

BOOK REVIEW

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A Review of Evidence, Proof & Probability

REFERENCE: Eggleston, R., *Evidence, Proof & Probability*, Weidenfeld & Nicholson, 91 Clapham High St., London, England SW4 7TA, 1985, 274 pp.

This is an erudite treatise on the application of probability theory to the legal process, written by a former judge and university chancellor, and still a law school professor. He is a scholar on the subject of constitutional law and the law of evidence, but for most of the audience in the American Academy of Forensic Sciences, his approach in this book has limited, but very poignant application.

This is a difficult book to read. It is neither a text nor a reference source. It is rather an expository on the theory of probability related to legal issues. After a definitional opening chapter, the next two chapters deal with the probability theory itself, followed by eight more chapters involving the course of trial and the law of evidence. The final five chapters apply the probability theory to the ascertainment of facts, and it is here that much of what he says directly affects our functions.

The author identifies three concepts of probability. The first is the likelihood that something will or has happened; that is, the chances of its happening are at least better than even (greater than 50%), but not necessarily certain (less than 100%). Those events less likely to happen are only possibilities. As we know, this is the foundation of the civil standard of proof. The second concept deals with degrees of likelihood, ranging from very unlikely to certain. This is the classic probability theory used mainly by mathematicians and scientists. It is with this that the author spends most of his time. The third concept of probability is referred to as "degrees of belief." This is a subjective probability and is incapable of quantification. Yet, this is the one lawyers are mainly concerned with. Therefore, it is the author's premise to have us apply the reasoning of the classical theory more than we have, in order to improve our assessment of factual problems.

The most difficult subject to tackle probabilistically is in assessing the credibility of a witness. Credibility does not rest solely on whether or not the witness is telling lies. "A lie is a statement that the speaker does not believe to be true, but many witnesses make false statements in the firm belief they are telling the truth." It has also been the author's experience that witnesses who would not lie to gain a personal advantage, may nevertheless lie to protect their good name or the good name of their friends and relatives if the questions asked seem not to have any bearing on the case. This being so, he gives us a series of factors that we can use in deciding whether a witness is telling the truth:

1. The inherent consistency of the story: the witness provides internal contradictions or inconsistencies. But watch out, for he notes that people frequently make inconsistent state-

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ments without realizing they are in fact inconsistent. Yet this test is one of the most often used in cross-examination today.

2. Consistency with other witnesses: this complicates the assessment process because the credibility of several witnesses must now be under scrutiny.

3. Consistency with undisputed facts: here the cross-examiner "does not really care whether the evidence so impugned is relevant or not, since his object is to use it to discredit the other evidence of the witness as to relevant matters."

4. The "credit" of the witness: the presence or absence of bias on the part of the witness.

5. Observation of the witness: physical manifestations of truthfulness or mendacity, or of uncertainty. Does the witness really look and act like an expert?

6. The inherent probability or improbability of the witness' story: a witness is less likely to be believed when he asserts an extraordinary fact. But at least with this test the author admonishes us to use probabilistic reasoning if only to avoid intuitive errors.

If you have the time and the bent toward probability analysis, this is a good book to read. It is written primarily for lawyers, but not in legalese. For scientific experts appearing in court, there are other sources that will provide better practical advice.