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Article Title: Psychological Aspects of Forensic Identification Evidence

Origin: Expert Psychological Testimony for the Courts

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Article's Subject Matter:

Discusses the manner in which experts compare forensic identifications evidence. In particular DNA, fingerprints and to a lesser degree firearms, bite marks, fibers, handwriting and bullet lead analysis.

This article is a chapter of an academic text. It is written in the standard academic style whose audience is academia and is not directed at the Forensic Expert, litigators nor the judiciary. Much of the text is a description of the disciplines, which tends to be highly simplified.

Key Points in Article

- Describes how Forensic experts make comparisons. Judgement and decision making of experts and their susceptibility to bias and error. Groups evidence into four categories: (1) a Simple Match (no statistics) such as fiber, hair, glass or bullet composition analysis; (2) a Match Plus Statistics such as seen in DNA and serology; (3) Qualitative Assessments of Certainty such as seen in Forensic Odontology's "Degrees of Certainty"; and (4) Individualization when individual characteristics are present. Individualization could be stated as a "match" or individualization, exclusion or an inconclusive determination.
- Wording such a "match" is confusing to juries.
- Questions jurors' ability to comprehend complex technical evidence.
- All Forensic scientists rely at least partly on subjective judgement.
- There are no data estimating the rarity of particular ridge details or combination of detail. Further there is no scientific basis on which to estimate the probability of a random match between two impressions and no statistics.
- Many types of forensic evidence lack validation. Describes two elements of scientific validation as reliability and diagnosticity in which reliability of forensic testimony refers to its value for proving an underlying fact and diagnosticity refers to the value of the underlying fact.
- Quotes Stoney (1997) "From a statistical viewpoint the scientific foundation for fingerprint individuality is incredibly weak"



Fallacies and/or Issues

- P35 states that Latent Print Examiners look at ridge characteristics. Not the case in Canada as we follow the ridge.