
The author informally canvasses a number of topics in the theory of measurement: measurement of length as a standard example, direct or fundamental measurement versus indirect or derived measurement, systematic measurement, random and non-random error, interpersonal agreement, and relations between measurement and scientific theories. In expounding these matters the author uses formal object languages and his concept of probability developed in terms of the idea of rational corpora of sentences. In fact, however, little that is said uses these formal notions in a really essential way, and the author explicitly says it is not his objective to "establish new mathematical or metamathematical results regarding measurement structures" (p. 23). Consequently most of the book lies outside the focus of this Journal.

The author emphasizes throughout the importance of the presence of error in actual measurements, and he relates his remarks to various general philosophical positions about the status of observation sentences and of operationalism. On the other hand, he makes little contact with the detailed theory of error in physical measurement that dates from the work of Lagrange and Laplace in the eighteenth century. Perhaps more surprising is the absence of analysis of the large psychophysical literature on probabilistic error dating from the end of the nineteenth century.

The book fits within the framework of general philosophy of science, and various chapters could usefully be read by students in an introductory course.

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