Abstracts

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Class Characteristics of Mexican Hand Printing

(Brittany King)

In the forensic examination of handwriting, document examiners must be able to distinguish between class and individual characteristics. If an examiner places too much emphasis on a characteristic that is common to a certain nationality or group of people, an erroneous conclusion may be rendered. With the migration of foreign-born individuals into the United States, it is important for document examiners to be aware of the class characteristics found in foreign handwriting. One of the largest growing cultural groups in the southwestern United States is that of the Mexican people. In this study, the class characteristics of Mexican hand printing are examined. Specific letter formations, which occurred often enough to be considered as class characteristics, are identified. The letter formations, as well as the statistical data are presented in this paper.

A New Check Security Feature: Thermochromic Ink

(Charlotte W. Ware)

One of the newest check security features being utilized today is a logo or mark printed on a check using colorchanging ink. This allows anyone to verify the authenticity of a document quickly and easily. By rubbing your finger over the mark, the document can be authenticated immediately, and can be repeated over and over again as the check is passed from person to person. But just how does thermochromic ink work? The chemistry of the ink and use of it both in document security and in other applications are discussed.

Enlargement and Reduction Characteristics of Facsimile Transmission Copies

(Brian S. Lindblom, Dan C. Purdy, and Karina Lange)

A research project was designed to determine the extent of enlargement and reduction of documents transmitted by different facsimile machines. In addition, the scope of the study was expanded to answer the following questions: *Does the transmitting or receiving machine have a greater influence on the enlargement/reduction of faxed documents?* Is the degree of enlargement/reduction consistent from one transmission to another? *Do significant differences exist in the degree of enlargement reduction from one page to another in multi-page facsimile transmissions?* Is the degree of enlargement reduction and vertical axes? Receiving machines were found to have a greater influence on the output size of faxed documents relative to the sending machines. Considerable changes in size were observed between originals and faxed copies, between separate pages of multi-page facsimile transmissions and within individual faxed documents. Although extreme differences in size were uncommon, faxed copies ranged from 12% smaller to 2.9% larger than the original template. Document examiners should be aware of these facts when inspecting faxed documents.

Triplet and Sibling Handwriting Study to Determine Degree of Individuality and Natural Variation (Sandra Ramsey Lines and Frankie E. Franck)

There have been no reports in the literature of handwriting studies that involved the comparisons of writings of triplets or comparisons of writings of multiple-birth siblings with their nonmultiple-birth siblings. The purpose of this small study, therefore, was to determine if the writing of one set of triplets and their nontriplet sibling could be distinguished and, if so, the degree of individuality in each subject's writing. Unlike previous twin/sibling studies, normal or natural variation (intrawriter variation) is examined and contrasted with differences or dissimilarities (interwriter variation). The findings support the concept of natural variation in handwriting and two of the axioms of handwriting identification: (1) no two individuals write exactly alike, and (2) no one individual writes the same text exactly the same way twice.

Book Review: *Document Examination on the Computer, A Guide for Forensic Document Examiners* (F. L. Lee, Jr.)