



Taylor & Francis  
Taylor & Francis Group



## American Society for Quality

---

### Review

Reviewed Work(s): Error and Inference: Recent Exchanges on Experimental Reasoning, Reliability, and the Objectivity and Rationality of Science by Deborah G. Mayo and Aris Spanos

Source: *Technometrics*, Vol. 52, No. 3 (August 2010), p. 369

Published by: Taylor & Francis, Ltd. on behalf of American Statistical Association and American Society for Quality

Stable URL: <https://www.jstor.org/stable/27867274>

Accessed: 07-03-2021 22:22 UTC

---

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact [support@jstor.org](mailto:support@jstor.org).

Your use of the JSTOR archive indicates your acceptance of the Terms & Conditions of Use, available at <https://about.jstor.org/terms>



JSTOR

*Taylor & Francis, Ltd., American Statistical Association, American Society for Quality* are collaborating with JSTOR to digitize, preserve and extend access to *Technometrics*

13. Nonparametric methods for measuring concordance between rankings: a case study on the evaluation of professional profiles of municipal directors

The first few chapters are dedicated to latent variables, which makes sense since most of the variables are not directly observable under topics of interest for this volume. Chapters 2–4 deal with latent variable models with educational applications, including ordinal and longitudinal data. On the other hand, Chapters 5 and 6 are dedicated latent variable models for hierarchical data, providing the use of multilevel models in education and estimation of the model parameters, respectively. Chapters 7–9 are somehow disconnected, standalone chapters. Having said that, these chapters deal with some important issues regarding evaluating service and performance, as well as conjoint analysis. Chapter 9 presents some robust diagnostic strategies in context with the studies on university performance evaluation. The last three chapters are devoted to nonparametric statistics with emphasis given on the evaluation issues arising in the education sector.

The main strength of the volume is that all chapters (except Chapters 5, 9, and 13) include a case study based on real datasets to illustrate the methodology described in the given chapters. This is a good contribution to statistical literature. The volume is well organized, structured, and presented; chapters appear in a logical order, and it contains useful information and applications. Further, the case studies presented in this book could be used in some regression and multivariate analysis courses.

**The Pleasure of Statistics—The Autobiography of Frederick Mosteller**, edited by Stephen E. FIENBERG, David C. HOAGLIN, and Judith M. TANUR, New York: Springer, 2010, ISBN 978-0-387-77955-3, xvi + 344 pp., \$39.95.

This volume is a companion to *Selected Papers of Frederick Mosteller* (Springer, 2006) and *A Statistical Model: Frederick Mosteller's Contributions to Statistics, Science, and Public Policy* (Springer-Verlag, 1990). The review of *Selected Papers of Frederick Mosteller* (Springer, 2006) was published in *Technometrics* in 2007 (Ahmed 2007). This edited volume presents the autobiography of Frederick Mosteller, the manuscript of which was started in the late 1980s by Mosteller and remained unfinished at his death. The editors retained Mosteller's voice and original schema, and worked diligently to clean up details and publish the manuscript.

This volume gives insights into the qualities that made Mosteller an enthusiastic instructor/teacher, prolific scholar, and a leader in statistical science. The volume showcases the personal details of a great scholar and gentleman—a human side! According to my quick counting, there are approximately 74 pictures of Mosteller—both individual and group shots, some of these of historical nature.

The book has 23 chapters which are nicely grouped into three parts as follows:

- Part I. Examples of Quantitative Studies (six chapters)
- Part II. Early Life and Education (nine chapters)
- Part III. Continuing Activities (eight chapters)

Chapter 23 serves as the Editors' Epilogue, detailing the life and work of Mosteller. A special feature of the book is its chapter-length insider accounts of various real-life works—for example, the preelection polls of 1948, statistical aspects of the Kinsey Report on sexual behavior in the human male, and the safety of anesthetics.

The editors have done a superb job in compiling this volume and I think they deserve a vote of thanks for their time and effort to make this volume a reality and for sharing such interesting information about Frederick Mosteller. There is a wealth of information regarding teaching, research, and many other interesting topics; an enjoyable read!

## REFERENCE

- Ahmed, S. E. (2007), Review of *Selected Papers of Frederick Mosteller*, edited by Stephen E. Feinberg and David C. Hoaglin, *Technometrics*, 49, 231. [369]

**Error and Inference: Recent Exchanges on Experimental Reasoning, Reliability, and the Objectivity and Rationality of Science**, edited by Deborah G. MAYO and Aris SPANOS, New York: Cambridge University Press, 2010, ISBN 978-0-521-88008-4, xvii + 419 pp., \$60.00.

This edited volume contemplates the interests of both scientists and philosophers regarding gathering reliable information about the problem/question at hand in the presence of error, uncertainty, and with limited data information. The volume makes a significant contribution in bridging the gap between scientific practice and the philosophy of science. The main contribution of this volume pertains to issues of error and inference, and showcases intriguing discussions on statistical testing and providing alternative strategy to Bayesian inference. In words, it provides cumulative information towards the philosophical and methodological issues of scientific inquiry at large.

The target audience of this volume is quite general and open to a broad readership. With some reasonable knowledge of probability theory and statistical science, one can get the maximum benefit from most of the chapters of the volume. The volume contains original and fascinating articles by eminent scholars (nine, including the editors) who range from names in statistical science to philosophy, including D. R. Cox, a name well known to statisticians.

The editors have done a superb job in presenting, organizing, and structuring the material in a logical order. The "Introduction and Background" is nicely presented and summarized, allowing for a smooth reading of the rest of the volume. There is a broad range of carefully selected topics from various related fields reflecting recent developments in these areas. The rest of the volume is divided in nine chapters/sections as follows:

1. Learning from Error, Severe Testing, and the Growth of Theoretical Knowledge
2. The Life of Theory in the New Experimentalism
3. Revisiting Critical Rationalism
4. Theory Confirmation and Novel Evidence
5. Induction and Severe Testing
6. Theory Testing in Economics and the Error-Statistical Perspective
7. New Perspectives on (Some Old) Problems of Frequentist Statistics
8. Casual Modeling, Explanation and Severe Testing
9. Error and Legal Epistemology

In summary, this volume contains a wealth of knowledge and fascinating debates on a host of important and controversial topics equally important to the philosophy of science and scientific practice. This is a must-read—I enjoyed reading it and I am sure you will too! The book gives a sense of security regarding the future of statistical science and its importance in many walks of life. I also want to take the opportunity to suggest another seemingly related book by Harman and Kulkarni (2007). The review of this book was appeared in *Technometrics* in May 2008 (Ahmed 2008).

## REFERENCES

- Ahmed, S. E. (2008), Review of *Reliable Reasoning: Induction and Statistical Learning Theory*, by Gilbert Harman and Sanjeev Kulkarni, *Technometrics*, 50, 238. [369]
- Harman, G., and Kulkarni, S. (2007), *Reliable Reasoning: Induction and Statistical Learning Theory*, Cambridge, MA: MIT Press. [369]

**Statistical Analysis of Management Data (2nd ed.)**, by Hubert GATIGNON, New York: Springer Science + Business Media, 2009, ISBN 978-1-4419-1269-5, xvii + 387 pp., \$179.00.

The first edition of this book was published in 2003 however we have not located a review of this first edition in *Technometrics*. There is no change in the presentation and philosophy of the material in this new edition. Like the first, this edition deals with statistical topics useful to researchers and graduate students in many fields of management such as:

- Finance
- Production
- Accounting
- Marketing
- Human Resources and other