

ABSTRACTS

Volume 17, Number 2

A Revealing Writing that has been Covered Using Correction Tools

Anna Guzowski, B.S., Kellen Millner, MSFS, Christopher Yue, Eliot Springer, M.Sc.

One particular challenge encountered by the forensic document examiner is that of obliterations through use of correction utensils and opaquing solutions (eg. Wite-Out®). Underlying writing can be difficult to distinguish due to this type of obliteration. In the past, various methods have been implemented to deal with these types of evidence, such as physically removing the solution. However, this method has the potential to destroy the original evidence in the process (1,2). An alternate non-destructive method for the visualization of the underlying writing is preferred. ESDA® and the VSC® are both non-destructive techniques widely used in the analysis of questioned documents. The ESDA® was proposed and examined as a novel method for visualizing this type of obliterated writing. This non-destructive method was then compared to that of using the VSC® for this same type of examination. The evaluation was carried out through the use of a variety of writing instruments, inks and printing methods. A series of samples consisting of handwritten, typewritten, and non-impact printed material was prepared and sections of each were covered with a different correction tool. Both the ESDA® and VSC® were used to view the underlying writing. The ESDA® was able to distinguish the underlying writing from the front in three of the eight samples where the correction tape was used and from the back in three of the eight samples where correction fluid was used. Surprisingly, for all other samples, the ESDA® did not succeed in revealing the obliterated writing. In all cases, however, the VSC® was able to generate a legible image of the original writing. In short, the VSC® was exceptionally effective at visualizing writing obliterated by opaquing solutions. There might, however, be some situations where the ESDA® may be more advantageous.

Investigating Forensic Document Examiner Opinions on Signatures in a Foreign Script

Rosalind Spencer

There have been court challenges in various countries around the world bringing into question the validity of forensic document examiners (FDEs) expressing expert opinions on writing systems other than those with which they are familiar. A study was designed to assess whether FDEs are significantly better at evaluating the authenticity of questioned signatures in a familiar script than FDEs who are faced with an unfamiliar one. Volunteer FDEs familiar with Chinese script, those unfamiliar with the script, and a group of laypeople were provided with a series of small validation tests in a blinded fashion. The theoretical paradigms used by FDEs to form the basis of expert opinion in this area were explored, together with a discussion on how these results may be generalised to the overall FDE population, given the limitations of such a study.

A Study of Various Factors Affecting Stamp Identification

Chi-Ming Pang, Janesse W.S. Hui and Chi-Keung Li

Stamp identification is performed by matching unique defects present on the stamp face to those on the impressions. Unique defects are usually introduced onto the stamp face through wear, tear, and day-to-day usage. Defects can also be introduced at the manufacturing stage. However, depending on the cause, these can be either unique to an individual stamp or apparent in all stamps produced using that particular mold.

In addition to defects, other essential factors that should be considered when undertaking a stamp examination are explored in this paper. These include: stamp shrinkage rates during normal use and how these rates are affected by changes in temperature and humidity, the effects of stamp re-inking, the effect of sunlight on the appearance of stamp impressions, the possibility of a duplicate stamp being used to make a questioned impression, and the “smudging” effect. The paper also discusses the significance these factors should be given when formulating opinions.

Ink Aging Testing—Do Preceding Indentation Examinations Affect Ink Aging Parameters?

Valery N. Aginsky, PhD

This paper discusses various aspects of two ink aging methods involving the analysis of volatile ink components: the Sequential Extraction Technique (SET) and the Solvent Loss Ratio Method (SLRM). Multiple ballpoint ink writings of various ages were tested by the SET and SLRM both before and after the pages bearing the writings were examined for indented writing impressions using an electrostatic detection apparatus (ESDA). The results obtained show that the indentation examination does not cause any significant changes to the ink aging parameters that are measured by the SET and SLRM.

Editorial (Letter to the Editor)

Forensic Document Examination Capacity Building

Samiah Ibrahim