LEGAL PROBABILISM

MARCELLO DI BELLO – ASU

READING GUIDE – WEEK #5

Dawid. This article is a good overview of some key topics in legal probabilism:

- Sec. 2 explains Bayes's theorem (odds version) and applies it to Sally Clark. Make sure you understand the difference between the two Bayesian arguments in 2.3.
- Sec. 3 is about identification evidence, specifically DNA matches. Very interesting is the discussion of the Adams case (sec 3.4). How were the exculpatory evidence (alibi, witness testimony) and the incriminating evidence (DNA match) combined together using Bayes's theorem? What did the court think of that?
- Sec. 4 is about cold-hit DNA evidence cases. What is a cold-hit case? What is the disagreement between statisticians about the value of DNA matches in cold-hit cases?

R v T This is an appellate case about the use of the likelihood ratio in footmark evidence analysis. The court opinion is long, so focus on the following issues:

- How the expert used the likelihood ratio to quantify the value of the footwear evidence (17 to 37), including exact calculations (35 to 37).
- How footwear evidence is analyzed in the US versus England and Wales (64 to 68).
- Why the court thought that the likelihood ratio approach used by the expert should not be used (69 to 87), including comparison with DNA evidence.
- How the likelihood ratio should be explained to the jury (88 to 91).
- The difference between the numbers given to the jury and the numbers the expert used, and why the conviction was 'unsafe' (103 to 109).

Precis. No specific instructions this week. Your precis should describe (a) topic of the paper (or court opinion); (b) main thesis (or theses, if more than one); (c) supporting arguments; (d) objections to these arguments, complications or difficulties that the author considers (if any).

A precis should be no more than one page. If you want to write more, that's fine, but do not exaggerate! Be clear, simple, and concise. Due at the beginning of class.