

Book Reviews

Pierre D. Thionet. *Quelques problèmes concernant les sondages*. Goettingen: Vandenhoeck & Ruprecht. 1978. 137pp.

The publication reviewed is number 9 in the series "Applied Statistics and Econometrics" edited by Gerhard Tintner, Pierre Desire Thionet, and Heinrich Strecker. The purpose of the series is to publish papers "too long for ordinary journal articles, but not long enough for books Upon acceptance, speedy publication can be promised". The abstracts in English, French, and German, usual in this series, are missing from the copy reviewed.

The book consists of ten chapters: sampling theory; multi-stage sampling and other fundamental problems; optimum stratification; variances; sampling with replacement and other theoretical issues; experimental design; information theory; *a posteriori* raising factors; order statistics; Bayesian methods. Such an ambitious content within 130 pages requires parsimonious presentation. One chapter has been squeezed into hardly more than four pages. The chapter on *a posteriori* raising factors will be useful in developing countries and particularly when samples do not work out as designed. It will also be refreshing to those limited to the literature in the English language.

The topic treatment is uneven in the sense that some chapters are limited to a review of literature, while others follow an introduction to literature with substantive material, mainly from the author's own writings and those of his students. Readers will find it an important and valuable book, particularly anglophone readers, whose erudition might have been limited to English-language literature. Much of the book is a formidable and erudite *tour d'horizon*. Its value lies in constructing not so much a comprehensive whole, but in showing how the many disparate parts in the legion of journal articles, proceedings contributions, and edited book chapters, fit eventually all together. In weaving French contributions into the world developments the author displays some egocentricity.

Those brought up on the (fairy?) tales of Sir Ronald and the Pearsons (refusing sugar from the same bowl during tea breaks) will find no echoes of this fight of the giants in the Thionet overview. One method of resource allocation in sample design is even labelled Neyman-Yates; strange bedfellows and Sir Ronald must be turning in his grave. Some lesser fights are presented and concluded with the philosophical remark that "the issue seems to be less burning in 1975" then previously (p.68). There is much undiluted, commonsensical wisdom throughout, but surely the cost of enumerators is a real cost even if paid out of an external budget, rather than the given survey allocation. The "free" enumerator hours are not free societally and should enter into designs considerations. Thionet deplores the paucity of data on financial costs and the time taken – an area in which the guilt of survey-takers in developing countries is probably greater than in developed countries. Idiosyncrasies of Indian statisticians are brought out for the reader's attention.

Of the close to a dozen "classics" on sampling (Deming, Yates, Hansen *et al.*, Cochran, Sukhatme, Kish, Murthy, Som, and Sudman) the author makes no use of the last four. Every reader will find his pet omissions. The reviewer missed the literature on response variance (Bershad *et al.* seminal article in Tokyo and Fellegi's work in Canada), randomized response achievements (except p. 11), dual system estimations and their variances, but every reader is also bound to have darker corners of his knowledge illuminated and some cobwebs swept away. Few will equal Thionet's erudition. Some formulations will appear strange to well-informed readers and much emphasis will be found misplaced by others. To pronounce on some of the chronology suggested by Thionet in contributions from various writers would require more time, effort, and space than a reviewer can afford. All this will be only to the good of the victims of English-language and particularly North American ethnocentricity.

There is no index and the bibliographic procedures are anarchistic. The French terminology is *sui generis*, but there are a few expressions in English where equally good or better terms in French are available. Generally, Paenson's glossary (Pergamon and UNESCO 1970) is little being sinned against. The author is liberally unpendantic: for sampling without replacement he uses both "tirage sans remise" and "tirage exhaustif" (Paenson admits both; p. 380).

The book closes citing Lindley's proclamation of the next century as the century of Bayesians; Robbins envisions in such a development the coming of the Dark Ages. Both calls were made in 1974 at the Conference on Directions for Mathematical Statistics at the University of Alberta in Edmonton, from where this review is fittingly signed.