STATISTICS EDUCATION: OUTLIERS AND FORENSIC SCIENCE

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The word statistics is related and assists in the administration of a nation (state). As a fundamental pillar of a state, the justice system is central to the political life. Starting with ideas from the 16th century there are many methods of legal decision-making. So, we introduce the so called "bayesian paradigm" into this area of the forensic science and, by addition, in the statistics education.

Lindley, thirty years ago, discussed a problem in forensic science of deciding whether two sets of fragments have come from a common source. From this starting point we find many contributions based on and derived from this paper, all of them, discussing and using Bayes ideas. In particular, for Forensic Science, words such as trace evidence use and are based on the so called "Bayes factor".

The increasing ability to collect and store data that there are relevant for identification in a forensic context has led to a corresponding increase in methods for numerically evaluating evidence that is associated with particular crimes.

But - when all is said and done – arise one statistical problem that faced the earliest times of the statistics and the statistical practice analysts, concerning discordant observations in that matter.

What about discordant values in trace evidence?

How can we study outliers in the context of Forensic Statistics? More specifically, what is an outlier in the bayesian perspective?

We present a synthesis and some proposals of study of that subject and in the field of the ICOTS8 Conference Theme - Data and Context in Statistics Education: towards an evidence-based society.

KEYWORDS
Statistics education, outliers, forensic science

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In C. Reading (Ed.), *Data and context in statistics education: Towards an evidence-based society. Proceedings of the Eighth International Conference on Teaching Statistics (ICOTS8, July, 2010), Ljubljana, Slovenia.* Voorburg, The Netherlands: International Statistical Institute. www.stat.auckland.ac.nz/~iase/publications.php [© 2010 ISI/IASE]