MAJOR ARTICLES CRITICAL OF FORENSIC DOCUMENT EXAMINATION

The following major critical articles of Forensic Document Examination have been summarized and appear in chronological order. The summaries are not exhaustive or all-inclusive of every detail, but were compiled from various sources to serve as an overview and general summary of noteworthy critical articles that forensic document examiners should be familiar with.

For further information, any interested forensic document examiner is encouraged to perform additional research on these or any other articles critical of forensic document examination and/or forensic sciences. Additions to the summaries listed here are always welcome.

Risinger, Michael D., Denbeaux, Mark P. and Saks, Michael J. *Exorcism of Ignorance as a Proxy for Rational Knowledge: The Lessons of Handwriting Identification Expertise.* University of Pennsylvania Law Review, Vol. 137, No. 3, 1989.

Risinger, Michael D. and Saks, Michael J. *Science and Nonscience in the Courts: Daubert Meets Handwriting Identification Expertise.* Iowa Law Review, 82, 21-74, 1996.

Saks, Michael J. *The Aftermath of Daubert: An Evolving Jurisprudence of Expert Evidence.* 40 Jurimetrics Journal, (2000)

Mnookin, Jennifer. *Scripting Expertise: The History of Handwriting Identification Evidence and the Judicial Construction of Reliability.* University of Virginia School of Law, Vol. 87 (2001)

Saks, Michael. *Commentary on: Srihari SN, Cha S-H, Arora H., Lee S. Individuality of Handwriting (from JFS 2002; 47(4)).* J. Forensic Sci., July 2004, Vol. 48, No. 4.

Mnookin, Jennifer. *Of Black Boxes, Machines, and Experts: Problems in the Assessment of Legal and Scientific Validity"* Episteme: A Journal of Social Epistemology, Vol. 5, Issue 3 (2008)

Risinger, Michael D., Denbeaux, Mark P. and Saks, Michael J.
Exorcism of Ignorance as a Proxy for Rational Knowledge: The Lessons of Handwriting Identification Expertise. **University of Pennsylvania Law Review, Vol. 137, No. 3, 1989.**
This article, written by 3 law professors, raised serious doubts concerning the reliability of handwriting examination. These critics raised issues in their assessment and asked questions never before addressed to document examiners in the field. Criticisms of the profession of forensic document examination included:

1. "No cases have ever examined, much less determined, whether these "experts" can do what they claim".
2. There existed almost no studies of its claims in any academic literature.
3. Studies that were conducted raise serious questions about its validity.
4. The law has resisted requiring presentation of the asserted expertise in ways that would expose its validity problems.

To support these allegations, the experts cited 4 studies from the 1980s (Forensic Science Foundation tests in 1984, 1985, 1986 and 1987), one study from the 1970s (Forensic Science Foundation test in 1975), Crime Laboratory Proficiency Testing, and another study from the 1930s (*Lay Witness Identification of Handwriting*, Inbau, 1939). Although none of these studies were designed for the purpose of validation and were rife with defects and flaws, the critics concluded: "Document examiners were correct 57% of the time and incorrect 45% of the time." At the time of the publication of this paper, document examiners paid little attention to it. The authors had no forensic or scientific training, no technical knowledge in the field, and were not considered a threat. However, a landmark court ruling in 1993 (Daubert v. Merrell Dow Pharmaceuticals Inc., 113 S. Ct. 2786) would result in new challenges to expert testimony regarding handwriting evidence, and the criticisms made in this article were soon resurrected in the courts.

Risinger, Michael D. and Saks, Michael J. *Science and Nonscience in the Courts: Daubert Meets Handwriting Identification Expertise.* **Iowa Law Review, 82, 21-74, 1996.**
This article again cites the earlier FSF tests as support for the unreliability of handwriting expertise, and also critiques the first Kam study involving FBI document examiners and lay persons. The article suggests that handwriting identification is strongly influenced by context cuing, and that the courts should "attempt to require adequate testing of each individual examiner, to ensure that person's ability to do what she or he claims to be able to do."

Saks, Michael J. *The Aftermath of Daubert: An Evolving Jurisprudence of Expert Evidence.* **40 Jurimetrics Journal, (2000)**
This essay examines the jurisprudence of expert evidence under the Federal Rules of Evidence by reviewing the Supreme Court's holdings in its post-Daubert scientific evidence cases. In particular, it considers the questions of the standard of appellate review, the distinction between methodology and conclusions, and Daubert's applicability to claims of nonscientific expertise. The essay suggests that testimony be

excluded for those that do not provide adequate empirical support for what the experts are claiming. It calls for a "black-box solution" – tests where although the principles used by the expert may be unknown, known inputs can be compared with known outputs (solutions) so that proficiency of the testifying expert can be verified.

Mnookin, Jennifer. *Scripting Expertise: The History of Handwriting Identification Evidence and the Judicial Construction of Reliability.* University of Virginia School of Law, Vol. 87 (2001)
This is a lengthy article that covers the history of handwriting evidence in the courts and alleges that expert handwriting identification and fingerprint identification do not withstand scrutiny under Daubert. Mnookin discusses the role the courts play in determining what constitutes reliability in expert testimony and the forensic sciences.

Saks, Michael. *Commentary on: Srihari SN, Cha S-H, Arora H., Lee S. Individuality of Handwriting (from JFS 2002; 47(4)).* J. Forensic Sci., July 2004, Vol. 48, No. 4. This is a critical article about Dr. Srihari's study that utilized CEDAR FOX software to support that the writing of every person is distinguishable from any other person and was able "to validate handwriting individuality with a 95% confidence." Saks finds the study flawed for the following reasons: the structure of the writing sample included a diverse group of 1568 writers from states in the U.S. and therefore ensured differences within the writings; the size of the writer population used in the study was too large; the content of writing sample itself was too large and "artificially maximized the ability to distinguish writers"; number of intra-writer samples was too small; the study was restricted to cursive writing samples only; and the study did not involve human examiners.

Mnookin, Jennifer. *Of Black Boxes, Machines, and Experts: Problems in the Assessment of Legal and Scientific Validity"* Episteme: A Journal of Social Epistemology, Vol. 5, Issue 3 (2008)
This paper examines recent controversies over what kinds of testing are (and ought to be) required to establish legal validity for a scientific or expert technique, with a particular focus on recent controversies surrounding latent fingerprint identification evidence and breath test detection of alcohol. Specific focus is on two strains of reasoning in tension with one another: one which emphasizes the adequacy of input/output testing in which the technique or method at issue is shown to get correct results when tested multiple times with known exemplars; and the other which rejects treating the technique or machine as a "black box" and instead insists that validation requires the existence and disclosure of a formally-specified method of analysis.