



Questioned Documents Section – 2004

J3 Nielsen v. Nielsen: Advances in the Linguistic Analysis of Questioned Authorship

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The purpose of this presentation is to examine two complementary methods for the stylistic analysis of language data as applied to cases of questioned authorship. This particular case will provide participants a hands-on review of, first, the process of qualitative identification of style-markers, and second, the quantitative analysis of identified markers in specific cases.

Program participants will follow and participate in the process of style-marker identification, the analysis of the relative frequency of occurrence of each marker, and finally the determination of the joint probability of occurrence of all markers in a writer. This presentation will impact the forensic community and/or humanity by demonstrating insight into the methodology and more reliable results produced by combining both qualitative and quantitative approaches to forensic analysis.

Introduction: Nielsen v. Nielsen was a divorce matter wherein the division of property was contested. A typed agreement and other writings that reduced one party's share of property were in Question.

Qualitative Analysis: Style markers appearing in the Questioned writings matched those in the Known writing of one of the litigants. These markers included the following:

TYPING

Format: All text typed in CAPITAL LETTERS
Format: Zip code placed under state in address

Format: Space after open-parenthesis and before close-parenthesis

LANGUAGE

Spelling: DOSE [DOES]

Word Form: CAN NOT, WHAT EVER, ANY THING [CANNOT, WHATEVER, ANYTHING]

Quantitative Analysis: The quantitative analysis included four steps: 1) Determination of the relative frequency distribution of each style marker in a corpus of 800 Southern California writers, 2) Calculation of the additive (conservative) joint probability of occurrence of all style markers in any single writer, 3)

Calculation of the multiplicative (less conservative) joint probability of occurrence of all style markers in any single writer, and 4) The explanation and correction for the possibility of odds inflation.

Questioned Authorship, Linguistic Stylistics, Methods of Analysis