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EVALUATING EYEWITNESS RESEARCH IN COURT: MOVING FROM GENERAL TO SPECIFIC INFERENCE

National Academy of Sciences' Committee on Scientific Approaches to Understanding and Maximizing the Validity and Reliability of Eyewitness Identification in Law Enforcement and the Courts

I. Conceptual background

A. Kenneth Culp Davis:

- (1) Legislative fact: "When an agency [or court] wrestles with a question of law or policy, it is acting legislatively . . . and the facts which inform its legislative judgment may conveniently be denominated legislative facts." ¹
- (2) Adjudicative fact: "[w]hen an agency [or court] finds facts concerning immediate parties—what the parties did, what the circumstances were...—the agency [or court] is performing an adjudicative function, and the facts may conveniently be called adjudicative facts."²

B. John Monahan and Laurens Walker:

- (1) Social authority: similar to legislative fact.³
- (2) Social fact: similar to adjudicative fact.⁴
- (3) *Social framework*: "the use of general conclusions from social science research in determining factual issues in a specific case."⁵

II. Options for communicating social frameworks to juries

- (A) *Instructions* by the judge.⁶
- (B) Testimony by an expert witness.⁷

III. Expert testimony: Inferences from group data to an individual group member⁸

- (A) Framework only: no individual inferences offered by the expert.9
- (B) *Deterministic individual inference*: "The eyewitness made an inaccurate identification."
- (C) *Categorical individual inference*: "There is a high likelihood that the eyewitness made an inaccurate identification."
- (D) *Probabilistic individual inference*: "The likelihood that the eyewitness made an inaccurate identification is 66 per cent."
- (E) *Implicit individual inference*: "Given the facts described in your hypothetical, the eyewitness would have made an inaccurate identification [have had a high likelihood of making an inaccurate identification/have had a 66 percent likelihood of making an inaccurate identification]."

IV. Expert testimony: Inferences from case-specific data to the individual case

"Fifteen years after his conviction for [homicide], James Newsome was pardoned on the ground of innocence: fingerprints and other information strongly imply that Dennis Emerson committed the crime. Newsome filed this suit... seeking damages from police officers who, he contends, induced three witnesses to identify him as the killer.

[I]t was important in this civil case to explore the question whether the testimony of [the eyewitnesses] identifying Newsome at the criminal trial was attributable to deliberate manipulation or instead to chance. [T]o explore this issue Newsome presented the testimony of Gary Wells, a professor of psychology who has performed experiments and written scholarly works in this field. Wells conducted an experiment to determine the likelihood that three persons who saw Emerson nonetheless would identify Newsome. He showed two panels of subjects different pictures of Emerson for 15 seconds then, after some time had passed, showed them pictures of the men in the lineup and asked them to choose the one they had seen in the initial photograph. Of 50 members on the first panel, none selected Newsome's photo; of 500 members on the second panel..., 15 chose Newsome's photo. Performing a chi-square test, Wells calculated that the probability of all three eyewitnesses independently picking Newsome out of a lineup by chance error was substantially less than one in 1,000, implying that the officers must have manipulated their identifications.

[T]he district judge concluded that Wells is an expert on the subject of identification, that his testimony was based on sufficient data, that his methods were reliable by the standards of the field, and that he applied these methods

reliably to the facts of Newsome's case. Experiments of the kind that Wells performed are the norm in this branch of science and have met the standard for scholarly publication and acceptance.

[T]he jury had to consider the possibility that unhappy chance rather than malfeasance led to the mistaken conviction. Wells provided information valuable in this endeavor. Appellate review of the district judge's decision is deferential, and there was no abuse here; indeed, we would have acted precisely as did the district judge."¹⁰

V. What should be communicated to the jury?

- (A) The effect, or the effect and the size of the effect?
 - (1) "[I]nstructions should describe the magnitude of the relationship that is addressed in the empirical framework. The issue here is 'how much more' or 'how much less' the presence of an identified factor makes the determination of the fact at issue."¹¹
 - (2) "Psychological Science now [i.e., as of January 1, 2014] recommends the use of the 'new statistics'—effect sizes, confidence intervals, and meta-analysis—to avoid problems associated with null-hypothesis significance testing." ¹²
- (B) The conclusion, or the conclusion and the fact that the conclusion derives from scientific research?

"The subcommittee [of the N. J. Supreme Court Committee on Model Criminal Jury Charges] could not reach a consensus on whether specific references to the social science studies and scientific research included in *Henderson*¹³ should be noted in the [jury instructions]. [Some] members stressed the importance of including the detailed description of the scientific findings and research found in *Henderson*. They were of the view that the jury should not only be told about the variables but also understand the science on how such variables can affect a witness's memory.

On the other hand, the opposing members of the subcommittee stressed that the Committee needs to be aware that the social science research is probabilistic in that it cannot determine that a witness is right or wrong in his or her identification.

[M]ost members agreed that the charge should not reference the social science studies or use the term "scientific research." 14

References

¹ Kenneth Culp Davis, An Approach to Problems of Evidence in the Administrative Process, 55 HARVARD LAW REVIEW, 364, 402 (1942).

² Id.

³ John Monahan & Laurens Walker, *Social Authority: Obtaining, Evaluating, and Establishing Social Science in Law*, 134 UNIVERSITY OF PENNSYLVANIA LAW REVIEW 477 (1986).

⁴ Laurens Walker & John Monahan, Social Facts: Scientific Methodology as Legal Precedent, 76 CALIFORNIA LAW REVIEW, 877 (1988).

⁵ Laurens Walker & John Monahan, *Social Frameworks: A New Use of Social Science in Law*, 73 VIRGINIA LAW REVIEW, 559 (1987).

⁶ Id.

⁷ John Monahan, Laurens Walker & Gregory Mitchell, *Contextual Evidence of Gender Discrimination: The Ascendance of "Social Frameworks,"* 94 VA L. REV. 1705 (2008).

⁸ Cases can be found in David L. Faigman et al, MODERN SCIENTIFIC EVIDENCE: THE LAW AND SCIENCE OF EXPERT TESTIMONY (2013-2014 ed), and in John Monahan and Laurens Walker, SOCIAL SCIENCE IN LAW: CASES AND MATERIALS (8th ed, 2014). For a distinction between "framework experts" and "diagnostic experts," see David Faigman, John Monahan, & Christopher Slobogin, *Group to Individual (G2i) Inference in Scientific Expert Testimony*, UNIVERSITY OF CHICAGO LAW REVIEW (in press).

⁹ John Monahan, Laurens Walker, & Gregory Mitchell, *Contextual Evidence of Gender Discrimination: The Ascendance of "Social Frameworks*" 94 VIRGINIA LAW REVIEW 1705 (2008).

¹⁰ Newsome v. McCabe, 319 F.3d 301 (7th Cir. 2003) (Easterbrook, J).

¹¹ Walker & Monahan, supra note 5, at 595-596.

¹² 2014 Submission Guidelines, Association for Psychological Science, available at http://www.psychologicalscience.org/index.php/publications/journals/psychological_science/ps-submissions#

¹³ State v. Henderson, 27 A.3d 872 (2011).

¹⁴ Report of the Supreme Court Committee on Model Criminal Jury Charges on the Revisions to the Identification Model Charges, January 9, 2012, available at http://www.judiciary.state.nj.us/criminal/ModelCrimJuryChargeCommHENDERSONREPORT.pdf