

Book Reviews: Autograph Dealing and the Forensic Imperative

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HARRALSON, Heidi H., and MILLER, Larry S. *Huber and Headrick's Handwriting Identification: Facts and Fundamentals*. Boca Raton: CRC Press, 2018. Small 4to. Hardbound. xxi, 420pp. Illustrations. **\$110.00**.

ELLEN, David, DAY, Stephen, and DAVIES, Christopher. *Scientific Examination of Documents: Methods and Techniques – Fourth Edition*. Boca Raton: CRC Press, 2018. Small 4to. Hardbound. xvii, 247pp. Illustrations. **\$115.00**.

HARRALSON, Heidi H. *Developments in Handwriting and Signature Identification in the Digital Age*. Oxford: Elsevier, 2013. 8vo. Softbound. viii, 140pp. Illustrations. **\$21.95 (hardbound \$190.00)**.

CALIGIURI, Michael P., and MOHAMMED, Linton A. *The Neuroscience of Handwriting: Applications for Forensic Document Examination*. Boca Raton: CRC Press, 2012. Small 4to. Hardbound. xix, 247pp. Illustrations. **\$180.00**.

SAUDEK, Robert. *The Psychology of Handwriting*. New York: Routledge, 2018. 8vo. Softbound. xii, 288pp. **\$58.95 (hardbound \$215.00)**.

Let me preface these reviews with some thoughts on autograph or historic document dealing as a profession, how it differs from the profession of historian, and the need to elevate it (in my humble opinion) by taking advantage of a massive body of handwriting identification knowledge and expertise that has long been overlooked.

Many times over the past thirty-odd years I've been asked "Are you a historian?" or told "You must be a historian!" To this I emphatically reply that I'm not a historian but a historic document dealer. I have too much admiration for true historians to number myself among that profession – on top of which what historic document dealers do is related to but different from writing history.

Historians spend a lifetime studying history, teaching it, writing it; they live and breathe it. Historic document dealers likewise study history and write about it, sometimes even teach it, but their expertise lies in recognizing and interpreting the historic significance (or lack of) of specific documents – of placing documents in their proper historic context and establishing monetary value based on the "track record" of that type of document and current market conditions.

Historians jump through a lot of hoops to earn their title – graduate school, dissertation writing, "publish or perish" pressure, tenure concerns – although many esteemed historians never taught history but simply wrote it and some bring no academic credentials to the table. No two historic document dealers have very similar backgrounds. A high percentage do have graduate degrees, though just as likely in English, finance or law as in history. Anyone can hang out a shingle and call themselves an autograph dealer. There are no education requirements, no training courses, no certification programs, no regulatory agencies. By-election trade groups such as the long-established Antiquarian Booksellers Association of America and the new kid on the block Professional Autograph Dealers Association both attempt to encourage high levels of professionalism and ethical standards; both boast ethics committees that try to self-regulate their membership.

Given this Wild West free-for-all state of affairs, you might expect the field, especially those outside the ABAA and PADA, to be rife with snake oil salesmen and assorted charlatans. But stepping back and trying to peruse the autograph dealing landscape with clear eyes, I have to say that full-time autograph or historic document dealers are to a high degree a knowledgeable, serious, honorable, genial group. I like to think I'd say the same thing if I didn't count myself among them. Their love of history is deep and sincere; their willingness to share and to help out competitors says a lot about them.

Sure, we have our prima donnas, our curmudgeons, our colorful eccentrics with interesting peccadillos. Once in a great while a bad apple floats to the top. This is thankfully rare, and miscreants are so swiftly identified as such and shunned within the trade and amongst customers that this unofficial censorship is effective. Such individuals may try to operate on the fringes among the uninformed, but the mainstream shuts them out – and tends to have a long memory.

So, you ask, what has all this to do with book reviews? It's all about education – and continuing education.

Expertise is the elephant in the room when it comes to handwriting authentication. It's acquired in two vastly differing ways: Historic document dealers usually begin as collectors, learning the basics of distinguishing authentic from non-authentic, reading and studying about documents along the way, in a long slow arc over the course of years. They learn from many years' experience how to ferret out deception of all sorts: printed facsimiles, proxy and secretarial mimicry, Autopen, outright forgery and so on. They transition to dealers and are constantly refining and sharpening those skills. Questioned document examiners, on the other hand, generally have an undergraduate or higher degree in one of the sciences before entering a forensics program that usually takes at least two years, followed ideally by an apprenticeship of several years and finally entering the field serving state or federal

law enforcement. A small number later enter private practice, still serving law enforcement. Any QDE's training is rigorously scientific, organized and disciplined.

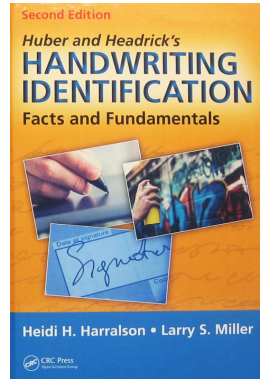
So what autograph dealers and questioned document examiners do is remarkably similar, yet worlds apart. Historic document dealers spend 99% of their time researching, identifying, and authenticating historical material and dealing with collectors and collecting institutions, while QDE's spend 99% of their time detecting forged documents and assisting law enforcement. Almost all expert witnessing in court cases is performed by QDEs and normally involves forged financial instruments, wills, threats and other fraudulent matters; autograph dealers rarely take the stand as expert witnesses, for rarely does the material with which they deal end up in court. Historically, the court system has a harder time allowing autograph dealers as expert witnesses, for although their expertise may be high their training is informal, inconsistent and unregulated.

Just as economics is jokingly referred to as the grim science and sociology disparagingly as the bastard science, I suggest that handwriting identification be referred to as the kinda-sorta science. Like other "soft" sciences, it does have plenty of hard science behind it and a large body of technical literature. Its tests produce quantifiable results in the tough-to-contest form of numbers and other solid data. Unlike, say, fingerprints and DNA, handwriting is a man-made construct, which means the number of variations is *literally* infinite. Black and white becomes grey and interpretation enters the picture – yes, opinions! – and here's where it gets really fun. Respected autograph dealers occasionally disagree with each other on authenticity issues, as sometimes do credentialed QDEs.

Given this state of affairs, historic document dealers are missing the ball by not studying forensic handwriting literature, which so far as I can determine almost nobody does. Most reach a certain level of proficiency and maintain that through hands-on experience alone; taking that extra step of studying forensic literature is a

route unfortunately rarely taken. A number of forensic studies have been reviewed in this column over the years. It's a challenging but pleasurable and worthwhile task to keep abreast of the scientific (as opposed to historical) side of handwriting authentication. Let's survey several new(ish) releases in this burgeoning field, starting with the broadest in scope before moving on to specialized topics.

It's a real delight to introduce Heidi Harralson and Larry Miller's *Huber and Headrick's Handwriting Identification: Facts and Fundamentals*, the revised and updated second edition of a highly-regarded text first published in 1999. Roy Huber and Alfred Headrick's groundbreaking *Handwriting Identification: Facts and Fundamentals* ushered forensic document examination into the 21st century – "a transitional time period in the scientific development of handwriting identification" when loosey-goosey courtroom standards on admissibility and best practices grew ever more strict. Here's the thing: Twenty years is an eternity in the forensics world. This seminal study, which Harralson and Miller characterize as "thorough and investigative," has never been revised in two decades' time. One is now able to replace that dog-eared, duct-taped chestnut with the same text revised to add decades' worth of new research and loads of citations.



It's an understatement to call *Huber and Headrick's Handwriting Identification* thorough and well rounded. It is well written for the most part, satisfyingly scholarly and exceptionally in-depth – 15 dense, meaty chapters each of which warrants intense study.

For instance, the second chapter ("The Development of Handwriting") devotes twenty pages to a seemingly-arcane survey

of how handwriting first came about. It examines the origin of the alphabet (screaming out for illustrations) and final dominance of Roman characters. In the end, “after Rome’s decline and the loss of a centralized influence, a new influence surfaced – nationality. From then until today, national characteristics became the major factor in writing styles.” This is information that QDEs probably never need to employ and historic document dealers may on rare occasions – but don’t you want professionals to be thoroughly familiar with the historical precedents of their field of study? This meticulousness, this systematic attention to detail, follows throughout this text’s 400-plus pages.

This same thoughtful spirit is evident in “The Discrimination of Handwriting” in which the authors lay the groundwork for the near-encyclopedic study that follows. “Handwriting identification is a discrimination process that derives from the comparison of writing habits, and an evaluation of the significance of their similarities or differences” – there’s an intricate, involved process succinctly and well put. I appreciate their methodical, scientific statement regarding that process:

...when fluency is absent, the attributes of the signature may exhibit the symptoms of spuriousness. When intricacy is absent, the signature may be deceptively duplicated more easily. ... The risk of spuriousness escaping detection in a signature or writing varies inversely with the magnitude in which fluency and intricacy are present.

Fully expected is discussion of such basic distinctions as *class characteristics* (“except for some general features that may differentiate the writings of different parts of the world, class characteristics are a thing of the past” due to large-scale abandonment of uniform writing systems in recent decades), *national characteristics* (“it would seem that a library of some

sort is necessary if an examiner is expected to know what the class characteristics are of systems taught in North America and how they differ from other systems taught elsewhere”), and *individual characteristics* (“a large number of more commonly encountered elements of writing that may be describes as designs, inventions, and developments of a writer that, when considered in combination as a group, give uniqueness to a writing”). But here they also delve into matters usually given scant attention, such as “Accidents in Writing.” This text is thick with theories, methods and approaches not found in the standard literature of historic documents and the kinds of forgery detection texts found in the autograph dealing community. There is, for instance, review of Found and Rogers recent “complexity theory,” in which quantitatively assessing the complexity of the signature is possible through counting the number of intersections and turning points. Such a method provides an objectively based measure that allows the document examiner to determine whether the evidence is adequate to provide an opinion of authorship.”

Huber and Headrick's Handwriting Identification is dense with provocative, useful material, as these few comments about just a couple of chapters shows. I'm at a loss, reduced to painting a picture with the broadest possible brush. “Discrimination and Identification of Handwriting” is a hefty chapter which lays out point by point many of the hairy comparisons that historic document dealers undertake in authenticating signatures and documents – commencements and terminations, line quality, pen control, legibility, to name but a few among many. Another insightful chapter covers “Extrinsic Factors Influencing Handwriting,” those often-overlooked, challenging-to-diagnose variables such as genetic factors, health issues, the effect of medications, mental conditions, even left-handedness. You can't have extrinsic without intrinsic, and the “Intrinsic Factors Influencing Handwriting” chapter that follows discusses “somewhat circumstantial” conditions “to which one voluntarily submits, for other reasons.” Such factors as writing

instruments, the writer's posture, writing surfaces and so on are all circumstantial, while alcohol, recreational drugs and hypnosis are examples of self-induced handwriting-altering conditions.

Of great interest to many is "The Diagnosis of Handwriting Identification," whose less-than-clear title means forgery detection for practical purposes. I commend the authors' opening remarks:

There is no practical way of knowing whether or not perfect forgeries have been created.... Being perfect, they necessarily escape detection. Forgeries that have been detected must be something less than perfect. Under certain circumstances, forgeries can and have been produced that have been exceedingly difficult for the most competent examiners to detect. Under most other circumstances, forgeries are frequently produced which, while not readily detected by lay persons, are within the capacity of the competent examiner to recognize as spurious executions.

The nature of the data in this chapter (indeed, in many of these chapters) compares to that found in the historic document and general forgery detection literature, but often goes into much greater detail and in a much more organized, methodical fashion. Not only are the discussions more in depth, but the sheer volume of data makes the non-forensic literature pale and feel superficial and anecdotal by contrast. The world of forensic handwriting also involves issues not generally seen in the autograph world, such as someone assisting an enfeebled person to sign a will or other document.

Chapters on "Evaluating Document Examiner Competency" and "Science and Handwriting Identification" further define and defend the forensic handwriting profession. The authors "address the question as to whether handwriting identification, as it is presently conducted, qualifies as a science" – combatting the 1995

“ruling of Judge McKenna... that forensic document examiners are not scientists, but are more in the nature of skilled craftsmen.” Despite the enormous number of studies cited and statistics offered, which lend *Huber and Headrick’s Handwriting Identification* a decidedly scientific air, this reviewer (after an inordinate amount of mulling) feels that handwriting identification falls awkwardly between science and art. Document examiners likely will disagree with this while historic document dealers will concur.

Huber and Headrick’s Handwriting Identification is a handsome hardbound production at a price point typical of small print run texts in specialized professional fields – spendy, in other words, as are all forensic texts. It contains a decent number of illustrations, far from generous, and would benefit from a good many more. It’s written for clarity and precision in a scientific, no-nonsense style for the most part lucid and readable. Unless comparing texts side by side with the 1999 edition, it’s impossible to know which is Huber and Headrick’s original text and which is Harralson and Miller’s revisions – worth mentioning only because there are occasional clunky sentences and occasional subject/verb agreement problems, the classic hallmark of any text written by several persons or a committee.

But these are minor squabbles indeed in a must-have text that should be studied not only by forensic handwriting examiners, but historic document dealers’ intent on deepening their knowledge base. Forensic manuals are certainly more intensely scholarly than autograph literature and do not make for “light” reading, but they do elevate one’s expertise. Scientific method represents a polar opposite to the B.I.S.S. (“Because I Say So”) school of handwriting identification that you sometimes still encounter in certain circles.

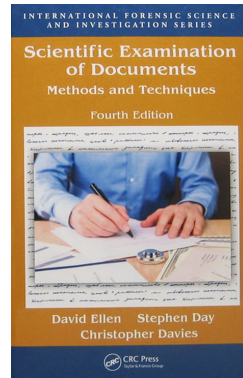
Even the end matter of *Huber and Headrick’s Handwriting Identification* – you know, that stuff at the end of many books that most don’t pay any attention to – is lengthy and well worth studying. A handy, detailed glossary defines the specialized vocabulary of forensic handwriting, much of which differs from that normally

used by historic document dealers. A fascinating appendix of “Systems of Writing in North America” makes you realize that if A.N. Palmer is the only handwriting method that comes to mind it’s time to think harder – as the 83 other writing systems listed shows. And the 30-plus page “References” could be considered a blueprint for building a first-rate handwriting identification reference library.

Like *Huber and Headrick’s Handwriting Identification*, this new edition of *Scientific Examination of Documents* is getting a new lease on life. First published in 1989, this and subsequent editions were authored by David Ellen; this fourth edition adds co-authors Stephen Day and Christopher Davies, who “review and where necessary amend the text for the modern world.”

Think of *Scientific Examination of Documents* as a prequel to *Huber and Headrick’s Handwriting Identification*: A tight, compact handbook that’s ideal as an introductory study whose “original intention” is this – “providing an outline of the subject to those outside the discipline who have a professional interest in the subject, but can also be of value to trainees in document examination.” Most importantly, this new edition retains much of the original text by now-retired author Ellen while “the chapters on office technology and analysis of materials, and sections on interpretation and validation have been re-written” by co-authors Day and Davies. Remember, the speed at which technology advances places a 1989 study squarely in the category of “obsolete”!

Scientific Examination of Documents stresses a holistic approach despite our age of increasing forensics specialization:



Document examiners... must consider the document in its entirety, not just the aspect or entry that has been drawn to their attention by the investigator. Although there are a number of techniques used in the examination of documents, it is not beyond the ability of a properly trained scientist to be able to tackle all of them to an adequate degree... a wide knowledge of all the available techniques is a great advantage in document examination.

But they also stress that this book “is not intended as a textbook for document examination – the detail is sufficient only to introduce the subject...”

Of this book’s 247 pages, a survey of handwriting comparison (the bulk of what historic document dealers perform) occupies more than any other topic, about 80 pages, with smaller sections varying from 10 to 40 pages addressing typewriters and typewriting, paper and ink, photocopies and printed documents, “Incidental Marks and Other Scientific Examinations,” imaging and other technical tools, and lastly how document findings are used in court.

Here’s why *Scientific Examination of Documents* proves most useful as a refresher and jumping-off point. One of the meatiest of the three chapters on handwriting comparison is “The Purpose and Principles of Scientific Examination.” Its sections break down as follows (deep breath): “Introduction,” “Amateur Experts,” “Scientific Method,” “Other Aspects of Forensic Science,” “Comparison of Handwriting” (subcategories “Consideration of Similarities,” “The Possibility of Chance Match,” “The Possibility of Simulation,” “Subjectivity,” “Common Authorship,” “Qualified Conclusions,” “Limited Populations,” “Consideration of Differences,” “Consistent Differences,” “Other Reasons for Differences,” “Similarities with Differences,” “Disguise,” “Simulation,” “Simulations on Ill Health,” “Traced Writings,” “Identification of the Writer of Simulations” and “Inconclusive Examinations”), “Complexities of Handwriting Comparisons” (subcategories “Inconsistent Known Writings,” “Complex Cases,” “Multiple Suspects,” “Reproduced

Writing” and “Unfamiliar Scripts”), “Statements” (subcategories “Expressing Conclusions,” “Qualified Conclusions,” “Scales of Conclusions,” “Clarity of Expression” and “Quality).

Why subject you to this shopping list? Not only does it give some sense of the flavor and style of the book, but keep in mind that many of these categories and all their subcategories consist of only one, two or three paragraphs and the remainder are at most one full page. *Scientific Examination of Documents* really and truly is a quick, just-the-facts-ma’am primer. Just as important, almost every chapter concludes with invaluable “References” to flesh out the chapter and every chapter features an all-important “Further Reading” section which lays out articles, studies and books devoted to the same topic.

So multiply this rapid-fire barrage of knowledge outlined above by about a dozen chapters and you get a feel for the quick reference value of *Scientific Examination of Documents*. Need to refresh your memory about non-Roman scripts? There’s three-quarters of a page and suggestions for further reading and research. Need to bone up on fiber-tipped, rollerball and gel pens? A half page spells out the basics. Scanning electron microscopy? One and a quarter pages. Stamp-pad inks? Third of a page. And so on and so on, covering a broad, vast range of issues, each of course followed by additional resources for you to pursue.

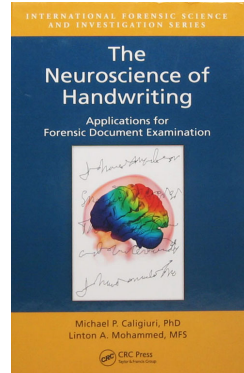
All of this makes *Scientific Examination of Documents* rather indispensable. In case it doesn’t show, I’m excited about this new and improved version of this standard resource, which represents a great improvement over its previous editions. If you like your information short, sweet and to the point this is one reference you’ll find yourself returning to again and again.

Lastly, some brief comments and observations on other titles from the same publishing conglomerate -- all of which deserve full-blown treatment, not these cursory *Cliffs Notes* thumbnail versions. For those who care to dive deeply into some more focused aspects of forensic studies, though:

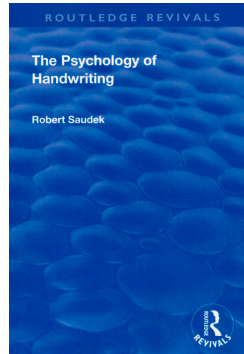
One of the oldest of these newer releases actually concerns the newest development in handwriting research. *Developments in Handwriting and Signature Identification in the Digital Age* by the ever-busy Heidi Harralson is a slim but fascinating “analysis of electronic signatures [which] is an ever-growing trend requiring specialized research and new methodology by forensic practitioners. This text hopes to give some focus... by defining misunderstood terms, identifying problems and challenges...” The application of forensic methods to signatures captured on digital tablets and other electronic screens using a stylus or finger clearly calls for new techniques. Exactly how these texts are captured electronically must be understood by examiners. Computer software systems that facilitate handwriting identification are identified and enumerated in a clear, concise manner that even the tech-challenged among us (me leading the pack) will find instructive. This whole new arena “has revolutionized what we know about handwriting movement with much of the research originating from the medical and handwriting recognition fields. Six tight chapters make for sometimes challenging but invigorating reading for the old school pen and paper crowd. An enjoyable specialized glossary shows you where to turn if like me you can’t tell a DTW from an ANN from a GMM from an HMM.... *Developments in Handwriting and Signature Identification in the Digital Age* is definitely not everyone’s cup of tea, but if you like to push yourself it’s a good place to start.



If the interplay between handwriting and the human body and how neurological conditions manifest themselves in handwriting interests you, Caligiuri and Mohammed's *The Neuroscience of Handwriting: Applications for Forensic Document Examination* represents by far the most technical medical text any non-medical professional may want to tackle. This reviewer found it difficult, to be sure, and chunks of it way above my head, but ultimately useful and informative. Discussions on how Parkinson's and other diseases, substance abuse of all sorts, and aging affect handwriting are worthwhile and readable to any intelligent lay person.



Robert Saudek's *The Psychology of Handwriting* was first published in 1925, and this facsimile reprint of the first English edition (London: George Allen & Unwin Ltd.). This Austro-Hungarian graphologist (1880-1935) was a regular Renaissance man who spoke many languages and published a large number of plays, novels, poems, and short stories. His life's work, though, seems to have been to legitimize graphology, the interpretation of personality through handwriting traits. The subject has come up in this column several times over the years and I confess to remaining steadfastly skeptical on the topic – much of the popular



literature on it seems to fall firmly in the pseudo-science category. I try not to be closed-minded, however, and *The Psychology of Handwriting* is an entertaining read and Saudek does strive to explain his points far more effectively, reasonably and scientifically than do the popular post-World War Two graphology titles I've encountered. His elaboration of physical handwriting characters is detailed – all in all a rewarding read that I'm glad to see back in print.