

COLLECTING KNOWN HANDWRITING SPECIMENS

The collection of known handwriting specimens is one of the most important tasks in preparing to submit material for examination to a forensic document examiner. Taking sufficient time and effort will result in optimum conclusions whereas taking a lackadaisical attitude toward the collection will conversely tend to result in significantly qualified or neutral conclusions. Each examination has its own unique aspects so the optimum amount and type of specimens will vary from examination to examination. There may also be more than one type of specimen set that will be equally effective for examination purposes. It is important to educate users as to the bases of known specimen effectiveness so they can team with the forensic document examiner to collect the proper evidence for their specific submission.

The determination of authorship of handwriting is a comparative process. Forensic document examiners compare discriminating elements of a questioned body of writing with the discriminating elements of a body of writing known to have been written by a certain person or persons.

Each examination is going to have its own idiosyncrasies such that establishing any hard and fast rules as to what constitutes adequate specimens will not be possible. That said, there are some general guidelines that can assist in the collection of adequate specimens. Adequacy of specimens is based on the three C's – comparability, contemporaneousness, and comprehensiveness.

Comparability

Comparability includes the following:

- form of writing (cursive, handprinting, initials, signature (to include content of signature))
- upper/lower case
- common letters
- common letter combinations or words
- common writing space
- similar writing materials (writing instrument and substrate)

The goal of obtaining specimens that are comparable is to limit variances. If the questioned writing is cursive, the specimens should be in cursive. If the questioned writing is large the specimens should be large. The purpose of limiting the variances is to limit the potential of dissimilarities being the result of something other than the issue of the writing source. Variances can affect writing so the fewer variances that exist, the clearer the data can be for the examiner.

Handwriting takes many forms and it is necessary for the forensic document examiner to compare the same form of writing when conducting an examination. Because there will be limited comparability of, for instance cursive to handprinting or signatures to initials, known specimens should be of the same form as that of the questioned body of writing.

In addition to the form, handwriting is comprised of upper and lower case lettering. Each case has its distinctive form, design, height, and other discriminating elements. As such, comparable specimens will reflect the upper or lower case lettering as found in the questioned body of writing. Some writers will co-

mingle the use of upper and lower case lettering in their writing but even then, there is no guarantee that the discriminating elements of each form will not have certain distinct features.

There are two types of known specimens. One type is course-of-business specimens. These are writings that are executed in the day-to-day activities of an individual. Other than for signature examinations, these specimens will not normally repeat the questioned writing verbatim and the comparability will consist of letter and letter combinations within the content. However, because they are prepared independent of the issue at hand, this type of specimen may more accurately reflect the writer's full range of writing habits and abilities.

The other type of specimen is request specimens. The value of request specimens is that they can reflect the questioned writing fully verbatim with all letters and letter combinations. However, because request specimens are obtained for the expressed purpose of a handwriting examination, some level of unnaturalness may also be included. Request specimens also have the disadvantage of being limited to the current time/date whereas course-of-business specimens have the advantage of date flexibility. Either request or course-of-business specimens (or both) may provide effective sampling for examination purpose.

For "signature" specimens from other possible writers or from any subject for comparison with non-signature questioned writings, full comparability would normally require request specimens unless they share a common first or last name. In such instances, it is completely acceptable to concentrate on finding course-of-business specimens that contain individual lettering or letter combinations that are present in the questioned signature(s). This form of specimen set can collectively provide the needed comparable data.

Those collecting specimens should be cognizant of the writing position and size of the writing area when deciding the procedures that will be followed. For example, the collection of specimen signatures for comparison to a signature on a contract would involve collecting specimen signatures of the purported writer on other documents with text and signature lines. However, the collection of specimens involving less common forms such as graffiti on a wall may require some thought. Depending on circumstances, one may desire, if possible, to obtain request specimens using butcher paper taped to a wall in order to reproduce the positioning and size of the substrate to the extent possible.

Contemporaneousness

Handwriting can evolve over time. As such, it is important to be able to assess not only the discriminating elements of a writing, but also the discriminating elements by that writer within the timeframe of the questioned body of writing. In his seminal textbook, *Scientific Examination of Questioned Documents*, author Ordway Hilton defined contemporaneous as specimens dated within two to three years of the date of the questioned writing and that these contemporaneous specimens are "satisfactory standards" but outside that range the standards "have a tendency to be less representative". (Hilton Page 305)

There are two ways to accommodate the need for contemporaneousness of known specimens. One, of course, is to have known specimens that include writings from the same timeframe. The other is to have known specimens that both pre-date and post-date the timeframe of the questioned body of writing, also called date-bracketing. If the pre-dating and post-dating specimens denote common discriminating elements, the forensic document examiner can confidently determine that the specimens represent the

writer's abilities and habits during the timeframe of the questioned body of writing. In general science terms this is known as data interpolation.

Why is this so important? When a forensic document examiner notes dissimilarities in discriminating elements of questioned to known bodies of writing, they must then determine whether the evidence supports that the dissimilarities are due to different writers or is due to other reasons such as influence of alcohol, injury, or evolution of handwriting characteristics. Without contemporaneous or date-bracketed specimens, the examiner cannot eliminate the possibility that the root cause of any dissimilarities is due to the time differential. As a result, dissociative conclusions have significant inherent limitations that can rendered them impossible to support.

The lack of contemporaneous or date-bracketed specimens can also affect the potential for associative conclusions. Non-contemporaneous specimens may provide significant characteristic agreement between the discriminating elements of the questioned and known bodies of writing, but the lack of contemporaneous known specimens may limit the comprehensiveness of these agreements and, hence, the confidence level of any associative conclusion.

Comprehensiveness

The goal of collecting known handwriting specimens is to be able to assess a writer's full range of writing habits, abilities, and variations. It is a basic axiom of handwriting examination science that "no two writings of the same material by the same writer are identical in every detail". However, "within a writer's range of variation there are handwriting habits and patterns that are repetitive and similar in nature". (SWGDOC Standard for Examination of Handwritten Items, Paragraph 3.3.15)

There is no set number of specimens or type of specimen that will accomplish this goal to a specific degree of confidence. This element of the examination is not only case specific to the writing at issue, but also is writer specific to the writer or writers from whom specimens are collected. A qualified forensic document examiner can be of unequalled assistance in guiding the user during the collection process.

For dissociative conclusions, an examiner must be able to establish that any noted dissimilarity between the questioned and known bodies of writing is not due to limited sampling or the aforementioned factors that can affect handwriting. As such, comprehensiveness will require an extensive number of specimens such that all considerations of root causes of dissimilarities can be assessed. Simply put, this cannot be reliably assessed with but a handful of specimens. For purposes of dissociative conclusion Hilton stated the following:

"Such a determination presumes extended writing specimens including extensive broad-based standards that reveal a full picture of the known writer's habits and abilities". (Hilton Page 10)

For associative conclusions comprehensiveness of collection will provide the corresponding comprehensiveness of characteristic discriminating element similarities that provide the basis for conclusions of high confidence. Oftentimes, comprehensiveness for associative conclusions can be achieved with lesser numbers of specimens if those specimens reflect discriminating elements of the questioned writing to a comprehensive extent.

ORIGINALS VERSUS COPIES

As with the questioned documents, original documents are preferred for examination as the examiner can fully assess the writing. However, it is recognized that obtaining originals, whether questioned documents or known specimens, is not always possible. In the case of known specimens, limiting oneself to only originals will likely handicap the available specimens, and thus limit the comparability, contemporaneousness, and comprehensiveness of the submission. As such, one should seek original documents but not to the exclusion of copies that enhance any submission. Copies are acceptable though they may result in some level of qualification to the ultimate conclusion.

THE ROLE OF THE FORENSIC DOCUMENT EXAMINER IN COLLECTING AND VERIFYING SPECIMENS

It is not usually the role of the forensic document examiner to collect handwriting specimens, though it sometimes is done. As such, the forensic document examiner will usually not have first-hand knowledge as to the source of the known handwriting material and it will be the responsibility of the submitter to verify the source of the specimens. The reason examiners do not routinely become personally involved in the collection or taking of specimens is to maintain a professional distance from the contention and avoid the potential of bias through the interaction. Published industry standards dictate that the examiner should conduct an “internal consistency” review of the submitted known specimens in order to assess the specimens for the potential of writings by more than one person.