

Book Reviews: Fascinating and Fastidious – A Forensic Foray

William Butts

HAYES, Reed C. *Forensic Handwriting Examination: A Definitive Guide*. Honolulu: Reedwrite Press, 2026. 8vo. Softbound. xvi, 209pp. Illustrations. **\$49.95** (at reedwrite.com).

HAYES, Reed C. *Reflections of a Forensic Handwriting Expert*. Honolulu: Reedwrite Press, 2025. Small 4to. Softbound. ii, 224pp. Illustrations. **\$29.95** (at reedwrite.com).

Two new titles from Honolulu-based forensic handwriting examiner Reed Hayes bring welcome attention to the science of questioned document examination. Its importance in the world of historical documents is always worth revisiting.

Forensic document examiners (FDEs) and historical document dealers live in parallel universes: When it comes to examining documents to determine authenticity and authorship, both do pretty much the same thing if for very different reasons. Their methods and processes are nearly identical, the main difference being certain lab tests (ink and paper analysis, for instance) which FDEs sometimes employ but are rarely used by autograph dealers.

Education-wise, FDEs and historical document dealers

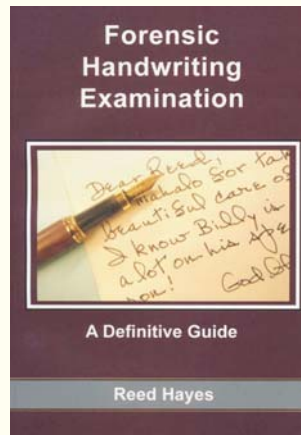
differ vastly. FDEs usually follow a bachelor's degree in some branch of science with a forensic apprenticeship or training program, eventually attaining professional certification from organizations such as the American Board of Forensic Document Examiners. Historical document dealers, on the other hand, usually have bachelor's and often master's degrees in just about anything – but more often history, English, and the liberal arts. They follow various paths to their expertise, generally beginning with years of collecting, studying, and reading about documents; those with ambition devour the forensic texts as well.

Some such as myself begin as collectors in their early teens, learning the general collecting literature with standards by such authors as Mary Benjamin, Charles Hamilton, Thomas F. Madigan, Kenneth W. Rendell and other dealers and high-level collectors who have penned books. Self-study in the large field of autograph literature continues for many years. Immersion in the literature of specialized forensic literature follows, classics such as Albert S. Osborn's *Questioned Documents* and many others. Most enter the profession with many years collecting and studying under their belts and the most fortunate of all – again, myself included – apprentice under a dealer of long experience. Expertise follows many years' experience and comes from handling, buying, and selling a wide array of documents and refining authenticating proficiency all the while. The FDE's path is straightforward and fixed; the historical document dealer's path may seem long and meandering, but in the end the similarities in their skill sets are remarkably alike.

FDEs and historical document dealers also differ vastly in their end result. FDEs produce for their clients – generally lawyers or other law enforcement -- reports detailing the results of their methodical examination of a questioned document or group of documents. They lay out their findings meticulously and conclude with the most likely determination

of authenticity or authorship. Scientific method rules. These reports are presented as evidence in legal or civil proceedings and the FDEs are often called on to testify in court. Historical document dealers generally use the same protocols and same techniques in authenticating their own inventory and to avoid acquiring forgeries, but the principles are applied in a much less formal way. They determine authorship in order to sell their wares, and in order to guarantee authenticity without time limit, as is standard practice. Their confidence in every document must be absolute. Historical document dealers are rarely called on to testify in court.

Hayes addresses the great bugaboo of questioned document examination in the preface to *Forensic Handwriting Examination*. “Although one of the oldest forensic disciplines,” he writes, “handwriting examination is not an exact science.” The fact that experts sometimes disagree is troublesome – but just as physicians may disagree on a medical diagnosis, economists may differ about the meaning of stock market trends and supreme court justices may disagree in interpreting laws, so too with questioned documents. Hayes explains:



Unlike identification of an individual through DNA which relies on solid data, handwriting is subject to variables which prevent it from being strictly quantified. (However, certain aspects of writing can be measured as demonstrated in this book.) The handwriting expert relies on the examination of material to reach opinions in much the same manner as a physician who considers

various tests, patient symptoms, and prior medical history in diagnosing illness. Each works with facts and evidence to arrive at conclusions according to his or her knowledge, training, and experience with similar cases. While the evaluation of handwriting is to a certain extent subjective according to each examiner's skill level and experience, it is nevertheless based on axioms, principles and theories which have been utilized and relied upon by handwriting experts for decades. Handwriting examination adheres to the scientific approach of observation, measurement, explanation, and verification.

Hayes elaborates on the at-times inexact nature of handwriting examination honestly, thoroughly, and well. "Forensic examination of handwriting is not a straightforward task that follows exact methods," he notes, "although a standard approach is normally taken by most examiners when working cases. Given the array of writing features that vary from one person to the next, as well as within an individual's own writing and according to the prevailing circumstances under which the writing was produced, it becomes challenging to present a system of analysis which will work the same in every instance."

Hayes makes the mound of handwriting features, variables, and issues manageable by breaking it down into nineteen bite-size chapters, each divided into several subcategories. *Forensic Handwriting Examination* may not at first seem a hefty volume at a trim 200-plus pages, but its dense, fact-filled style soon make you realize the meaty content belies the slim size. "It is not meant to be a comprehensive treatise on such a vast subject about which others have written so extensively," he notes.

The largest of these chapters by far is the fourth, "Primary Handwriting Features," which covers numerous

basic handwriting characteristics that form the backbone of questioned document examination in 40 pages, with nineteen subdivisions, three of which are further divided. Herein lie the meat and potatoes. Hayes offers a tight, nuanced discussion of these many variables – the comparison and analysis of which form the building blocks that determine authorship of a questioned document. Many years of experience are condensed into this survey of fundamental ABCs. To cite a few, there are such factors as arrangement, pressure, spacing, connecting strokes, hiatuses and pen lifts, initial and terminal strokes, slants – plus a dozen more. The breadth and level of minutiae will surprise those unaccustomed to forensic methods, though this is absolutely standard for forensic texts. Even those immersed in handwriting analysis daily will find this a welcome refresher.

Here's an example of the level of detail that handwriting analysis entails: No written character in any language is smaller and simpler than the dot or period. But a dot is never *just* a dot, a period never *just* a period. The symbol can represent much more to a handwriting examiner. Hayes observes they can be “dashed, jabbed, or connected to the following letter or word. ‘Flying dots’ will indicate pen direction and may be useful clues as to authorship. The pressure of periods and dots, which lies anywhere on the continuum of very light to very heavy, may also be revealing. ‘Dots’ can be curved or angular, convex, or concave. Sometimes dots are perseverated – written over and over and perhaps even ground into the paper...” And let's not neglect the placement of a period in relation to the baseline and of dots in relation to the lower case “i” and “j.”

After this nuts and bolts chapter the bulk of what follows are the many subtler, less obvious considerations the examiner compares and weighs: the rhythm, speed and writing skill of whoever penned the questioned document; the importance of line quality (“the degree of fluency of the movement involved in

handwriting or signatures”), which include tremor or the faking of tremor; the extent of natural acceptable variations within a person’s writing and how the effect of age, medical conditions, drugs and alcohol and even awkward writing circumstances must be taken into account; the challenges of having proper exemplars and how they are obtained. Hayes also takes the reader step by step through an examination process that helps de-mystify this little-understood procedure.

Hayes is adept at dispelling misconceptions and correcting false notions that swirl around his subject. Readers are well advised to pay close attention to this. Anyone unfamiliar with handwriting examination will appreciate these mentions of what does and doesn’t have evidentiary value – what is meaningful and what not. Hint: When the word *layperson* appears, listen up, for a myth is about to be straightened out. Random examples:

To the layperson, misspelled words in documentation are apt to be suspicious and might be considered proof of non-genuineness. To the handwriting examiner, they will likely not be given so much weight. Words like *ninety* and *forty* are often spelled incorrectly and such words as *their* and *there* are commonly confused. Consequently, they may not be very strong evidence for authorship.

The layperson, if taking time to consider whether a signature being presented might be inauthentic, is apt to note only its pictorial appearance and not the significant details that determine genuineness.... Forgers, also generally unaware of the nuances of writing, often focus on the obvious features of the signature being simulated such as the capital letters, slant and loops, qualities that make an immediate

impression and usually allow the phony signature to pass as genuine.

Contrary to the layperson's general belief, a carefully written, clearly legible signature with no curlicues or fancy movements is the most difficult to simulate. On the other hand, a tortuous, twisted signature comprised of illegible formations can be more readily depicted, at least well enough that the forgery may pass as genuine.

And perhaps most critical of all:

Mistakenly, the layperson often believes that letter forms are the primary writing elements that personalize handwriting. It is not uncommon for clients to present handwritings for comparison, claiming that one writing matches another because the capital letters are similar, the *ds* are formed the same, or the *gs* are alike. The examiner will of course look to numerous other writing features, alert to the possible presence of class characteristics or the limited number of ways that some letters can be shaped. In fact, letter forms are relatively low on the identification value scale.

One type of document handwriting analysts encounter that historical document dealers almost never handle are anonymous letters, addressed in depth in the intriguing chapter "Anonymous Writing." Ransom and blackmail notes, hate mail and similar unsavory writings often threatening physical or sexual abuse arise frequently in the law enforcement world but rarely in the collecting world. Such handwriting brings a distinct set of challenges to handwriting analysts and the special approach employed to unmask perpetrators Hayes outlines well – all useful fodder in forgery detection. I recall handling only

one poison pen letter, a threat mailed to President-elect Lincoln filled with racial slurs and promising hell and damnation should he venture to Washington, DC. It's said Lincoln kept these in a special drawer of a certain desk where Mary was unlikely to see them.

Miscellaneous oddball tips worth noting for anyone engaged in handwriting analysis crop up throughout *Forensic Handwriting Examination* – far too many to cite here. I picture reader copies bulging with sticky notes and dog-eared corners for easy future reference. One favorite I have observed many times occurs with lengthy, multi-page questioned documents. Hayes writes:

When the person's attention relaxes or his mind wanders, habitual writing habits tend to creep in so that portions of the writing will remain undisguised. This is especially so with extended writing. When disguise is suspected, an effective process is to start the examination toward the end of the writing, working one's way toward the beginning, as it is likely that the disguise will wear then as the writer proceeds.

Oh so true! An extreme example would be the 62 volumes (that's right, not pages but *volumes*) of journals supposed to have been penned by Adolf Hitler but forged by Konrad Kujau in the late 1970s/early 1980s.

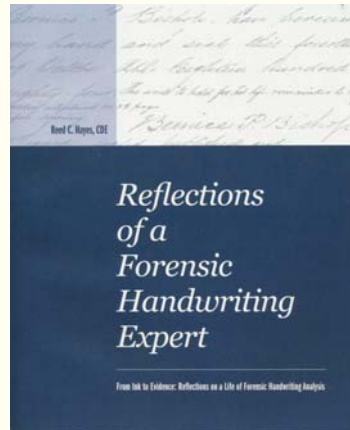
Hayes rounds out this well-rounded study with three case histories that allow the reader to see these analysis skills in action, an effective method of demonstrating real-world applications. Three meaty concluding chapters contain deep dives into the analysts written report (its appearance, what it should and shouldn't have), the hairy intricacies of testifying in court, and other aspects of engaging a handwriting analyst such as fee arrangements and record-keeping.

Consider *Reflections of a Forensic Handwriting Expert* a companion guide to *Forensic Handwriting Examination*. It also represents a genre new to this column. Forensic analysts tend to author technical articles for forensic journals and occasionally general or special-focus textbooks on the topic – but an essay collection about actual cases of interest to the general reader? A first ever and a welcome one.

This gathering of a couple dozen case histories makes a fine follow-up, illustrating the principles found in *Forensic Handwriting Examination* in everyday use. If you enjoy police procedurals and the various forensic shows such as *CSI*, the in-depth how-to of handwriting analysis on actual cases in *Reflections* is as in-the-weeds nitty-gritty as it gets.

“This book is a collection of stories of some of the most memorable, challenging, and instructive cases I have encountered during my career,” writes Hayes.

Some may surprise you with their drama, others with their subtlety. And many will reveal how handwriting – something most of us take for granted – can become decisive evidence in matters of justice. My goal is not only to tell stories but also to shed light on the science, the methodology, and the careful judgment required in this work. I also leave here a record of my professional journey.



“If it involves writing, I’ve probably seen it,” he continues:

My cases have included questioned estate papers such as wills, codicils to wills, and trust documents. I have examined writing on contracts, promissory notes, powers of attorney, deeds, invoices, rental agreements, school records, forged checks, and insurance papers. Throughout my career I’ve investigated over 50 anonymous writing cases in addition to threatening letters, graffiti, and notes written by stalkers.

Variety abounds in these case studies, most of which are civil and not criminal. “A Fraudulent Insurance Document” might be considered typical. Hayes is engaged by an attorney whose client claims a signature on an insurance application is not his. Enlargement of the questioned signature alongside known signatures of the client highlight the comparison, with Hayes’ helpful arrows pinpointing issues with the suspect signature. Quite often his findings result in a settlement or plea deal and his testimony in court not necessary. In this case Hayes takes the stand as expert witness and I’m reminded of *Perry Mason*, with his expert witness being grilled by prosecutor Hamilton Burger – and we know who prevails:

I proceeded to show the jury a PowerPoint presentation demonstrating numerous differences between the questioned signature and the exemplar signatures. Utilizing enlarged photos of the original signature, I was able to show that the signature was awkward, belabored and tremulous. The only question under cross-examination was, “Mr. Hayes, isn’t it true the signature in question is an abbreviated signature and therefore there was little for you to work with?” I explained to the court and jury that a person’s writing

habits are nonetheless still evident, no matter the extent of the signature. During my testimony, several of the jurors nodded in agreement, always a positive sign.

Another “typical” case history (in a world where no two cases are very similar) is “Trouble in Saipan – The Greedy Senator from Rota.” Hayes comments that of the many jobs that come his way from this U.S. commonwealth, “Most... have to do with real estate transactions which are often questionable if not downright fraudulent. Five siblings contested a “Deed of Gift” in which a sixth sibling, a prominent Taipan politician, claimed ownership of a piece of property based on a document gifting it to him and supposedly signed by the mother. The several pages’ worth of signature exemplars – one questioned signature against many known authentic signatures – extensively highlight numerous subtle and not-so-subtle discrepancies. An all too typical scenario, but each such case history offers variations and demands a variety of techniques to arrive at a conclusion.

An amusing situation arose, too, one in which historical document dealers sometimes find themselves: Asked to make a snap judgment on the authenticity of a document by those who don’t understand the analysis process and seem to think it involves Harry Potter wizardry, passing a magic wand over the document while incanting a faux Latin phrase. “While on the witness stand,” writes Hayes,

the opposition approached me with a document I’d not seen before, asking if I would opine whether the signature on the document was authentic. I refused to give an opinion as I had not examined and compared the signature with any specimen signatures, and in any case I do not do on-the-spot evaluations. Opposing counsel pressed the judge to instruct me to state an

opinion on the newly presented signature. His response was, “I will leave it up to Mr. Hayes as to whether he can render an opinion on the signature.” Of course I again refused for the reasons stated above.

A number of chapters in *Reflections* involve historical documents from well-known figures, sure to be of particular interest to the autograph crowd. Especially fascinating is “Handwriting Inscriptions on a Cuban National Flag and Beret.” Any dealer with long experience knows the special challenges presented by handwriting on cloth or any type of textile. My gut initially told me the flag with lengthy inscription by Fidel Castro and beret with inner lining similarly inscribed by Che Guevara were just too good to be true. But Hayes elaborates the methodical techniques necessary to render a solid finding on these questioned artifacts. Dealing with delicate material around seventy years old, the distortion and discoloration of cloth over time, the ink bleeding into and nib occasionally snagging on fibers – all these and more presented difficulties out of the ordinary. Obtaining adequate handwriting exemplars on these elusive figures also proved a bit of a hurdle. But Hayes’ approach is masterful and his conclusions compelling. Not only is this a superb case history – it’s a lesson in developing appropriate techniques to deal with out-of-the-ordinary items. An absolute must-read – but no spoiler alert here! Equally engrossing chapters concern the Obama birth certificate controversy, the supposed Jack the Ripper diary of not too many years ago and other historical pieces.

Far outside of Hayes’ usual wheelhouse is the chapter “Was a Painting Under Sketch Created by Artist Thomas Cole?” Asked by an art collector to help confirm that a sketch *beneath* an oil landscape (its presence shown by infrared reflectography) authenticated by experts as the work of painter and Hudson River School founder Thomas Cole (1801-48) was likewise by Cole, Hayes was “initially hesitant to accept the assignment

as I am not an art historian nor have I had formal training in authenticating art work. However, my curiosity got the better of me and [the owner] assured me he simply wanted an opinion from a handwriting and document expert, so I agreed to take on the project.”

Hayes rightly viewed the comparison of questioned handwriting against known authentic exemplars as similar and relevant to comparing questioned landscape features against known Cole landscape exemplars. He compares features such as tree branches, leaves, shading, tree trunks, rocks, and other physical elements. The assignment was highly unorthodox, but I share Hayes’ interest in testing the boundaries of handwriting authentication and admire his approach. The results are surprisingly effective and persuasive.

Many chapters in *Reflections* that end leaving a partial blank page are filled with “Handwriting Tidbits” – helpful oddball factoids that Hayes finds worth noting. One such titled “Handwriting-Related Neurological conditions” briefly defines agraphia, dysgraphia and hypergraphia, another “Effects of Alcohol on Handwriting,” another “Handwriting Slant,” another “Effect of Parkinson’s Disease on Handwriting” plus other topics not covered in the case studies (though all covered in *Forensic Handwriting Examination*).

Both *Forensic Handwriting Examination* and *Reflections of a Forensic Handwriting Expert* do leave me wanting something: Some of the niceties of traditional book format. I miss running heads at the top of each page – traditionally the book title on one side and chapter title on the other -- that serve to quickly remind the reader of their spot in the book. I miss numbered chapters, which are present in *Forensic Handwriting Examination* but lacking in *Reflections of a Forensic Handwriting Expert*. These too aid the reader in a variety of ways. I miss a bibliography at the close. Hayes does cite many sources and properly references them in footnotes, but a listing of old and new forensic handwriting literature

would be a welcome addition to a second edition of either of these works. I miss hard covers, which assure far greater longevity of the text – yet I acknowledge their greater cost also limits dissemination of that text. And lastly, as for the subtitle of *Forensic Handwriting Examination*, the adjective *definitive* smacks of marketing hyperbole and carries far less impact than if bestowed on it by another.

But these are petty squabbles all, for Reed Hayes has written two enjoyable reads that belong in the arsenal of reference works for anyone interested in furthering their knowledge of handwriting analysis. The process of handwriting authentication is often grossly simplified and poorly grasped in the public eye. The reality – that it's a painstaking, meticulous process demanding excessive attention to detail – Hayes amply conveys. *Forensic Handwriting Examination* and *Reflections of a Forensic Handwriting Expert* are a worthy pair that go a long way toward demonstrating the minefield of subtleties and complexities involved in this challenging craft.