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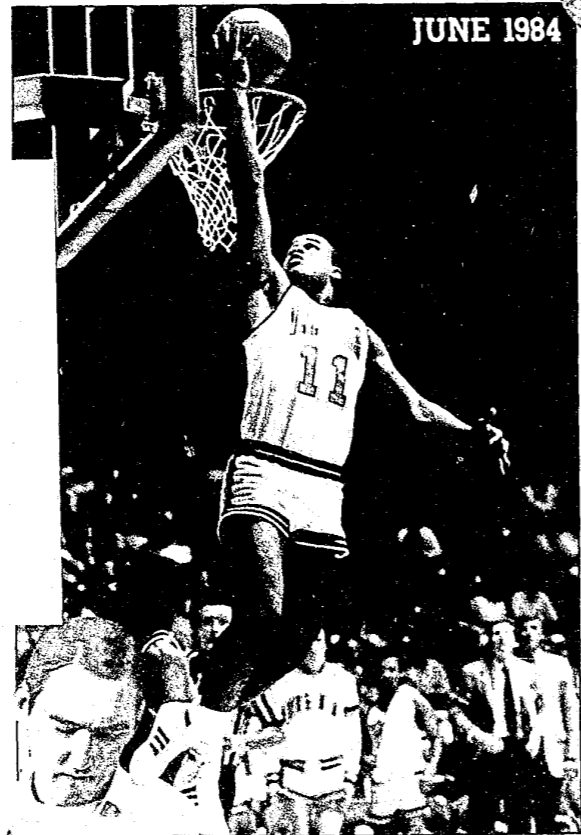
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Handwriting Evidence for the Investigator

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The alert investigator will find that the document examiner (often referred to as handwriting expert) can be a valuable ally in successfully investigating and prosecuting cases. Handwriting examination is one of the few forensic sciences in which a particular individual can be identified to the exclusion of all other persons. The very act of writing may establish intent.

The effective use of handwriting evidence requires a considerable degree of effort and knowledge on the part of the investigator, who must be aware of the potential presence of documentary evidence within the framework of the investigation and be able to recognize it as such. Then, necessary steps must be taken to obtain the tools with which to determine the origin of the document or to prove it for what it is. In some cases, such as those dealing with fraudulent or counterfeit checks, the bogus nature of the document is self-evident. In a complicated fraud scheme, however, it may be difficult to recognize the importance of documents to the investigation.

In order to make full use of handwriting evidence, an investigator must know what is required for an examiner to conduct a comprehensive examination. Definite results in handwriting examination are not always possible. This is simply the nature of handwriting. By supplying the examiner with adequate materials with which to work, the chances of receiving a laboratory report detailing definite conclusions are significantly improved.

Where Handwriting May Be Important

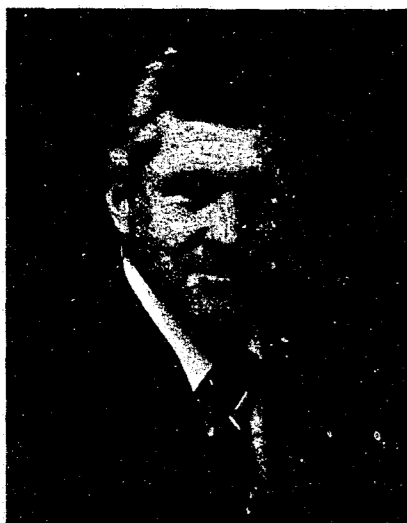
Identifying the person who did the writing becomes extremely important in many cases. Signatures and other writing on a fraudulent check will provide proof of that person's involvement in the crime. The handwriting on contracts, work papers, and correspondence can help incriminate those involved in a fraud. Letters are used in extortions, while demand notes turn up in robberies. Handwriting on documents such as a motel registration card, credit card invoice, sign-in sheet, or visitor's log may place a

person in the vicinity or at the scene of a crime. These are but a few of the potential applications of handwriting evidence to everyday investigative operations.

Why Handwriting Can Be Identified

The basic premise that no two people write exactly alike is a generally accepted tenet within the community of document examiners and has been accepted by the courts and criminal justice system for many decades.¹ The physical act of writing is a habit or a reflexive action. As a person writes, his mind is on the words or message he is trying to communicate. Therefore, in normal writing, the movement of the muscles required to push the pen across the page, forming the letters and words, is controlled by the subconscious, while the conscious mind concentrates on the message.

As the writer matures, his writing develops numerous individual characteristics which are consistent and are repeated from one specimen of writing to another. It is the combination of



Special Agent Waggoner

these characteristics unique to an individual which permits two specimens of writing to be identified as the product of one person. Likewise, it is this unique combination of characteristics which permits most people to recognize the handwriting of friends, relatives, and business associates.

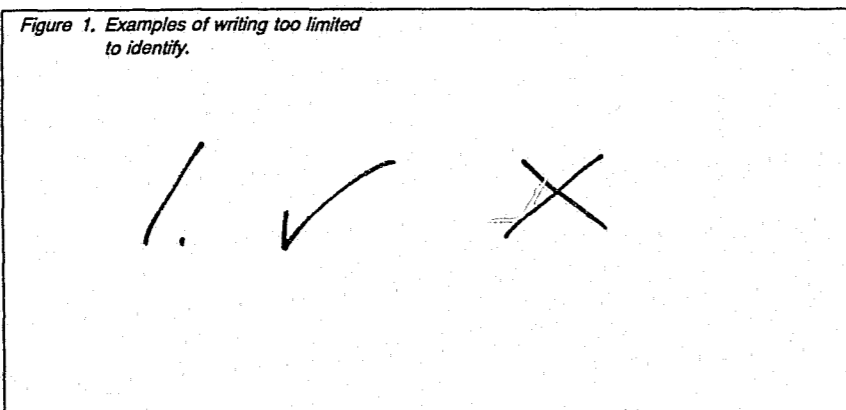
During his examination, the expert examines in detail the writings involved in the investigation. These will generally consist of documents bearing handwriting that is in question and other documents bearing known handwriting samples of a suspect. The examiner determines what combination of characteristics is present in each of the writings and compares the two. The actual examination involves a thorough, detailed study of all aspects of the writing. This includes features such as slant, speed, pressure, rhythm, ability, spacing, letter formations, beginning, ending and connecting strokes, line quality, and many other elements of the writing. Appropriate magnification and lighting is used as required.

A handwriting can be identified with the writer if it contains the characteristics and individualities of the writer in adequate kind and number and if the writing is truly representa-

tive of its source. In other words, there must be an adequate amount of writing, it must be normal writing, and it must contain sufficient individualities. For these reasons, it may not be possible to identify very limited writing, such as a check mark, a single letter or number, initials, distorted or disguised writing, or block letter handprinting. (See fig. 1.) By the same token, distorted or disguised handwriting exemplars are not suitable for use in a handwriting examination because they do not represent the normal writing of the individual.

Another example of handwriting which cannot be identified with the writer is in the case of a simulated or traced forgery. In a simulated forgery, the writer attempts to copy the signature of another person by observing the signature and trying to draw it. In a traced forgery, the writer actually traces from a genuine signature by going over it with carbon paper underneath or by using transparent paper. In both of these cases, the forged product cannot be identified with the writer because these forged signatures do not represent his normal handwriting characteristics. Rather, the characteristics of the victim's writing will be incorporated into the

Figure 1. Examples of writing too limited to identify.



"The primary consideration in obtaining documentary evidence is to preserve the evidence in the same condition in which it was found."

forged signatures to a greater or lesser extent, depending on the skill of the forger. Both simulated and traced forgeries, however, will generally exhibit features which enable the examiner to judge them as forgeries.

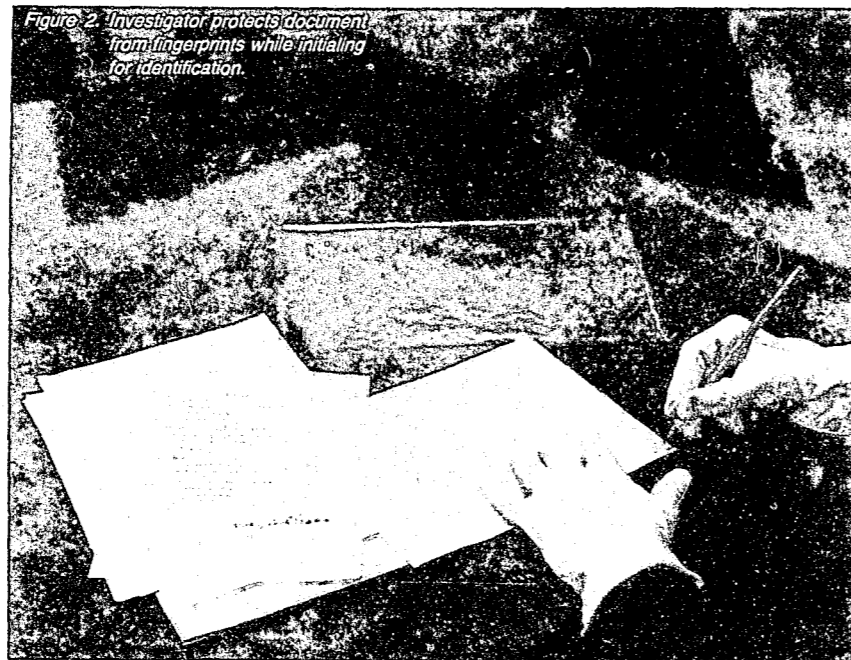
Handling Questioned Documents

The primary consideration in obtaining documentary evidence is to preserve the evidence in the same condition in which it was found. (See fig. 2.) The questioned documents should be inconspicuously dated and initialed for identification. They should not otherwise be marked, stapled, folded, or soiled. Never write on paper that is placed on top of the evidence since this may leave indentations in the questioned document. Also, the documents should be placed in plastic envelopes to preserve them from fingerprints while being handled.

Keeping detailed records of where and how the documents were obtained and their disposition for future chain of custody accounting is important. Also, always send the original evidence to the examiner unless it is absolutely not available. It is often difficult to conduct an adequate examination from photocopies.

Obtaining Known Writing Exemplars

Once a suspect is located, it becomes important to obtain suitable handwriting standards or exemplars to be used in the examination. This is a crucial point in the investigation because the quality of the known standards has a direct effect on the results of the examination. It has been the experience of document examiners that the lack of adequate known exemplars is one of the primary causes of inconclusive examination results.



An informal survey has shown that in about 50 percent of the cases with inconclusive findings, the cause has been inadequate known handwriting samples. It is, therefore, important for the investigator to understand what exemplars the examiner requires in order to conduct an adequate examination.

The object of the exemplar is to illustrate the writer's personal writing habits with respect to the writing in question. If an identification is to be made, the handwriting sample will recreate the identifying elements, or combination of characteristics, of the questioned writing with which it is to be compared. It becomes evident,

now, that the examiner will compare the characteristics that are present in the strokes, letters, letter combinations, words, names, numbers, punctuation marks, and other facets of the questioned writing with those same strokes, letters, letter combinations, words, names, numbers, punctuation marks, and other facets appearing in the exemplar. In other words, the known writing sample should consist of substantially the same wording, in the case of extended text, and of the same names, where signatures are involved, as the questioned writing.

To illustrate further, a successful comparison cannot be made between a questioned signature "John Smith" and a known sample in the name "Stephen Barnes." (See fig. 3.) Likewise, the words "I have a gun" cannot be compared with the phrase "This is a stickup." The letters, words, and names in the questioned writing must

be compared to those same letters, words, and names in the known exemplar. A similar situation exists with respect to cursive writing and handprinting. A letter, word, or name written in cursive style cannot be successfully compared with that same letter, word, or name which is printed. A letter printed in upper case cannot be compared with the same letter printed in lower case form.

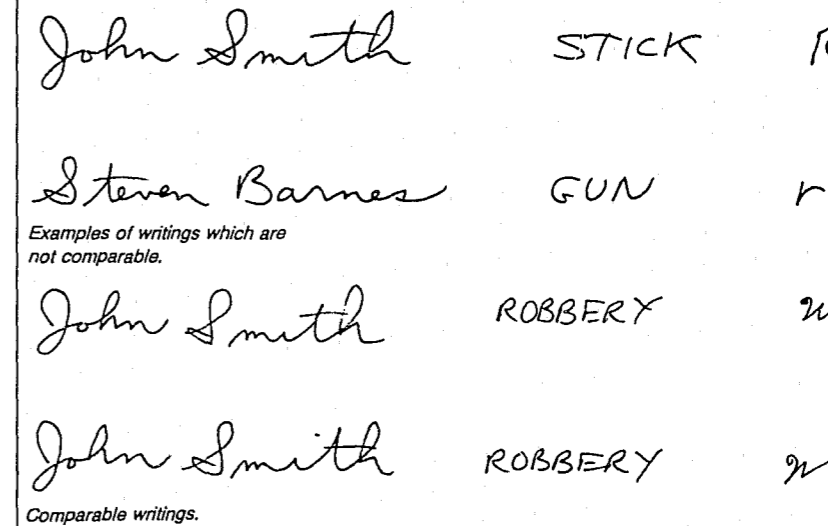
It is incumbent upon the investigator to obtain known samples that can be compared successfully with the questioned writing. These exemplars must not only represent the normal writing habits of the writer but also must contain a sufficient quantity of the same letter combinations, words, and names as the writing in question.

There are two classes of exemplars. Undictated exemplars are those writings prepared during the normal course of business. Dictated exemplars are writings produced at the request of the investigator. Both types have advantages and disadvantages.

The primary advantage of undictated writings is that they are likely to contain the normal writing habits of the writer since no reason exists for him to alter or disguise his writing. At the time the writing was prepared, there were no circumstances which would cause undue emphasis on the act of writing.

There are, however, two disadvantages to undictated standards. These are the potential difficulty in having the writings authenticated for court purposes as being the writings of the defendant and the problems of locating writings which are comparable to the questioned writing, that is, that contain a sufficient number of the same letters, letter combinations, and words. When the questioned writing

Figure 3.



consists of extended text, such as an extortion letter, it becomes easier to find comparable exemplars.

The source of undictated exemplars will depend on the suspect. An investigator should review the subject's background for potential avenues of approach. One way is to simply ask the subject for notes, letters, and cancelled checks that he has written, making sure that he verifies the writing as his. Relatives or friends may supply letters the subject has written to them. Business records from the place of employment, including application forms, should be considered. School papers, financial documents, and military records are some additional potential sources. Here again, send in the original evidence, not photocopies, to the examiner.

In most cases, it is advisable to obtain requested or dictated known exemplars. The main advantages to this type of standard are that the subject can be requested to produce writing that is comparable (same wording) to the questioned writing and the samples can be easily authenticated for court purposes. The disadvantage is that obtaining such exemplars focuses inordinate attention on the writing process. This may inhibit the writer, resulting in a product that is not freely and normally prepared and may not contain his normal writing characteristics. There also may be an attempt to alter the style of writing or disguise it. Nevertheless, in most cases, it is necessary to obtain dictated exemplars. The quality of these exemplars has a direct bearing on the results of the examination. Therefore, it is important to discuss in detail correct methods of obtaining dictated known handwriting exemplars.

"The successful investigation and prosecution of a case may depend on the comprehensive examination of handwriting evidence."

A key point to remember is to duplicate the condition under which the writing in question was produced. In every case obtain an adequate amount of samples from the writer using a ballpoint pen. If the questioned writing was written with a pencil, fountain pen, or fiber-tip pen, additional samples should be taken with that kind of instrument. As mentioned earlier, these samples should be in the same wording and names as the questioned writing.

The format of the questioned writing, within reason, should also be reproduced in the samples. By way of illustration, assume the document in question is a fraudulent check. The samples, logically, will be obtained on check-type forms. (See fig. 4.) Many law enforcement agencies have forms printed specifically for this purpose. If

none are available, try bank counter checks, forms made by photocopying a blank personal check, or even simulate a check form by drawing lines on a sheet of paper.

Once again, it is important to have the suspect write all of the questioned writing on all of the fraudulent checks. This includes date, payee name, written and numerical amounts, signature, endorsement, and such identifying information as addresses or numbers which are part of the endorsement. Do not limit the writer to the signature or endorsement alone, unless they are the only writing in question.

In the case of an extortion letter consisting of extended cursive writing on lined tablet paper, for example, provide the suspect with lined tablet paper and instruct him to write in cursive as the wording of the letter is dictated. If the letter was handprinted, give the writer specific directions to print in uppercase or lowercase letters corresponding to the questioned writing.

Other types of questioned documents are to be treated accordingly. Credit card invoices generally consist of a signature crowded into a small

box or block. Sample forms should be prepared so that the suspect will be writing in a similar sized area. A contract or letter may bear one signature on a line at the bottom of the page. Draw lines of similar length on similar sized sheets of paper for use as sample forms. If the writing in question includes an addressed envelope, have the writer prepare the samples on envelopes or on slips of paper of the same size. Make sure that the sample consists of the wording of both the address and the return address.

Standard Sample Forms

Beware of standard handwriting sample forms containing various names, paragraphs, the alphabet, and numbers. (See fig. 5.) These forms are often not adequate substitutes for comparable writing in the same wording, names, and numbers as the questioned writing. Likewise, page after page of the alphabet are unlikely to be adequate for an examination in themselves. These types of writings are fine as supplementary material or for "warming up" the writer but are generally not adequate standing alone.

In each case, dictate the writing to the suspect without letting him see

the questioned writing. As each sheet is filled out, it should be removed from the view of the writer. Both the suspect and investigator should initial and date each page.

Number of Samples

How many samples must be obtained? There are no set requirements, and each case must be treated individually. The handwriting exemplars should be sufficient to demonstrate the normal range of writing habits of the writer. As a general rule, however, obtain 20-30 repetitions when the questioned writing is relatively brief, such as a signature or a single check. If there are 10 questioned checks, each bearing different writing, 8 or 10 repetitions of each check is probably sufficient. By the same token, a 3-page extortion letter will require perhaps 3 or 4 repetitions. In the case of large volumes of questioned documents, such as work papers, notebooks, or diaries, obtain as much known writing as is feasible in a period of 2 hours or so. Concentrate especially on words and phrases which appear throughout the questioned writing.

One of the greatest drawbacks of dictated known exemplars is the potential for disguising the writing. In an attempt to disguise his writing, the suspect will often slow the writing speed, increase pen pressure, change the style of capital letters, alter the slant, or make exaggerated or grotesque letter forms. Observe the writer for evidence of disguise as he writes. If he does not appear to be writing normally, encourage him to do so, requesting him to speed up or alter his slant as necessary. Have the



suspect continue to write until you believe the writing is normal. Many people find it difficult to maintain a disguise over a period of 2 or 3 hours. Also, consider obtaining samples with the awkward hand if the questioned writing exhibits a lesser degree of skill than the samples written with the normal hand.

Conclusion

It is becoming more and more common to obtain handwriting exemplars at the direction of a court order or grand jury subpoena. In this event, request that the order or subpoena direct the defendant to provide "normal handwriting in the amount, style, and wording as directed by the investigator." Remember, a great deal of time and effort have been spent in gathering evidence for the case.

Examiner testifying in court.

Do not cut corners in obtaining handwriting samples. Always submit a complete set of exemplars. The successful investigation and prosecution of a case may depend on the comprehensive examination of handwriting evidence.

FBI

Footnote

Fenelon v. State, 195 Wis. 416, 217 N.W. (1928), rehearing denied, 195 Wis. 416, 218 N.W. 830; *Murphy v. Murphy*, 144 Ark. 429, 222 S.W. 721 (1920); *Baird v. Shaffer*, 101 Kan. 585, 168 Pac. 836 (1917); *Baird of Weston v. Saling*, 33 Ore. 394, 54 Pac. 190 (1898).

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