When Jennifer Thompson picked Ronald Cotton—suspect number five—from a line-up, she was “absolutely certain” she had identified the man who raped her in July 1984. She said she knew she was right because, during the rape, she had studied his eyes, his voice, his height, and even the shape of his ears. She was determined to identify him later if she survived. Thompson’s repeated strong and confident identification of Cotton during pretrial proceedings and at trial led to his 1985 conviction and sentence of life imprisonment plus 50 years.

In 1995, DNA evidence proved Thompson’s identification to be wrong. She erred because her memory of the rapist was skewed by suggestive pretrial identification procedures: working with police on a composite sketch of the suspect inclined her to identify Cotton’s mug shot, which bore a resemblance to her assailant; selecting his mug shot primed her to pick him out of a line-up; and picking him out of the line-up led her to identify him with absolute certainty at trial. Investigators’ positive reactions to her repeated identification of Cotton further reinforced Thompson’s misguided certainty that he was her rapist.1

The Ronald Cotton story is far from unique in its tale of unreliable eyewitness confidence and the inaccuracy of an identification leading to a wrongful conviction. Of the 239 DNA exonerations documented by late 2009, 73 percent—or 175 cases—involved positive eyewitness testimony—ultimately proved to be erroneous.2 This should not be surprising. In 1937 John Wigmore drew attention to the many problems of eyewitness identification in The Science of Judicial Proof.3 Reliance on an eyewitness’s confidence misdirects law enforcement officials, inappropriately bolsters the confidence of other witnesses, negates credible exculpatory evidence, and contributes to the over-reliance on eyewitness testimony by jurors and many judges. A major difficulty is that frequently judges feel their hands are tied by a legal precedent that has continued to vex courts across the country.

Origins of a precedent
A trilogy of cases under U.S. v. Wade, decided in 1967, also recognized the frailties of eyewitness identification. The foundation of the trilogy was the Wade Court’s acknowledgment of the “high incidence of miscarriage of justice” caused by mistaken eyewitness identifications,
and its recognition that suggestive pretrial identifications can taint later identifications. The Court held that where there has been a suggestive pretrial identification, any subsequent in-court identification must have an independent basis to be admissible. In applying this test, the Court suggested several factors that may be considered:

for example, the prior opportunity to observe the alleged criminal act, the existence of any discrepancy between any pre-lineup description and the defendant’s actual description, any identification prior to lineup of another person, the identification by picture of the defendant prior to the lineup, failure to identify the defendant on a prior occasion, and the lapse of time between the alleged act and the lineup identification.

However, when the Supreme Court returned to the subject in the 1972 case of Neil v. Biggers, it restated the factors, adding a new one—the level of certainty demonstrated by the witness at the confrontation. This new factor appears to have been the product of the Bigger Court’s “common sense” intuition rather than being based on Wade, any other Court precedent, or, indeed, on any empirical evidence.

While the Wade Court did not attribute its list of reliability factors to any source, the factors appear to have originated in a book by Patrick M. Wall, Eye-Witness Identification in Criminal Cases, which the Court referenced repeatedly throughout its opinion. Strikingly, however, Wall cautioned against the use of eyewitness certainty or confidence, warning that an eyewitness “may be subjected to so many suggestive influences by the police that at the trial he will make ‘a positive identification which no amount of subjective cross-examination will be able to shake.’” Thus, the introduction of confidence as a factor in Biggers conflicted with the very foundation of Wade: the recognition that an eyewitness is unlikely to “go back on his word” once he has identified the defendant.

No scientific basis

In the nearly four decades since Biggers, peer-reviewed journals have published hundreds of scientific studies on the accuracy of eyewitness identification. These studies confirm what Wall had concluded in 1965: that the correlation between eyewitness confidence and accuracy is at best a weak relationship and is contingent on any number of situational factors, some of which can be manipulated, even unintentionally, by police or other witnesses.

Professor Gary Wells, one of the leading experts on eyewitness identification, and co-author Deah Quinlivan, recently published an extensive review of 30 years of eyewitness identification research, showing that the confidence factor is central in explaining unreliability.

Research also shows that the relationship between confidence and accuracy is alterable in predictable ways by the investigation and trial process. Nancy Steblay, for example, demonstrated the consistency of the finding that—as with Jennifer Thompson in the Ronald Cotton case—eyewitnesses’ confidence is affected by feedback from the police or other witnesses. This simple “confirmatory feedback” tends to produce robust effects on eyewitnesses’ assessment of the observed event, including exaggerated reporting of their confidence in the identification, the attention they paid to the suspect, and even the length of time that they viewed the suspect. Thus, because of the occurrence of confirmatory feedback over the course of an investigation, the relationship between confidence and accuracy is likely to get weaker, rather than stronger, before trial.

In a recently published study involving 14 witnesses to an actual armed robbery, the findings again supported the general scientific conclusion that witness confidence is not a reliable predictor of accuracy of recall. In that study, the witness’s recollections were checked against store video cameras that recorded the entire event. While about 84 percent of the information the witnesses recalled was correct, the accuracy-confidence correlation was “modest,” prompting the authors to caution that while “confidence may be used as a cautious indicator for accuracy during police investigations . . . , it should never be allowed as evidence for memory accuracy in the courtroom.”

Multiple studies have also consistently failed to find ways to improve this relationship. For example, although collaborating with another witness has been found to be associated with higher confidence as well as higher accuracy, the relationship has been found to be lower when responses were made in public, which of course is necessary in this context.

Even repeated questioning, without any confirmatory feedback, can lead to higher reported confidence over time. Thus, if an eyewitness is asked several times over an extended period to confirm an identification she has made, her confidence in the accuracy of her identification is

---

7. See, e.g., Saul M. Kassin et al., On the “General Acceptance” of Eyewitness Testimony Research, 56 AM. PSYCH. 405, 407–12 (2001) (reporting that 87% of scientists surveyed believed it was proper to offer expert testimony at trial that “an eyewitness’s confidence is not a good predictor of . . . accuracy”).
11. Id. at 513.
greater at the end of the period than it was at the beginning. Additionally, in situations where social pressures or incentives to perform correctly are high – such as in a trial setting – eyewitnesses try especially hard to “get it right.”

In short, over the last 30 years, research has convincingly established that the “common sense” Biggers confidence factor is generally unsuitable for determining the reliability of eyewitness testimony. Under conditions specific to a trial, confidence is likely to be an even less reliable predictor of accuracy.

Contaminating criminal proceedings
As the Court was aware in Wade, considering confidence as a factor in determining the reliability of eyewitness testimony can adversely affect the investigation, pretrial, trial, and appellate stages of a criminal case. At the investigation and pretrial stages, the factor shapes decisions about whom or what to investigate and whether to prosecute. Whenever an identification is made, police routinely are instructed to document the confidence level of the eyewitness. If the witness expresses some degree of uncertainty about what she witnessed, the police may redouble their efforts to develop additional evidence of the suspect’s guilt or may abandon some avenues of investigation; if the witness expresses a high degree of certainty, the police more often will curtail their investigation or thereafter focus entirely on the suspect identified. In both cases, the police may be inappropriately narrowing the investigations, because they are assuming, contrary to scientific fact, that certainty equates with accuracy. Such misdirected investigations frequently lead to wrongful convictions.

Prosecutors are also subject to this kind of misdirection. For example, in cases that depend heavily upon the testimony of an eyewitness, prosecutors may decide not to charge the actual perpetrator because an eyewitness cannot express sufficient confidence in the identification. Conversely, a prosecutor may pursue a case primarily because of the eyewitness’s certainty about an identification and ignore other evidence that raises doubt.

At the trial stage, courts often appear to favor the testimony of highly certain eyewitnesses, in the process subtly encouraging witnesses to express greater confidence so their testimony will be admitted and they will not disappoint the prosecutors, the police, even the victims of the crimes. Jurors also tend to give more weight to eyewitness testimony than is justified, particularly focusing on the confidence with which the eyewitness identifies the defendant.

Similarly, based on the same false assumptions, some judges deny motions to allow expert witnesses or refuse to issue cautionary jury instructions about eyewitness identifications. They reason, as the Supreme Court did in Biggers, that lay jurors can intuitively assess the reliability of eyewitness testimony. Part of this reasoning is based on the assumption that judicial instructions alone will sensitize jurors to the problems of eyewitness identification, including the eyewitness’ confidence, but empirical research indicates that such instructions are likely to be ineffective.

Finally, the presence of a highly confident eyewitness may lead experts and other witnesses to testify more confidently, themselves, fortified by the eyewitness’ confidence.

The problem for courts
Although many appellate courts unquestioningly apply the Biggers factors, others have long been struggling to reconcile the chasm between what Biggers requires and what is scientifically sound. Some courts have circumvented the flawed standard altogether by addressing the problem of eyewitness testimony under standards based on their own state constitutions. For example, courts in Massachusetts, New York, and Wisconsin have relied upon their state constitutions to adopt per se rules that exclude all eyewitness testimony obtained using unnecessarily suggestive procedures. Additionally, courts in Michigan and Utah have adopted tests under their constitutions that specifically exclude the consideration of the confidence factor.

Other courts have sought to blunt the impact of eyewitness testimony admitted under the standard by permitting experts to testify about the scientifically demonstrated unreliability of such testimony. For example, in a case involving suggestive pretrial procedures and the testimony of two confident eyewitnesses, the Arizona Supreme Court ruled that the trial court erred in refusing to permit expert testimony on eyewitness identification, reasoning that Dr. Loftus’ testimony and some experimental data indicate that there is no relationship between the confidence which a witness has in his or her identification and the actual accuracy of that identification.

Other appellate courts simply downplay the confidence factor in affirming a conviction, reasoning that an eyewitness’s confidence is
influenced by the suggestive procedure itself. That is, unlike the other four elements of the *Biggers* test, the eyewitness’s degree of certainty can be recorded only after the suggestive procedure has been used. Thus, the degree of certainty can be “engendered by the suggestive element itself.”

Still other jurisdictions have tried to address the problem outside the courts. For example, the U.S. Department of Justice and Illinois, New Jersey, North Carolina, and Texas created commissions that recommended adoption of more scientific and less suggestive techniques for conducting lineups and photo spreads. Still other jurisdictions, including Wisconsin, have enacted or are considering enacting laws that standardize scientifically validated identification procedures.¹⁹

### The precedent perseveres

Litigants in both federal and state courts have challenged identifications as violations of due process. Many have petitioned the U.S. Supreme Court for review, but the Court routinely refuses to hear challenges to the *Biggers* test. In one such case, *Ledbetter v. Connecticut*, the Connecticut Supreme Court upheld use of the *Biggers* confidence factor while simultaneously recognizing that it was contrary to scientific research.²⁰ Ledbetter petitioned the U.S. Supreme Court for certiorari review, and an amicus brief signed by 21 leading experts in the field was submitted on his behalf.²¹ Among other things, the brief drew attention to the large body of scientific research that directly challenges the confidence factor.

The Court rejected Ledbetter’s petition in 2006, and other such challenges since then. The result is that a flawed standard continues to privilege a factor of reliability that science and experience counsel should be abandoned. At the same time, challenges to the confidence factor continue unabated in state and federal courts.²²

### Time for science to prevail?

When it was adopted by the Supreme Court in 1972, the *Biggers* confidence factor was based upon widely shared “common sense” beliefs and understandings about a direct relationship between the confidence of an eyewitness and the accuracy of his or her identification. Without the benefit of scientific research, the Court thus fashioned a constitutional standard that comport with an intuitive understanding generally shared by judges, lawyers, and the general public. The common sense origin of the decision’s confidence factor likely accounts for both its longevity and its power to do great harm. The decision may have seemed to make sense at the time, but experience and scientific research have now shown that it was wrong.

More than 75 years ago, Justice Brandeis noted that in “cases involving the Federal Constitution, . . . [t]he Court bows to the lessons of experience and the force of better reasoning, recognizing that the process of trial and error, so fruitful in the physical sciences, is appropriate also in the judicial function.”²³ Is it time for the Supreme Court to finally yield to judicial concern backed by solid science and overturn the confidence criterion in *Biggers*? ²⁴

---


---

**NEIL VIDMAR, PH.D.**

is Russell M. Robinson II Professor of Law at Duke University School of Law and Professor of Psychology, Duke University. He is also research director of Duke Law School’s Center for Criminal Justice and Professional Responsibility. (vidmar@law.duke.edu)

**JAMES E. COLEMAN, JR.**

is John S. Bradway Clinical Professor of Law at Duke University School of Law. He is Director of Duke Law School’s Center for Criminal Justice and Professional Responsibility and co-director of the Law School’s Wrongful Convictions Clinic.

**THERESA A. NEWMAN**

is a clinical professor of law, executive director of the Center for Criminal Justice and Professional Responsibility, and co-director of the Law School’s Wrongful Convictions Clinic at Duke University School of Law, and board member of the Innocence Network.