

Admissibility Issues in Forensic Document Examination

Thomas W. Vastrick

Forensic Document Examiner, 380 S. State Road 434, Suite 1004, Altamonte Springs, FL 32714, and
6600 Stage Rd., Suite 107, Bartlett, TN 38134

The admissibility of forensic document examination has, on occasion, been challenged in courts across the United States. This paper reviews the requirements and guidelines under U.S. Supreme Court decisions of recent years as related to Rule 702 of the Federal Rules of Evidence and compares them to studies, research, methodologies, testing, and publications within the discipline of forensic document examination that relate to these guidelines, and outlines how forensic document examination meets and exceeds each of these guidelines. In addition, this paper reviews statements made by critics in testimony and nonpeer reviewed articles concerning forensic document examination as it relates to admissibility issues. These statements are compared with the raw data on which many of the statements were based. Many of the critics' conclusions were inaccurate.

Introduction

In 2001, the University of Virginia Law Review recently published two articles on the subject of forensic document examination (Mnookin, 2001; Gross, 2001). It was disheartening to see the lack of objectivity and inaccuracies being published within these pages. It is beyond understanding that articles allegedly presenting a review of any discipline would do so with input by fictional characters from the works of Shakespeare, but no input from those who are actual practitioners in that field. Contrary to these writers' opinions, forensic document examination has long held a high level of credibility as a discipline within the field of forensic science and within the judiciary.

It is the purpose of this paper to provide a review of the training, experience, methodologies and standards used in this discipline, in light of Daubert guidelines and Rule 702 of the Federal Rules of Evidence, which will clearly demonstrate the basis under which forensic document examination has achieved a high level of credibility in courts throughout the United States. In addition, this paper will specifically

address certain claims made by those critical of the admissibility of forensic document examination.

Basic Principles of Handwriting Examination

Modern forensic document examination is based on the principle that no two writers share the same combination of handwriting characteristics. There are a number of large-scale governmental projects in the United States, Germany, and The Netherlands classifying the similarities and differences within handwriting using a statistically significant sampling of the world's population. From these projects nearly 100,000 handwriting specimens have been cataloged and classified. Not one example of two people writing exactly alike has been reported.

Recently, the principle of uniqueness was put to an extensive computer validation study (Srihari, 2002). In this study, Dr. Srihari conducted research into computerized analysis of handwriting similarities and differences based on only some of the features examined by forensic document examiners. It was his conclusion that

handwriting was statistically unique to individuals.

Vastrick (1998) conducted a survey of 91 forensic document examiners with a total of 1,490 years of experience. Collectively the examiners had examined the handwriting of over one million people. None of the examiners reported finding two different persons who had the exact same combination of handwriting characteristics. Vastrick also references numerous additional empirical studies concerning the uniqueness of handwriting in both the general population and within numerous sub-groups that were all found to have the same results.

Some critics have made comments concerning an article by John Harris (1958) in which he advises document examiners to consider the sufficiency of the amount of writing in the overall uniqueness of handwriting evaluation of an examination. Mr. Harris points out that different people can write words such as "Smith" in indistinguishable manners and suggests that this short word alone may not, in every instance, provide sufficient grounds to establish uniqueness of handwriting. Critics have suggested that the Harris paper proves that handwriting of individuals cannot be differentiated, yet it should not be overlooked that Harris bluntly begins the paper by stating: "No two persons write exactly alike." In response to critics' references to his paper, Harris published a specific response to "set the record straight"(2002).

Daubert Background

Daubert v. Merrell Dow Pharmaceuticals (509 U.S. 579, 590, 1993) was aimed at expanding, not restricting, the admissibility of expert opinion under Rule 702, in keeping with the Supreme Court's view of the "'liberal thrust' of the Federal Rules and their 'general approach of relaxing the traditional barriers to 'opinion' testimony' (*Beech Aircraft Corp. v. Rainey*, 488 U.S. 153, 169, 1988)." Thus, *Daubert* rejected the long-prevalent *Frye* (293 F. 1013, D.C. Cir. 1923) doctrine which held that a scientific theory was admissible only if it enjoyed "general acceptance" in the pertinent community of expertise. The Supreme Court held that *Frye* was unduly restrictive in light of Rule 702. The *Daubert* Court responded to the concerns of some that its ruling would open the floodgates to all manner

of questionable expert opinions, stating that those critics are "overly pessimistic about the capabilities of the jury and of the adversary system generally. Vigorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof are the traditional and appropriate means of attacking shaky but admissible evidence."

Interestingly, handwriting opinion testimony, based on a comparative analysis of questioned and known handwriting, was always held admissible under the *Frye* test. Indeed handwriting identification is the paradigm of a "generally accepted" test — it has been used for nearly 150 years, it has been introduced on thousands of occasions in judicial proceedings, and it is one of few methods used in both the law enforcement context and in resolving civil disputes. The Third Circuit stated as much in *United States v. Downing*, 753 F.2d 1224 (3d Cir. 1985), a seminal opinion which rejected the *Frye* test and was later embraced by the Supreme Court in *Daubert*. The *Downing* Court stated that under *Frye*: "Once a novel form of expertise is judicially recognized, this foundational requirement can be eliminated, as is done when, for example, fingerprint, ballistics, or x-ray evidence is offered."

It would thus be incongruous, to say the least, that a method of evaluation which has received such overwhelming acceptance and consistent use would fail under a rule of evidence meant to be less stringent than the general acceptance test of *Frye*. A review of the law interpreting the newer, Rule 702 standard reveals that this is not the case. To the contrary, the courts have been faithful to the Supreme Court's mandate to apply a liberal standard of admissibility under Rule 702. In essence, the Supreme Court's cases simply drew the line at what is colloquially referred to as "junk science," the attestations of purported experts without any reliable basis in fact or study. Some historic examples include:

1. *Daubert* – Questioning the reliability of testimony by a witness who simply "re-analyzed" 30 studies of over 130,000 patients (all of which found no link between use of Bendectin and the complaint of injuries) and reached a different conclusion than the previous researchers;

2. *General Electric Co. v. Joiner* (522 U.S. 136, 145-46, 1997) – A medical causation expert relied only on four epidemiological studies, which were either inconclusive or irrelevant to the pertinent issue; and

3. *Kumho Tire Co., Ltd. v. Carmichael*, (526 U.S. 137, 154, 1999) – A tire expert purported to state his opinion regarding cause of tire failure, based solely on a visual examination of questionable value, and without consideration of substantial evidence contrary to his view. This opinion, relating Frye acceptance to the less stringent Daubert guidelines, was also followed specifically for forensic document examination by the Florida Supreme Court in *Florida v. Spann* (No. SC00-1498, 04/03/2003).

A perfect example of the liberal thrust of admissibility based on Rule 702 involving handwriting comparisons can be found in *United States v. Velasquez* (64 F.3d 844, 3d Circuit, 1995). In this case, the Court held that the testimony of a handwriting examiner, who follows a comparative analysis, is admissible under Daubert. The Court stated: "In the present case, there is no question that the district court properly admitted Ms. Bonjour's handwriting analysis testimony because her testimony met all three of the requirements of Rule 702." In particular, the Court added, the testimony "was sufficiently reliable to be admissible." However, the Court also held that the district court had abused its discretion in excluding the defense's contrary opinion "expert," a law professor. This law professor (who did not consider himself a scientist): never examined a document under a microscope; never studied under a forensic document examiner; never received training in statistics or ever took any collegiate level mathematics courses; could not explain in detail how he reached the statistical conclusions used as the basis for their criticism to which he was prepared to testify; was admittedly not involved in the statistical portion of the article in which he was co-author; relied on statistics from which the training or level of expertise of the participants could not be identified; utilized inappropriate methodology in deciding which answers were correct or incorrect; used

inappropriate statistical methodology; had no information about such factors as reward systems for the test participants; did not know whether the participants of referenced "tests" were forensic document examiners; and had never watched a trained forensic document examiner conduct an examination at that time. In addition, Collaborative Testing Services had clarified that the "tests" utilized by the critic in his testimony were not designed or appropriate for the purposes proffered by this "expert." Ignoring these factors, the Court ruled that error had been made in not allowing testimony thus establishing the extent of the "liberal thrust" as described by the U.S. Supreme Court in *Daubert*.

Appellate Court Cases

There have been numerous cases, in addition to *Velasquez*, involving forensic document examination, which have found their way to various Courts of Appeal. In *U.S. v. Paul*, (175 F.3d 906, 11th Circuit, 528 U.S. 1023, 1999) and *Estate of John Acuff v. Brenda Olinger*, (M1999-0068-COA-R3-CV, Tennessee, 2001) the appropriate appeals courts ruled that forensic document examination and the opinions of the examiners were admissible under Rule 702. The Paul appeals ruling affirmed the trial judge's ruling not to permit the testimony of an "expert critic" stating that the proposed witness did not possess the skill, experience, training, or education required of Rule 702. The trial judge's ruling to exclude this same witness for the same reasons in *Acuff* was not appealed. In *Taylor v. Abernathy* (149 NC App 263, 01-470) the North Carolina Court of Appeals ruled that not allowing a document examiner to testify to his opinion but only to similarities and differences was reversible error. The U.S. Court of Appeals in the First Circuit determined in *U.S. v. Moore* (02-1318, 1st Circuit, December, 2002) that the trial court did not abuse its discretion by allowing an American Board of Forensic Document Examiner (ABFDE) certified diplomate to testify to their opinion based on their examination.

Other Court of Appeals decisions upholding forensic document examination as a reliable source of information that would assist the trier of fact include: *U.S. v. Ruth* (U.S. Court of Appeals, Armed Forces, No. 96-0155, 1997); *U.S. v. Rosari* (118 F.3d 160, 163-64, 3d Circuit 1997); *U.S. v. Jones* (107 F.2d 1147, 6th Circuit 1997); *U.S. v. Ruteria* (138 F.3d 1328, 10th Circuit, No.

96-2139, No. 96-2142, No. 96-2141, March 1998); U.S. v. Battle (188 F.3d 519, August 1999); U.S. v. Jolivet (224 F.3d 902, 8th Circuit, September 2000); and U.S. v. Elmore (U.S. Navy-Marine Corp., Court of Appeals, October 2001).

Mnookins (2001) acknowledges the pattern of acceptance of forensic document examination by various courts of appeal with some interesting editorializing: "The first approach, most visible in the appellate cases on the issue, is basically avoidance. Several appellate courts have affirmed the use of handwriting experts, often by evading the hard questions entirely." The U.S. Supreme Court in *Joiner* made it clear that the trial judge has broad authority in exercising gatekeeper duties and that appellate courts are only to review such decisions as to whether abuse of discretion is demonstrated. These courts are clearly following the mandate of the U.S. Supreme Court.

Mnookins also makes this comment about appellate court and trial court decisions: "Note that while appellate courts continue to approve trial court rulings admitting handwriting evidence, *every* (emphasis added) trial court that has considered the issue since *Kumho Tire* was decided has had reservations about admissibility." Mnookins' statement is simply not true. There have been cases numbering into the thousands in which forensic document examiners have testified since *Kumho*. Only a very few have involved Daubert challenges most of which were entirely unsuccessful. In many cases, document evidence has been admitted through stipulation of qualifications. Forensic document examiners testify regularly across the country with no reservations from the trial courts. This author alone has testified approximately sixty times from 1999 to the publication of this paper and has been admitted through stipulation of qualifications or with no challenge of qualifications in the vast majority of these cases and no successful challenges of qualifications in any cases.

Daubert Guidelines and Forensic Document Examination

Daubert made clear that the factors it outlined for the admission of expert testimony need not necessarily apply in each case. These factors were intended only as a guide. Given Daubert's recognition that the list of factors to be considered in weighing the admissibility of expert

testimony is not a closed set, courts (such as Paoli II, 35 F.3d at 742 n.8) have amplified the list of pertinent considerations that include: (A) whether a method consists of a testable hypothesis; (B) whether the method has been subject to peer review; (C) the known or potential rate of error; (D) the existence and maintenance of standards controlling the technique's operation; (E) whether the method is generally accepted; (F) the relationship of the technique to methods which have been established to be reliable; (G) the qualifications of the expert witness testifying based on the methodology; and (H) the nonjudicial uses to which the method opinion evidence has been put (Paoli). A review of pertinent information relating to each guideline provides significant information into the standards and methodologies on which admissibility under Daubert is based.

A. Whether the method consists of a testable hypothesis.

The Daubert decision states that "ordinarily, a key question to be answered in determining whether a theory or technique is scientific knowledge that will assist the trier of fact will be whether it can be (and has been) tested." The handwriting identification method can be and constantly is tested. It is possible to show known exemplars to qualified examiners and test their proficiency. Forensic document examiners have exhibited significant accuracy on actual proficiency tests for years. Further, each side of any litigation is free to perform whatever tests and introduce whatever reliable evidence they like in order to disprove the method, although that will be difficult, given that the method to date has completely passed every appropriate test.

The methodology of handwriting comparison is not subjective. An examiner, relying on extensive training in noting similarities and dissimilarities in writings, and in reasoning from such observations whether or not the writings are of a common source, is reaching a conclusion which is grounded in a scientific method. The accuracy of this approach, and the specific examiner, can be and routinely is tested through certification testing, special field testing, organizational membership testing, and yearly proficiency testing. In addition, specific empirical studies have been conducted testing the abilities of forensic document examiners as compared to those of equivalent general education but lacking

training in the discipline. The results are clear: forensic document examiners are exponentially more accurate than the control group. These tests were not conducted by individuals who lacked a statistical background or with only a professional interest in statistics. These analyses were performed under the active participation of a scientist specifically trained in statistical research and pattern recognition who used standardized and accepted methodologies.

As previously discussed, Srihari (2002) has conducted research involving computerized analysis of handwriting similarities and differences based on only some of the features examined by forensic document examiners. In addition to his conclusion that handwriting was unique to individuals, it was also determined that forensic document examiners had sufficient individuality within the established examination methodology to statistically reach their conclusions. Some individuals critical of the admissibility of forensic document examination have commented on testing. Mnookins (2001), referencing Risinger, et al. (1989), stated “. . . in the only test on evaluating disguised writing, a 1984 proficiency test, one hundred percent of the examiners got the answer wrong!” Research into this “test” revealed that nearly one hundred percent of the respondents provided the correct answer to this question. It was also determined that there are no records as to the professional background, training or experience of those who took the “test.” The “test” was available to anyone who wanted to take it, whether a qualified forensic document examiner, a trainee, a graphologist, or one with no more than a passing interest in the subject.

Standard statistical methodology requires that the background and training of any participants in an actual proficiency test being used for statistical studies must be known. In addition, the referenced “test” was not a proficiency test. This exercise was created for the user to apply as they saw fit. There was no requirement that a participant had to be a forensic document examiner or one who has completed training, or even that each participant had to take the “test” independently. Finally, there have been disguised writing proficiency tests that have been provided to fully-trained, qualified forensic document examiners. Had Mnookins conducted an appropriate literature review or had background discussions occurred with one or more qualified

forensic document examiners, gross misstatements in her paper may have been avoided. It is interesting to note that Saks (1989) when referencing the 1984 “test” wrote: “Participation rates and response rates are not high enough to provide data that can be relied upon to be representative.”

These facts amply demonstrate that the accuracy of the methodology is testable, and has proven to be outstanding. Given the prevailing law that a method need only provide “good grounds” for an opinion, it is evident that the methodology used by qualified forensic document examiners far exceeds the minimum requirements for admissibility under Rule 702, subject to whatever contrary opinion or test results opposing counsel wishes to present.

B. Whether the method has been subject to peer review.

The field of forensic document examination has a rich library of peer-reviewed articles concerning all aspects of forensic document examination covering a span of 150 years and growing every year. But publication is not the only means of peer review; rather, the Supreme Court spoke of peer review more broadly as “submission to the scrutiny of the scientific community [which] increases the likelihood that substantive flaws in methodology will be detected.” Handwriting comparisons have long been subject to scrutiny in the forensic document examination community through such groups as The Scientific Working Group for Document Examination (SWGDOC) and the general scientific field through The American Society for Testing and Materials (ASTM). In addition, peers often oversee each other's work in the field. The reliability of handwriting opinion testimony is far more strongly grounded in this factor than a study which has merely gained publication in a journal or two. Books on the subject of forensic document examination, such as those authored by Hagan (1894), Ames (1900), and Osborn (1929), have survived as authoritative references for approximately 100 years, thus demonstrating overwhelming evidence of acceptable “scientific” peer review. Plainly, this is a field in which there is extensive peer review and widespread acceptance of the basic method of handwriting comparison.

C. The known or potential rate of error.

In applying methodology, the question to be addressed is which rate of error is relevant — the error rate for the methodology, or the error rate of the practitioner/witness. In *Daubert*, the Supreme Court made clear that the appropriate focus of this particular guideline is on the former. That is sensible considering, where a method is reliable, any error in its application may be exposed through the testimony of contrary experts as discussed in more detail later. The statistical studies conducted by Kam (1994, 1997, 1998, 2001, 2003) and Sita, Found, and Rogers (2002) have established an error rate for certified and noncertified forensic document examiners under nonlaboratory conditions. This leads to the issue in which everyone seems to agree — the courts must take a more active role in scrutinizing the education, skill, training, and experience of the specific examiner being proffered as an expert.

The ABFDE is the only certification board recognized by the broader forensic science community, by law enforcement, and by the courts as the template of an organization establishing diplomate requirements consistent with the goals of *Daubert*. The ABFDE requirements for certification include a baccalaureate degree or higher in science, criminal justice, or a related field; the successful completion of a full-time, in-residence, two-year (or longer) training program in a recognized laboratory or under the training of a recognized forensic document examiner; and the successful completion of each part of a three-part technical test. While this checklist may seem minimal, the ABFDE is the only certification board for forensic document examiners that maintain these requirements.

D. The existence and maintenance of standards controlling the technique's operation.

The field of forensic document examination has evolved as a science over the past 150 years. For decades, this field has been found to be reliable with its system-wide methodologies for the comparison of questioned handwriting with known standards. The basic methodology for comparison has not changed. The methodologies used can be traced back to the early authoritative texts in our field and are constantly updated and revised through numerous peer-reviewed,

published papers and through the most recent codification of these methodologies through the work of SWGDOC, ASTM, and the Australian Society of Forensic Document Examiners Special Advisory Group (Found and Rogers, 1998).

An opinion based on the comparative handwriting identification method is one based on scientifically established truths. They are reached through a careful and principled application of the scientific truths and the evaluation of the evidence and on comparison of a quantity of characteristics which has been known to allow an assured identification. As such, an opinion is one with which any competent examiner would most certainly agree.

Some critics assert that forensic document examiners make a subjective determination that, according to the critics, means that they are not following standards in the application of the test. That conclusion vitiates the very nature of expert opinion testimony and applied science. Virtually all expert testimony is ultimately "subjective." Were it not subjective, it would not be "opinion testimony." Summarily rejecting subjective opinion as unreliable would be incorrect under Rule 702, and would amount to wholesale rejection of virtually all of the expert opinions that the rule embraces in addition to the extinction of all applied science to the legal profession (which is all science). This is the quintessential type of opinion evidence for which Rule 702 is designed. To say that an expert cannot express a subjective opinion which rests on his or her expertise and training would be to write Rule 702 out of the Federal Rules of Evidence. To the contrary, the rule provides that an expert may testify "in the form of an opinion or otherwise," recognizing that an expert's subjective view based on training superior to that of the jurors may be helpful to the jury in the performance of its task. The very word "opinion" insinuates a subjective aspect to any methodology. The Advisory Committee note to the adoption of Rule 702 explicitly authorized such opinion testimony by stating: "It will continue to be permissible for the experts to take the further step of suggesting the inference which should be drawn from applying the specialized knowledge to the facts."

If experts were limited only to providing testimony regarding which there is totally objective empirical proof, there would be no need for expert opinions at all. By the same notion, if the reliability of an expert's opinion rested on

his or her demonstrable accuracy, without any reference to his or her subjective judgment, there could never be a case in which competing experts were allowed to opine. This is not the law.

E. Whether the method is generally accepted.

In the landmark *Downing* decision, which foresaw and influenced the Supreme Court's decision in *Daubert*, the Court opined that any widely accepted method which met the *Frye* standard would easily, on that basis alone, pass muster under Rule 702: "The district court in assessing reliability may examine a variety of factors in addition to scientific acceptance. In many cases, however, the acceptance factor may well be decisive, or nearly so. Thus, we expect that a technique that satisfies the *Frye* test usually will be found to be reliable as well. On the other hand, a known technique which has been able to attract only minimal support within the community is likely to be found unreliable."

Comparative handwriting examinations have been used to make identifications and eliminations on many thousands of occasions. With respect to judicial matters alone, it is notable that this evidence has been admitted with daily regularity. Critics have attempted to assert that the judiciary is divided on the issue of the admissibility of forensic document examination, even going so far as to groundlessly and erroneously suggest that no unchallenged forensic document examination testimony has occurred subsequent to *Kumho* (Mnookin, 2001). As stated previously, should one conduct any appropriate research into this claim, it will be noted that there are very few challenges to the continued and regular admissibility of the testimony of qualified forensic document examiners, with many cases having admissibility being stipulated.

Law enforcement agencies, public defenders, criminal defense attorneys, attorneys in civil and corporate matters, corporate security specialists, insurance companies, banks, schools, doctors, securities firms, and disciplinary boards in the medical and legal fields are among the many entities that have turned to, and continue to turn to, the demonstrated expertise of forensic document examiners to answer questions in matters concerning documents. Forensic document examination has also held general acceptance in the forensic science field. The

Questioned Document Section of the American Academy of Forensic Sciences (AAFS) is a charter section of the Academy and has been a full partner with the other disciplines over the 50-plus years that AAFS has been in existence. This same partnership can be found in forensic science organizations in Canada and around the world.

F. The relationship of the technique to methods which have been established to be reliable.

The methodologies used by forensic document examiners clearly demonstrate a history of reliability through maintenance of standards and accurate application by those who are properly trained to do so. Another key aspect to reliability is reproducibility of results. It has been argued, with no supporting information, that forensic document examiners frequently disagree, thus suggesting that this proves the methodology is unreliable. But a review of published material and even sworn testimony of these same critics provides different information. In a published empirical study conducted years ago, one author concluded that forensic document examiners provide conflicting testimony in approximately .01 percent of their court appearances and this does not take into consideration the qualifications (or lack thereof) of the opposing expert (Todd, 1973). One critic of forensic document examination admissibility testified in a deposition under oath (*Estate of John Acuff v. Olinger*): "... and I said why do you need me and they said, well, there's handwriting experts on one side and we can't get anyone to testify for us. And I said, well, I understand that, that's a problem. It happens a lot. Whichever side has the first expert, it's been my experience the other side never can get an expert to testify once it becomes clear. I've run into this every time I've gotten calls on these type situations. The people who call me have been unable to obtain a competing expert."

There is a basic reason for the systemic level of reproducibility and reliability. The scientific method used by forensic document examiners requires an objective approach that follows established and tested procedures. Competent forensic document examiners utilize this methodology due to their commitment as advocates only of scientific facts and not of any parties in a legal matter. In criminal cases, conclusions are commonly reached that exonerate suspects. Risinger, et al. (2002)

attempted to cast dispersion on the entire field of forensic science for institutional bias toward law enforcement and prosecutors. Many theories were presented and many scenarios were provided with the beginning word “suppose.” As far as any independent testing of their hypothesis that the bias exists, the authors admitted “... there have been no formal studies on the actual practices in forensic science laboratories that would document the statistical incidence of the use of domain-extraneous information.” The basic inherent error in the accusation forwarded in the Risinger, et al. (2002) article is that there are forensic scientists in private practice who have no professional connection to law enforcement. Since the court system is adversarial in nature, any “influence” in a finding by law enforcement experts could, and would, be revealed by the findings of opposing private experts. This is the very purpose of opposing experts being permitted in courts. Were the reader to expand the influence theory to include civil matters, it would be expected that forensic experts would have a propensity to provide findings favorable to their client. This would be entirely contrary to the previously referenced quotes attributed to one critic under oath about the inability to find experts with opposing findings. It is also noteworthy that numerous death row inmates have been released from prison due to the results of forensic tests resulting in a moratorium on the death penalty in Illinois.

G. The qualifications of the expert witness testifying based on the methodology.

The field of forensic document examination contains practitioners with a wide assortment of “training.” The qualifications range from those with training in graphology (personality assessment from handwriting) to those of the scientifically trained professional. As such, this is an aspect in which all agree — careful scrutiny of the witness’ training by the court is needed. Appropriate training is defined as one that is under the tutelage of a qualified examiner for a period of two years or more, full-time, and in-residence. The subject matter of this training is outlined in a published ABFDE monograph (1991). Any court should seriously and vigorously scrutinize the training of a forensic document examiner and seriously question one who does not meet the minimum standards as outlined by the ABFDE. In like fashion, it should be expected

that this same court should seriously and vigorously scrutinize the qualifications of any witnesses offering themselves as “critics” to expert testimony in such areas as statistical analyses, forensic document examination training, and the methodologies on which any opinions are based.

An ABFDE-certified forensic document examiner cannot receive certification unless he or she has shown, on repeated occasions, virtually unerring accuracy in the forensic examination of documents to include, but not limited to, handwriting comparisons. Further, the ABFDE requires technical testing with unerring accuracy. These results also demonstrate the complete reliability of their work.

H. The nonjudicial uses to which the method has been put.

Comparative handwriting identification is universally accepted, and not only in the judicial arena, but throughout nonlitigative applications of comparative handwriting identification. Outside the courtroom this method is used by businesses that rely on the signatures on checks and credit cards for identification purposes. In a matter in which the significance and sensitivity of the task and the mandate for accuracy cannot be overstated, handwriting experts were able to identify the writings of a South American resident as that of Nazi war criminal Josef Mengele (Crown, 1987; Epstein, 1987).

Assisting the Trier of Fact

One important foundation of testimony within the Rules of Evidence, and specifically Rule 702, is that any proffered testimony must assist the trier of fact. Empirical studies (Kam, 1994, 1997, 1998, 2001, 2003; Sita, Found and Rogers, 2002) have shown that untrained individuals, such as those who would be on a jury, are exponentially more likely to arrive at inaccurate conclusions than a qualified forensic document examiner when reviewing and studying the same documents. Clearly, forensic document examiners can, through their training and expertise, assist the trier of fact.

The suggestion has been made that courts should only permit forensic document examiners to testify to the similarities and differences found, and not to the ultimate opinion of authorship based on questioning the “reliability” of the

methodologies used in forensic document examinations for decades. This suggestion essentially eliminates the utility of forensic document identification, and all other forensic identifications in all future cases. Even if an expert shows the jury magnifications of the questioned and known writings, and illustrates points of comparison between the two, the jury has no way of knowing whether it may make an identification. The expert may document 100 points of comparison, but for all the jury knows every person's handwriting shares those 100 similarities. The testimony is meaningless without the expert's explanation of the link between similarities and a reliable identification, and the expert's opinion as to the application of this method in this particular case. In addition, there is the real likelihood that, lacking the expert's opinion, the jury will misinterpret the information provided. It is not unusual to find skilled simulations in which there are numerous characteristic similarities and very few differences. A trained and qualified forensic document examiner will recognize this signature for what it is, namely a simulation. However, if a jury is only permitted to have the numerous similarities and few differences pointed out to them during testimony, the Court runs the risk of having testimony that is significantly more prejudicial than probative.

One critic testified under oath in a pre-trial hearing to his confusion over this very matter. In *Acuff*, a critic of forensic document examination testified about the extent of design similarities versus the extent of design differences in a matter involving a traced signature. This critic did not testify about the importance of the extremely poor line quality, blunt initial and terminal strokes, hesitations in the writing line, and numerous pen lifts that permeated the traced signatures. It would be expected, by a forensic document examiner, to find significant similarities and few differences of character design in a tracing. Anyone making an evaluation of authorship based solely on the design similarities and differences risks making an erroneous conclusion unless they are also permitted to evaluate all of the evidence with the learned guidance of a qualified expert. In *US v. Gary Ramsey* (Criminal Action No. 01-005-05, U.S. District Court for the Eastern District of Pennsylvania) a Daubert hearing before Judge Yohn, defense counsel conceded as much regarding points in a fingerprint:

Court: So, you want him to say, well, here are these prints and I see fourteen points that seem to me to look the same and that's the end of it?

Counsel: That's right, your Honor.

Court: And what good would that do the jury?

Counsel: Well, it's — quite honestly, it wouldn't do them all that much good.

The North Carolina Court of Appeals, in *Taylor v. Abernathy* (149, App 263, 01-470, 2002) also found this to be true and ruled that the trial court had abused its discretion by only allowing testimony of the forensic document examiner to similarities and differences but not to the expert's opinion. The United States First Circuit, in *U.S. v. Mooney* (02-1318, 1st Circuit, December 2002), ruled that the trial court had not abused its discretion by allowing an ABFDE certified forensic document examiner to testify to his opinion based on his examination. Testifying only to similarities and differences, but not to the ultimate conclusions, is at odds with the manifest purpose of Rule 702, to admit any reliable opinion testimony that may assist the trier of fact in its task.

Conclusion

Any potential expert witness must demonstrate an appropriate level of skill, education, training, and experience in order to qualify under Rule 702 to testify as an expert. In addition, the U.S. Supreme Court has outlined guidelines provided in the *Daubert* decision in which appropriate emphasis is directed to methodologies, reproducibility, and testing. This paper has outlined how forensic document examination meets and exceeds each of these guidelines. Forensic document examination has a history of standard, reliable methodologies, peer review, and has been tested by those qualified to conduct such testing. Individual forensic document examiners can demonstrate proficiency in their field through appropriate training, individual testing, peer review, and certification.

While there have been vocal critics to forensic document examination, these critics have yet to provide any substantive evidence using acceptable methodologies or independent confirmation in support of their accusations. In additions, the critics have not demonstrated the skill, education, training, or experience that qualifies them to make the statements they assert. Finally, and most importantly, there has been no single instance in which these critics have demonstrated that any finding was in error.

Should further reading on the subject of the admissibility of forensic document examination under Daubert and the critics of this admissibility be desired, Moenssens (1997) article titled, "Handwriting Identification Evidence in the Post-Daubert World," is an excellent source of in-depth legal issues on this subject. At the time he wrote the article, Moenssens was the Douglas Stripp Professor of Law, University of Missouri at Kansas City and Professor of Law Emeritus, University of Richmond, Virginia.

Acknowledgments

The author wishes to acknowledge the pioneering efforts of the United States Attorney's Office, Eastern District of Pennsylvania, and specifically United States Attorney Patrick L. Meehan and Assistant United States Attorneys Robert Zauzmer, Thomas Perricone, David Resnicoff, and Paul Sarmousakis who collectively authored the "Memorandum of Law in Support of Government's Motion for Reconsideration of the Court's Exclusion of Fingerprint Opinion Testimony" in the case of U.S. v. Plaza (98-362) which served as the template for this paper. The author also wishes to thank the various law professors, judges, and attorneys who have reviewed the legal aspects of this paper.

References

- American Board of Forensic Document Examiners (1991). Objectives for Training.
- Ames, D. T. (1900). *Ames on Forgery*. Ames-Rollinson Company, New York.
- Crown, D. A. (1987). The Identification of the Handwriting of Josef Mengele, *Journal of Forensic Sciences*, Vol.32, No. 1, pp 110-117.
- Epstein, G. (1987). Examination of the Josef Mengele Handwriting, *Journal of Forensic Sciences*, Vol. 32, No. 1 pp. 100-109.
- Found, B. and Rogers, D. (Editors 1998). Documentation of Forensic Handwriting Comparison and Identification Method: A Modular Approach (unpublished).
- Gross, S. R. (2001). Detection of Deception, *Virginia Law Review*, Vol. 87, No. 8, December, pp. 1847-1855.
- Hagan, W. E. (1894). *Disputed Handwriting*. Banks and Brothers, New York.
- Harris, J. J. (1958). How Much Do People Write Alike, A Study of Signatures, *Journal of Criminal Law and Police Science*, Vol. 48, No. 6, pp. 647-651.
- Harris, J. J. (2002). Author's Introduction: How Much Do People Write Alike?, *Journal of the American Society of Questioned Document Examiners*, Vol. 5, No. 2, pp. 88-89.
- Kam, M., Wetstein, J., Conn, R. (1994). Proficiency of Professional Document Examiners in Writer Identification, *Journal of Forensic Sciences*. Vol. 39, No. 1, pp. 5-14.
- Kam, M., Fielding, G., Conn, R. (1997). Writer Identification by Professional Document Examiners, *Journal of Forensic Sciences*, Vol. 42, No. 5, pp. 778-786.
- Kam, M., Gummadidala, K., Fielding, G., Conn, R. (2001). Signature Authentication by Forensic Document Examiners, *Journal of Forensic Sciences* Vol. 46, No. 3, pp. 884-888.
- Kam, M., Fielding, G., Conn, R. (1998). Effects of Monetary Incentives on Performance of Nonprofessionals in Document Examination Proficiency Tests, *Journal of Forensic Sciences*, Vol. 43, No. 5, pp. 1000-1004.
- Kam, M., Lin, E. (2003). Writer Identification Using Hand-Printed and Non-Hand-Printed Questioned Documents, *Journal of Forensic Sciences*, Vol. 48, No. 6, pp 1391-1395.
- Mnookin, J. L. (2001). Scripting Expertise: The History of Handwriting Identification Evidence and the Judicial Construction of Reliability, *Virginia Law Review*, Vol. 87, No. 8, December, pp. 1723-1846.

Moenssens, A. A. (1997). Handwriting Identification Evidence in the Post-Daubert World, *University of Missouri Kansas City Law Review*, Vol. 66, No. 2, pp. 252-343.

Osborn, A. S. (1929). *Questioned Documents*, 2nd Edition. Boyd Printing Co., Albany, NY.

Risinger, D., Denbeaux, M., Saks, M. (1989). Exorcism of Ignorance as a Proxy for Rational Knowledge; the Lessons of Handwriting Identification Expertise, *University of Pennsylvania Law Review*, Vol. 137, No. 3, pp. 731-792.

Risinger, D., Saks, M., Thompson, W., Rosenthal, R. (2002). The Daubert/Kumho Implications of Observer Effects in Forensic Science: Hidden Problems of Expectation and Suggestion, *California Law Review*, No. 90, Vol. 1, January, pp. 1-56.

Saks, M. (1989). Prevalence and Impact of Ethical Problems in Forensic Science, *Journal of Forensic Sciences*, Vol. 34, No. 3, pp. 772-793.

Sita, J., Found, B., Rogers, D. (2002). Forensic Handwriting Examiners' Expertise Signature Comparison, *Journal of Forensic Sciences*, Vol. 47, No. 5, pp. 1-8.

Srihari, S., Cha, S., Arora, H., Lee, S. (2002). Individuality of Handwriting. *Journal of Forensic Sciences*, Vol. 47, No. 4, July, pp. 856-872.

Todd, I. (1973). Do Experts Frequently Disagree, *Journal of Forensic Sciences*. Vol. 18, No. 4, pp. 455-459.

Vastrick, T. W. (1998). The Uniqueness of Handwriting, *Journal of American Society of Questioned Document Examiners*, Vol. 1, No. 1, pp. 4-7.