BIOS601 - Fall 2007

Assignment on Measurement

- 1. Refer to the descriptions of the SMOG index, and the Fry method, for measuring readability (under Resources for Measurement/Surveys). For the article you have chosen (as per discussion in class), measure its readability once by the SMOG index, and once by the Fry method, and three times (using different samples of text, of the same size as used for the other 2 methods) by the Flesch-Kinkaid (grade and reading ease) method. From the 3 Flesch-Kinkaid estimates, calculate the standard error of measurement, and the coefficient of variation.
- 2. Propose a method to assess the validity of a readability index.
- 3. Derive, theoretically, the link between the standard error of measurement and the (intraclass correlation) reliability coefficient [see page 7 of the notes on "Quantifying Reliability" in the Lecture Notes of Measurement in the Resources for Measurement/Surveys].

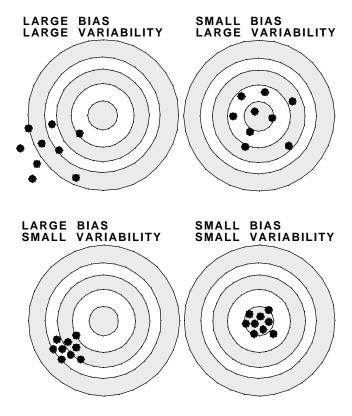


Figure 1: Being approximately correct and precisely wrong.