Impressions/Ink Intersection Sequencing — A Comprehensive Overview

Robert W. Radley and Brian S. Lindblom

This paper explores the sequencing technique between ESDA detectable impressions and ink strokes. The method assists in the determination of the execution order of visible ink lines and intersecting ESDA impressions. Critical factors, suggested procedures, interpretation and tips on conducting the work are considered and addressed in detail. Consideration is also given to conflicting papers on this topic.

The Frequency of Occurrence of Specific Handwriting Characteristics within a Limited Population

Kate Savoie

This study was designed to determine how frequently a specific population continues to use the class characteristics of certain cursive words, numbers, or letter combinations from the learned copybook style or the frequency at which the population deviates from that copybook style. Nine different elements were evaluated, including three words, two numbers, two capital letters, and two letter combinations. For each of the nine elements, three to five class characteristics were classified according to the copybook style and a side by side comparison was conducted to determine if a research participant within the population studied retained the characteristics taught to them, or if they deviated from that style. The results were tabulated and calculated to determine the frequency with which the participants used or did not use the copybook style five years after graduating from high school.

Skill Characteristics of Forensic Handwriting Examiners Associated with Simulated Handwritten Text

Carolyne Bird, Reinoud D. Stoel, Bryan Found and Douglas Rogers

The assessment of the process of production of handwriting (naturally written, disguised or simulated) is an important step in forensic examinations and may impact on any authorship opinion offered. However, there is currently little empirical data on the skill of forensic handwriting examiners in discriminating between disguised and simulated writing processes. The results reported here form part of a larger investigation to that end. The trial consisted of 100 pairs of handwriting samples, each with a naturally written comparison sample, and a questioned sample that was either disguised by the comparison writer, or written by another writer attempting to simulate the comparison writer's handwriting features. The simulated writings were made with or without practice and with or without a direct model of the target text in the comparison writer's handwriting. Analysis revealed no significant differences between the correct or misleading (erroneous) scores of any of the combinations of simulated writing types. Simulated writings attracted high misleading and inconclusive scores indicating that the predictor features that FHEs use to form opinions on the un-natural writing samples in this study were not effective.
A Study on the Stability and the Utility of Satellite Droplets for Classification of Ink Jet Printers

Liu Ning

The author investigated the stability of satellite droplets as either class or individual characteristics in the printouts from 40 types of Hewlett-Packard and Canon ink jets. Observation established that satellite droplets produced by one ink jet device might vary in appearance with different print modes, ink, media and other factors. Given their lack of repeatability, they are not considered to be characteristics that can be relied upon by FDEs for ink jet printer classification or identification. However, the forensic value of satellite droplets should not be totally ignored. Their structure can indicate the properties of the ink, and possibly the brand of printer. They are very useful for ascertaining certain characteristics for ink jet classification, including halftone dot, nozzle arrangement, and stepping of paper feed. They can also assist in determining print modes, without which no ink jet output can be produced. Therefore, satellites should be taken into consideration when FDEs are examining an ink jet-printed document.