

**Schneider, Ivo**

**Die Entwicklung der Wahrscheinlichkeitstheorie von den Anfängen bis 1933: Einführungen und Texte. (The development of probability theory from the beginnings up to 1933: introductions and texts).** (German, English) [Zbl 0681.01001](#)  
Darmstadt: Wissenschaftliche Buchgesellschaft. xiii, 529 S. DM 79.00 (1988).

This is a source-book containing (fragments of) classical works and introductions to its 11 chapters (games of chance up to the 17th century; the notion of the probable; probability before Laplace; the law of large numbers (LLN) and the central limit theorem (CLT); applications to mortality; to the theory of errors; to physics; mathematical methods; axiomatization; Markov chains and processes; celebrated problems). The sources are mostly in German (they include existing and ad hoc translations), but English contributions not previously done into German are left intact. No claim is made about comparing new translations from Latin with those into English or French.

Bibliographic information is incomplete: it is difficult to identify the original texts of some fragments (on pp. 74-75 these are taken from §§ 39, 40 and 43 of Cournot, 1843, but only § 39 is mentioned); in many instances only the first, hardly available edition of a source is referred to (p. 41); sometimes (pp. 9, 44, 186) the language of the source is not stated; and even the main commentators of classical works are not named. True (p. VI), the editor intends to do so, and to supply much more meaningful commentaries of his own in a companion volume.

Mathematical statistics is included only in part and such scholars as Pearson and Fisher are absent. Population statistics except for mortality is excluded and there are many other omissions: Huygens's letter on the emergence of probability; DeMoivre's dedication of his "Doctrine..." to Newton; the anticipation of the method of least squares (Simpson, Euler); the Ehrenfests' model and its precursor (the urn problem due to Daniel Bernoulli and Laplace); the notion of randomness; Cauchy's work on the CLT; Michell's problem; Price, Buffon, and Laplace on the probability of the next sunrise etc. And instead of the luxurious fragments from Pacioli, Cardano, and Tartaglia a few passages from Lyapunov should have been included.

The introductions contain mistakes. Too much stress is laid on Laplace's denial of randomness (p. 49); applications of probability to the law are wrongly claimed to result in the former's stagnation (p. 50, partly refuted on p. 487). DeMoivre is credited with having proved the DeMoivre- Laplace theorem only in a particular instance (p. 118). In 1969 Schneider knew better than that! Quetelet never used the Poisson LLN (cf. p. 119); and a common mistake concerning the date of publication of Arbuthnot's memoir is repeated on p. 507. Also, the reader will not find either the formula of Bernoulli's LLN, or the uniform distribution in connection with mortality, or any recognition of the discovery that some fundamental laws of nature are stochastic.

Reviewer: O.B.Sheynin

**MSC:**

[01A05](#) General histories, source books  
[60-03](#) History of probability theory

Cited in **4** Reviews  
Cited in **2** Documents

**Keywords:**

Probability theory; Wahrscheinlichkeitstheorie; central limit theorem; theory of errors; physics; axiomatization; Markov chains; Mathematical statistics; method of least squares; randomness