

Lineup: The Reliability of Examinations Involving Multiple Writers

David L. Parrett¹ and Garry Szabo²

¹Forensic Document Examiner, Oklahoma County District Attorney, 320 Robert S. Kerr, Suite 505, Oklahoma City, Oklahoma 73102

²Forensic Document Examiner, Tulsa Police Department, 600 Civic Center, Tulsa, Oklahoma 74103

A 1999 United States District Court ruling suggested possible bias in one-on-one questioned to known suspect document examinations. The ruling was, in part, a result of document examination critic Mark Denbeaux's assertion that an examination of the writing of several persons similar to a police "lineup" might produce a different opinion by the examiner. In contrast to the traditional police "lineup" of a few individuals, this study employed the writing of 1,000 "suspects." Four examiners were provided a questioned document consisting of a "London Letter." They were given the task of determining if the questioned author's handwriting was among the 1,000 "London Letters" gathered from different writers. All four examiners, encompassing a wide range of experience, reached definitive correct conclusions.

The opinions and assertions contained herein are the views of the authors and are not to be construed as official or reflecting the views of the Office of the Oklahoma County District Attorney or the Tulsa Police Department.

Introduction

In 1995, the televised murder trial of O. J. Simpson brought forensics into homes nationwide. The defense attacks on the forensic evidence in that proceeding heralded a stepped-up assault on the forensic fields in other arenas. In recent years the proliferation of forensic science television programs has brought the field even more attention. Most of these programs, however, focus on the more visually appealing regimens such as blood spatter interpretation and physical analysis of evidence. It is, in part, ignorance of the field of questioned document examination by attorneys, prosecutors, and jurists that allows "expert critics" to make unsubstantiated claims that are, at times, accepted by courts.

On June 11, 1999, United States District Judge Nancy Gertner issued a Memorandum and Order in the case of *U.S. v. Johanna Hines* citing information proffered by Mark Denbeaux, co-

author of "Exorcism of Ignorance as a Proxy for Rational Knowledge: The Lessons of Handwriting Identification Expertise (1989)." In that ruling, the judge drew an analogy between handwriting identification and eyewitness identification with reference to allowing testimony from Diana Harrison, a document examiner with the Federal Bureau of Investigation (FBI). Judge Gertner stated: "Indeed Denbeaux draws an interesting analogy to eyewitness identification. Courts have concluded, as a matter of law, that one-on-one show-ups are unduly suggestive. Likewise, Denbeaux suggests, are one-on-one handwriting comparisons. The outcome of this analysis, for example, may be different if Harrison were given a 'lineup' of similar handwriting exemplars to review, and asked to determine which of this group is most similar to the robbery note author. Whether one adopts that specific approach or not, one thing is clear, when Harrison says, 'I conclude that Hines wrote the robbery note,' she may well be going beyond her expertise (1999)."

It was that judicial reasoning that sparked the authors' interest in testing Denbeaux's ideas and the judge's comments that: (1) imply one-on-one document examinations are suggestive, and (2) examinations involving a questioned document and known standards from multiple writers may result in a different outcome.

A literature search revealed that document examiner Farrell Shiver (1996) conducted an examination while serving with the United States Army in which he reviewed handwriting from 1,000 individuals in a counterfeit check investigation. Shiver was able to identify a suspect for investigators. That suspect ultimately confessed, validating Shiver's opinion.

This study addresses the ability of document examiners to identify the writer of a questioned document by comparing similar known standards executed by multiple writers. It explores the hypothesis that given a questioned document containing a paragraph of writing, a questioned document examiner cannot accurately identify the writer of that questioned document when given an array of known standards of similar content executed by multiple authors.

Methods and Materials

A typical police photographic lineup consists of six to eight possible subjects and one witness. To replicate this scenario for handwriting identification, it would have entailed utilizing a questioned document and six to eight known standards. These authors decided to "raise the bar" to determine if multiple examiners could correctly identify the writer of a questioned document among numerous standards.

The traditional "London Letter" was chosen for the questioned document and known standards. The standards were obtained from in excess of 1,000 writers comprised of: male and female, left and right-handed writers, a minimum age of 15, and from a variety of ethnic and educational backgrounds. A cover sheet accompanied each letter requesting the individual participants to identify their sex, age, ethnic background, and education. The accompanying standard was printed on 8 1/2 inch by 11 inch lined paper and included the "London Letter" text to be copied. The standards contained written instructions directing the participants to write using cursive handwriting. In the event of a mistake, the writer was instructed not to remove the mistake or overwrite, but to re-write the word next to the error. Unsuitable standards were discarded from the sample.

The document examiners conducting the examinations included the authors with 5 and 2 years of actual examination experience; a retired law enforcement examiner now in private

practice with 14 years experience; and a law enforcement examiner with a major metropolitan police department having 3 years actual examination experience. Sets of writings consisting of two "London Letters" each were obtained from four persons that had not participated in the collection of the original standards. In each set, one letter was labeled as questioned and the second letter was identified as a known. A nonstudy participant inserted the second letters randomly to comprise the 1,000 known standards. The examination packets were then submitted to the examiners.

Results

The question to be answered was: "Could the examiners associate the questioned document to a known exemplar and, if so, with what level of certainty?" The judge in the *Hines* case had suggested, per Denbeaux, that document examiners are unduly influenced when given a questioned document and only one suspected writer's handwriting to examine. The judge had further suggested that it was possible that the FBI document examiner in that case might have reached a totally different conclusion had she been required to look at knowns from several writers. In this study each examiner was faced with not only 6 or 8 suspects in a lineup situation, but was asked to consider 1,000 suspects. Each participant examiner reached a conclusive positive identification and their identifications were correct.

The hypothesis that given a questioned document containing a paragraph of writing, a questioned document examiner cannot accurately identify the writer of that questioned document when given a "lineup" of known standards of similar content executed by multiple authors is thereby rejected.

Discussion

Two common mistakes by laypersons analyzing handwriting are to focus on a limited number of characteristics or mistaking class characteristics for individual characteristics in identifying handwriting. The methodology employed by qualified document examiners considers agreement or disagreement of class and individual characteristics. This methodology examines aspects of handwriting such as height relationships, spacing, formatting, connection

habits, letter formations, size, baseline alignment, slant, diacritics, line quality, and direction to name a few. A common approach to document problems by qualified examiners allows those examiners to render similar conclusions and interpret another examiner's work.

Although a limited number of examiners participated in this study, these authors believe that the initial findings are compelling when considering the magnitude of the "lineup." Participant examiners, encompassing a wide range of experience, reached definitive correct conclusions employing the standard methodology used by qualified document examiners. This study is another example of how unsubstantiated criticism by "expert critics," who are accepted in a court of law, has been disproved.

Conclusion

This study addresses a Mark Denbeaux inspired federal court's implication that one-on-one handwriting comparisons are biased. The judge suggested that a "lineup" scenario involving multiple writers might have produced a different conclusion by the examiner. Four document examiners took part in the study. A questioned document consisting of a "London Letter" was compared to 1,000 known "London Letters" executed by different writers. The examiners were asked to determine if the writer of the questioned document was present in this "lineup" of known exemplars. All study participant examiners reached a correct identification. Common examination methods utilized by qualified examiners allow for replication of results. This study, while limited, confronts still another unsubstantiated claim questioning the validity of document examination methodology.

Acknowledgments

The authors wish to thank Lené Mitchell of the Oklahoma County District Attorney Questioned Document Laboratory for her assistance with the implementation of this study.

References

- Risinger, D. M., Denbeaux, M. P., & Saks, M. J. Exorcism of Ignorance as a Proxy for Rational Knowledge: The Lessons of Handwriting Identification expertise. *University of Pennsylvania Law Review*, pp. 137, 731-792, 1989.
- Shiver, Farrell. Case Report: The Value of Field Assistance to the Investigator in a Counterfeit Check Case. Southwestern Association of Forensic Document Examiners Meeting. Atlanta, GA, April 25-27, 1996.
- United States v. Johanna Hines*. United States District Court for the District of MA, Memorandum and Order CRIM. NO. 97-CR-103336-NG, Section A, June 11, 1999.