Memory Expert Testimony

The overview that follows is offered to help the trier of fact — and the courts that decide what the trier of fact may hear — understand the role of expert testimony about memory and eyewitness identification: when it is admitted, why it is sometimes excluded, what it can and cannot properly address, and whether it actually helps jurors. This is the one topic in this series that is about the testimony itself. Its purpose is to define the terms a court is likely to encounter, to summarize the research on the effects of such testimony, and to do so in plain language and without favoring any party.

The Question and the Landscape

The question is whether a qualified psychologist may explain to a jury how human memory and eyewitness identification work — the factors that affect reliability, the limits of confidence, the influence of suggestive procedures — so that the jury can better evaluate the identification evidence before it. Admissibility varies widely. Some jurisdictions have historically excluded such testimony, others admit it in the trial court's discretion, and a growing number recognize it as helpful and admissible in appropriate cases. The trend has moved toward admission as the underlying science has matured and as courts have confronted the role of mistaken identification in wrongful convictions, but the law remains uneven across jurisdictions.

Why Courts Have Excluded It

Courts that exclude memory expert testimony have offered several recurring rationales: that the workings of memory are matters of common sense already known to jurors; that cross-examination is adequate to expose any weakness in an identification; that such testimony invades the jury's exclusive province to judge credibility; and that it risks confusing the jury, consuming time, or carrying undue influence because it comes from an expert. The empirical premises of the first two rationales are open to question. Research on lay knowledge finds that jurors do not, in fact, reliably understand many of the factors that affect eyewitness accuracy, and that their intuitions diverge from the scientific findings on important points (Desmarais & Read, 2011). Cross-examination, moreover, is poorly suited to revealing problems a sincere and confident witness is unaware of, such as the effects of suggestive procedures on the witness's own memory.

Does It Help? Skepticism Versus Sensitization

Whether expert testimony actually improves jury decisions has been studied for decades, and the research distinguishes two possible effects. The hoped-for effect is sensitization: that expert testimony helps jurors discriminate between identifications made under good conditions and those made under poor ones, giving appropriate weight to witnessing and procedural factors. The feared effect is skepticism: that it simply makes jurors distrust all eyewitness identifications across the board, good and bad alike. The findings are mixed. Some studies find that expert testimony increases jurors' attention to identification evidence and improves their sensitivity to the conditions that matter, without producing blanket skepticism (Loftus, 1980; Cutler, Penrod, & Dexter, 1989). Others find general skepticism with little true sensitization, and still others find that the effect depends on moderators such as the timing of the testimony, the strength of the case, and the jurors' own disposition (Leippe, Eisenstadt, Rauch, & Seib, 2004; Devenport, Stinson, Cutler, & Kravitz, 2002). The fair summary is that well-framed expert testimony can sensitize jurors under some conditions, that it commonly increases skepticism, and that the research has produced more nuance than firm conclusions.

What the Expert Can and Cannot Say

A consistent limit defines the proper scope of this testimony. The expert educates the jury about how memory and identification work in general and about the factors present in the case that the science associates with greater or lesser reliability. The expert does not, and may not, opine on whether the particular witness's identification is accurate or whether the witness is telling the truth; assessing the credibility of a specific witness is the jury's exclusive function. Properly understood, memory expert testimony is a framework for evaluating the evidence, not a verdict on it — which is also why it does not usurp the jury's role, despite the contrary concern sometimes voiced by courts.

Alternatives and Complements

Expert testimony is not the only way to bring the science to the jury, and courts often weigh it against, or combine it with, other safeguards. Cautionary jury instructions that explain the relevant factors are one alternative, ranging from the older model instruction (United States v. Telfaire, 1972) to the detailed, science-based instructions adopted by some state courts (State v. Henderson, 2011). Improved police procedures embodied in official guidelines reduce the errors at the source (Technical Working Group for Eyewitness Evidence, 1999; National Research Council, 2014), and informed voir dire and vigorous cross-examination play a part. Courts have at times been especially receptive to expert testimony directed at system variables — whether the identification procedures followed accepted guidelines — because such testimony bears on conduct within the State's control and is less likely to be seen as a comment on the witness.

Memory Expert Testimony and the Law

Admissibility is governed by the rules on scientific and expert evidence. In federal court and the many states that follow it, the trial judge is a gatekeeper assessing the reliability and fit of the testimony under Daubert v. Merrell Dow Pharmaceuticals (1993), as elaborated by General Electric Co. v. Joiner (1997) and extended to nonscientific expertise by Kumho Tire Co. v. Carmichael (1999), all now reflected in Federal Rule of Evidence 702; other jurisdictions apply the general-acceptance test of Frye v. United States (1923). Under either standard the maturity and general acceptance of eyewitness science increasingly support admission, and several courts have so held — reversing convictions where qualified testimony was wrongly excluded (State v. Chapple, 1983; People v. McDonald, 1984) and recognizing a broad scientific consensus that makes such testimony admissible to aid the jury (State v. Guilbert, 2012).

At the same time, courts retain discretion, and the Supreme Court has emphasized that expert testimony is one of several safeguards — along with cross-examination, counsel, and jury instructions — that protect against unreliable identification evidence, declining to expand constitutional screening partly in reliance on those safeguards (Perry v. New Hampshire, 2012). Whether offered by the defense or the prosecution, such testimony is admitted to inform the trier of fact about how memory works and what the research shows — not to opine on whether a particular identification is correct, a judgment the law reserves to the fact-finder.

Special Issues in Legal Practice

The principles described above apply with equal force to every party in a legal proceeding. Memory operates the same way regardless of who is asking the questions, and the science summarized here favors no side. What differs between the parties is not the science but the vantage point — the particular places where memory issues tend to surface, and the particular errors each party is best positioned to guard against. The two summaries below identify those recurring issues. They are offered for orientation, not as litigation strategy; in every case the controlling question is

what the evidence in that case will, and will not, support, and the expert's role is to inform the trier of fact rather than to advocate for either side.

Special Issues for Prosecutors

For the State, memory expert testimony is most often encountered as evidence offered by the defense, and the State's legitimate interests lie in keeping it within its proper bounds rather than in reflexively opposing it. The science favors no side: the same principles that can undermine a weak identification also explain why a strong one — made under good conditions and sound procedures, with an early, high-confidence statement — is entitled to weight. The errors the prosecution is best positioned to guard against include allowing an expert to cross the line into opining that a specific witness is or is not accurate, and permitting general testimony to breed indiscriminate skepticism rather than the sensitization the science supports. Where appropriate, the State may meet defense testimony with cross-examination, with its own qualified expert, or by establishing that the identification procedures followed accepted guidelines — and it may support cautionary jury instructions as a balanced way to convey the relevant factors.

Special Issues for Defense

For the defense, expert testimony is a principal means of placing the science of memory before a jury that may otherwise rely on mistaken intuitions about how identification works — recognizing that the goal is to sensitize the jury to the specific conditions of the case, not merely to sow blanket distrust. The defense is best positioned to show why the factors present in a given case — suggestive procedures, poor witnessing conditions, cross-race identification, the weak link between confidence and accuracy — bear on reliability in ways jurors do not reliably appreciate and cross-examination cannot fully expose. Effective use keeps the testimony within its proper scope, educating the jury about general principles and case-relevant factors without asking the expert to vouch for or against the witness. Where a trial court excludes qualified, case-relevant testimony, that ruling may itself be error (State v. Chapple, 1983; People v. McDonald, 1984; State v. Guilbert, 2012), and the defense may also seek science-based jury instructions as a complement or alternative (United States v. Telfaire, 1972; State v. Henderson, 2011). The aim is not to persuade the jury that all identifications are unreliable — the science does not support that — but to ensure the jury can accurately weigh the identification in the case before it.

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