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Bradley Efron* (brad@stat.stanford.edu). *Baseball, Shakespeare, and Modern Statistical Theory.*

Statistics is the mathematical theory of learning from experience, especially experience that arrives a little bit at a time: a baseball player's success or failure in one trip to the plate, a cancer patient's survival or death in a clinical trial of a new treatment. Two competing schools, the Bayesians and the frequentists, have contended for supremacy in information collection for two and a half centuries. Suddenly, at the beginning of the Twenty-First Century, new scientific technology, producing torrents of data asking volumes of questions, has forced a combined Bayesian/frequentist approach to information analysis. I'll describe both the old and new theories through a few examples. No background beyond elementary probability will be assumed. (Received September 23, 2006)