stovall v. Denno* (1967), *Neil v. Biggers* (1972), and *Manson v. Braithwaite* (1977). In *Stovall*, the Court considered the idea that suggestive procedures could violate due process even when right to counsel does not apply. In this case, Stovall was brought to the victim-eyewitness’s hospital room in handcuffs, and the victim identified him under these conditions. The Court ruled that this was not a violation of due process because, although the procedure was suggestive, it was not “unnecessarily” suggestive. There was some uncertainty that the victim-eyewitness would live long enough to make an identification, and clearly the eyewitness could not visit the police station to view a normal lineup. The Stovall case is important because it defined the criterion for exclusion of identification evidence in terms of whether the procedure was unnecessarily suggestive rather than whether the procedure was suggestive per se.

The Court’s position was further complicated in *Neil v. Biggers* (1972). In this case, the Court reasoned that even unnecessarily suggestive procedures would not require the exclusion of identification evidence if the identification procedure did not create a substantial risk of mistaken identification. The criteria for this determination outlined in *Neil v. Biggers* were (a) the eyewitness’s opportunity to view the offender at the time of the crime, (b) the eyewitness’s degree of attention, (c) the accuracy of the eyewitness’s prior description of the offender, (d) the degree of certainty expressed by the eyewitness at the time of identification, and (e) the length of time between the crime and the identification procedure. The idea behind the Court’s ruling in *Neil v. Biggers* was that if little time had passed since the crime, and if the eyewitness had a substantial opportunity to view the culprit, paid attention to the culprit, gave a good description, and made a confident identification, then suggestive procedures are unlikely to have significantly influenced the identification. *Manson v. Braithwaite* (1977) reiterated these criteria for deciding whether a substantial risk of mistaken identification is present. It also clarified the test, noting
that external evidence of guilt (i.e., evidence against the accused apart from the eyewitness’s ability to make an accurate identification) is not relevant to the question of whether the procedure produced a substantial risk of mistaken identification. Hence, for example, evidence that the accused was in possession of the stolen property in question is not considered by the Court to be relevant to the assessment of whether the procedure was unnecessarily suggestive in a way that would produce a substantial risk of mistaken identification.

Assessments of the Court’s Rulings

With regard to lineups and photospreads, the Court has concerned itself primarily with right-to-counsel issues from the Sixth Amendment rather than the more general issue of due process. Absent from Supreme Court rulings are guidelines for how lineups and photospreads ought to be conducted. There were serious procedural problems with the lineups and photospreads used against the defendants in United States v. Wade (1967), Gilbert v. California (1967), Kirby v. Illinois (1972), and United States v. Ash (1973), and the Court even commented on those problems. Instead of setting guidelines for acceptable lineup and photospread procedures, however, or ruling that certain procedures are unacceptable, the Court ruled narrowly on the issue of right to counsel at identification proceedings in these cases. The Court seemed to place a great deal of faith in the idea that the presence of defense counsel can remedy risky or suggestive lineup procedures. The claim that “Neither witnesses nor lineup participants” are likely to be “schooled in the detection of suggestive influences” (Gilbert v. California, 1967, p. 230), along with the ruling that there should be right to counsel at the lineup, implies that defense counsel is schooled in such ways and would be an effective overseer of the identification proceeding. Even if one were to accept this presumption, the Court has in effect limited the right to counsel to such an extent that it typically does not apply to lineups and never applies to photospreads. Recent survey data indicate that only 27% of identifications involve live lineups, 73% are photospreads, and less than 25% of identification proceedings occur in the presence of defense counsel (Wogalter, Malpass, & Berger, 1993). Hence, regardless of whether right to counsel is an effective safeguard against biased lineup procedures, most identification proceedings fall outside the scope of right to counsel. Perhaps the Court did not anticipate the current prevalence of identification procedures that do not fall within the scope of right to counsel as defined by the Court’s rulings.

The Court came closer to issuing guidelines for lineups and photospreads in Stovall v. Denno (1967). In Stovall, the Court considered whether a showup violated due process regardless of right to counsel. The Court ruled that this particular showup should not be excluded. In the process of that ruling, however, the Court noted that a showup normally would be excluded if it were “unnecessary” (i.e., if a lineup were a viable alternative under the circumstances). The Stovall case is the only ruling of the Court that specifically argues against a particular practice in conducting an identification proceeding. The scope of this ruling is limited severely by two factors. First, the Stovall case and, later, Neil v. Biggers (1972) have allowed showups to be conducted under some sets of conditions. Second, the Stovall ruling on showups does not state how lineups and photospreads should be conducted, only that showups may be improper under some circumstances.

The Court’s criteria set forth in Neil v. Biggers (1972) for assessing the risk of
mistaken identification have been analyzed with regard to the extent to which they agree with the results of scientific studies (Wells & Murray, 1983). In a broad sense, the Neil v. Biggers's criteria do not strongly clash with scientific evidence. Clearly, the amount of time that passes between the crime and the identification is critical, the eyewitness's opportunity to view (and pay attention to) the culprit is important, the verbal description of the culprit is relevant, and the confidence of the eyewitness can be of some use. Nevertheless, the value of these criteria is diminished by three problems. First, the criteria are only weakly related to eyewitness identification accuracy. The relation between verbal descriptions of people and eyewitness identification accuracy, for instance, is almost too weak to detect in controlled studies of the relation (Pigott & Brigham, 1985; Pigott, Brigham, & Bothwell, 1990; Wells, 1985). Second, the criteria ignore other considerations that can be more important, more powerful determinants of eyewitness identification accuracy. The passage of time per se, for example, may not be nearly as important as the events that occur during that time, such as interactions among eyewitnesses or exposure to photographs of the accused. Third, assessments of these criteria in actual practice are confounded by other factors in complex but important ways. Recall that the purpose of the Neil v. Biggers criteria is to decide whether some suggestive procedure could have created a substantial risk of mistaken identification. Recent work shows that suggestive procedures can increase the confidence with which eyewitnesses make their identifications (Wells et al., 1993). Apparently, suggestive procedures can lead eyewitnesses to have high confidence, and high confidence can then be used by courts to infer that the suggestive procedures were not problematic. This seems to create a paradoxical situation because the effect (consequence) of a suggestive procedure is used to infer that the suggestive procedure had no effect (consequence).

Although it is possible to criticize individual elements of the Court's rulings in the cases reviewed here, we are more concerned with what the Court has not said regarding identification procedures. The Court has given attention to how to assess whether a suggestive procedure produced a substantial risk of mistaken identification, but little or no attention to the issue of how to avoid suggestive procedures in the first place. The Court has not made statements about the need for distractors in lineups and photospreads to match the eyewitness's verbal description of the culprit, the paramount import of instructing the eyewitness that the culprit might not be present, the need for the lineup or photospread to be conducted by someone who does not know who the suspect is, or the need to obtain a confidence statement from the eyewitness at the time of the identification rather than later.

The Case for Exclusion

The Court has not taken meaningful steps to prevent suggestive procedures but instead has concerned itself only with the questions of right to counsel at identification proceedings and how to assess whether a suggestive procedure was one that might have produced a mistaken identification. We acknowledge that there can be circumstances in which a suggestive procedure cannot be avoided (as in the showup in Stovall v. Denno, 1967), but the Court has not articulated some simple and effective minimal requirements for lineups and photospreads for the vast majority of cases for which there is no necessity for suggestive procedures. The purpose of our proposed set of four rules is to increase the accuracy of eyewitness identifications by eliminating procedures that produce risk to innocent suspects. Given current case
law in which a defendant’s counsel is not present at photospreads and is present at only a subset of lineups, it seems reasonable to call for a set of rules by which these lineups and photospreads should be conducted. It is difficult, at best, to assess whether a suggestive procedure could have produced a mistaken identification. Hence, it seems only logical to articulate a set of simple rules that would prevent such suggestive procedures in the first place.

We prefer a remedy in which the eyewitness identification is excluded from evidence when these minimal rules are violated without justification. We believe that an exclusionary rule would be effective in cleaning up identification procedures. Although an exclusionary rule is a dramatic solution, the four rules we have recommended are (a) readily understandable and easily followed by police investigators, (b) easily met without significant effort or other costs, (c) well grounded in scientific logic and data, and (d) effective in minimizing suggestiveness. Furthermore, the effect of these rules would be to increase our ability to trust that the eyewitness’s identification was a product of memory rather than a product of the identification procedures that police used.

We have alluded to the idea of these rules coming about through judicial rulings. Almost certainly such rulings have to be tied to a specific case or cases for which it can be argued that (a) not following these rules produced a lineup or photospread procedure that was biased against the defendant, (b) there were no external constraints on police that prevented them from following safer procedures, (c) the identification evidence was critical to obtaining a conviction of the defendant, and (d) the issue of unfair lineup or photospread procedures was placed at issue early in the legal proceedings. The first three of these case characteristics are self-explanatory. The fourth characteristic may be critical because of the difficulty of using lineup procedure as an issue for appeal when it was not at issue in the original trial.

Even cases that have all four of these characteristics, however, might not be sufficient for obtaining a judicial ruling that encompasses the four rules that we have proposed. Courts could continue to reason that the question of whether a lineup or photospread procedure was acceptable should be left to the trier of fact (i.e., judge or jury). The courts might reason that defense counsel has the ability to make arguments regarding the bias of a particular lineup or photospread procedure and can use witnesses and discovery rules to lay the issues out before the triers of fact. Some courts might also allow one or more eyewitness experts to give testimony about the fairness of a lineup or photospread procedure, thereby giving the defense full opportunity in court to present any evidence bearing on the lineup or photospread procedures. This type of reasoning negates somewhat the obligation of the courts to issue judicial rulings that set rules for conducting lineups and photospreads.

There are three reasons why we believe that courts should set rules for lineups and photospreads of the type we have suggested rather than rely on triers of fact to make such determinations. First, there is little evidence to support the idea that lay triers of fact can understand and appreciate the influence of suggestive lineup procedures (see Cutler & Penrod, 1995, for a review). Second, many of the suggestive influences that are effectively handled by the rules are hidden influences (i.e., suggestive influences on the eyewitness that are not known to the triers of fact). Nonverbal suggestions by the detective administering a photospread, for instance, are unlikely to be discovered by defense counsel or to be a part of any eyewitness’s
testimony on the stand. Relatedly, some behaviors of the detective administering the photospread or lineup would be of the type that would place defense counsel in a "Catch 22" if they were argued before the trier of fact. Consider, for instance, that a detective told an eyewitness just before taking a statement of the eyewitness's confidence that the person identified had a criminal record. If the prior record is not admissible at trial, how can the defense argue that the eyewitness's confidence in the identification was contaminated by what the detective told the eyewitness without also revealing that the defendant has a prior criminal record? A third reason that we prefer rules is that rules serve to prevent the risky practices whereas the Court's current approach is to try to assess or diagnose the risky practices. We have already noted that assessment of suggestiveness is difficult. An additional problem is that the assessment approach places increasing pressure on courts to belabor issues of the fairness of identification procedures, including the use of experts. We believe that experts would be less willing to give opinion evidence favoring the defense if the procedures used to obtain the identification followed the four rules we have proposed here. The use of rules has the additional advantage of reducing criticism of the legal system itself as a contributor to false identifications and increasing the trust that can be placed on the in-court identifications because the pretrial identification will have been conducted in a defensible manner.

Summary and Conclusions

Mistaken identification is the single largest factor contributing to false convictions (Borchard, 1932; Brandon & Davies, 1973; Frank & Frank, 1957; Huff et al., 1986; Rattner, 1988). The scientific literature supports the view that the procedures used to secure identifications of criminal suspects from lineups and photospreads can affect both the likelihood of mistaken identification and the confidence with which eyewitnesses make identifications. These procedures, which include the behaviors of the person administering the lineup or photospread, the distractors used, and instructions to the eyewitnesses, are under the direct control of criminal investigators who, in turn, take direction from the courts as to what is acceptable and unacceptable. The courts, however, have tended to focus primarily on issues of right to counsel (or how to determine whether a suggestive procedure was one that produced a risk of mistaken identification) rather than setting rules for avoiding suggestive procedures in the first place. Risky lineup and photospread procedures can be controlled to a large extent by four simple rules. Lineups and photospreads should be administered only by someone who does not know who the suspect is, the distractors should match the eyewitness's verbal description of the culprit as well as does the suspect, the eyewitness should be warned that the culprit might not be in the lineup or photospread, and the eyewitness's confidence in any identification should be obtained prior to the eyewitness being told other things about the accused. These rules can help guarantee minimal standards for assuring that a lineup or photospread identification is a product of the eyewitness's own ability to recognize the culprit rather than a product of suggestive procedures.

The rules we have proposed, if implemented, do not guarantee that eyewitness identifications will always be reliable. Nevertheless, the role that the justice system itself plays in contributing to false identifications through the use of suggestive procedures can be largely eliminated by setting these four simple rules and allowing exceptions only under special circumstances.
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EYEWITNESS IDENTIFICATION


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