

Comments to Help Achieve Uniformity in the Layout of Published Articles in Sequential Analysis

D. H. Author

Department of Statistics, University of Connecticut, Storrs, Connecticut, USA

C. B. Author

Department of Health Studies, University of Excellence, Chicago, Illinois, USA

Abstract: A clearly written abstract, preferably within 200 words, is essential. Please add some important [keywords alphabetically](#) (with the first letter capitalized), preferably chosen from the text and not from the title of the paper itself. The importance of the words used in a title is already obvious to readers. The keywords are to be separated by [semicolons \(;\)](#). Please also provide appropriate subject classification numbers, which can be found at this website: <http://www.ams.org/msc/>

Before authors prepare their final TEX or Word plus PDF files (as appropriate), they should make sure that the latest version of their accepted manuscript has taken into account all general guidelines laid out in this document as precisely as possible. One may not worry too much about some of the gray areas, but it is important that all the big concerns are addressed before an accepted manuscript is readied for typesetting by the publishing house (Taylor & Francis).

Keywords: Bounded CV; Consistency; Data analysis; Known clumping; Practical application; Two-stage sampling; Weight function.

Subject Classifications: 62L12; 62G35; 62F25.

1. INTRODUCTION

The first paragraph in every section or subsection will flush to the left margin. All other paragraphs will be indented. Please follow this general guideline.

[At the bottom of the first page](#), one should provide the e-mail, telephone and fax info, and complete address (including the street name, P. O. Box number, etc. as needed) for the corresponding author, formatted as follows:

Address correspondence to D. H. Author, Department of Statistics, CLAS Building U-4120, University of Connecticut, 215 Glenbrook Road, Storrs, CT 06269-4120, USA; Fax: 860-486-4113; E-mail: nitis.mukhopadhyay@uconn.edu

2. OTHER SECTIONS

The equation numbers, for example, (2.1), (2.5), (3.9), should be given consecutively, right flushed. Note the capitalization patterns for terms like “table(s),” “figure(s),” and “section(s)”: The equation number (2.1) is the first equation in Section 2, the equation number (2.5) may belong to Subsection 2.1, and so on. The tables will be numbered consecutively as Table 1, Table 2, and so on. The figures will be numbered consecutively as Figure 1, Figure 2, and so on. One may write, for example, tables and figures are given in Section 5. See Tables 1-3 in Section 5.1 and Figures 5-8 in Section 5.4. [Please look at a recent issue of SQA](#) and match the spacing, font sizes and general appearance.

How are the subsections going to look? Please read on.

2.1. Subsections May be Divided and Sub-Divided as Needed

The material in a subsection will be formatted just like that in any other section. The following paragraphs will be indented as usual.

Please read on for other helpful details and hints. The main theorem and its interpretations are included in Section 2.1.1.

2.1.1. The Main Result is Stated in This Section

The material in a subsection will be typed just like that in any other section. The following paragraphs will be indented as usual.

In Section 3, we have explained how theorems and lemmas are to be laid out.

3. THE WAY TO STATE THEOREMS AND LEMMAS

In this section, we provide a number of theorems and lemmas. After each [theorem](#) and [lemma](#), one should provide clear explanations and interpretations of the results so stated. The lengthy proofs are deferred to an appendix to enhance readability and applications.

Theorems and lemmas will be numbered as [Theorem 2.1](#), [Theorem 5.3](#) or [Lemma 2.2](#). These items consecutively belong to Sections 2, 5, and 2 respectively. The statements of theorems and lemmas should be laid out as follows:

Theorem 3.1. *The two-stage procedure (2.2)-(2.3) is consistent, that is, the probability of coverage is at least the nominal level for all parameter values.*

A short proof (few lines only) may be laid out as follows after the statement of the theorem. For example, one could write as follows:

Proof. The result follows by combining Jensen's inequality and the dominated convergence theorem. Further details are omitted for brevity. \square

Lemma 3.1. *The standardized sample mean based on N observations has a $N(0,1)$ distribution whatever be the unknown parameters.*

We should emphasize that Lemma 3.1 plays a crucial role in the proof of Theorem 3.3 which in turn eases the proof of Theorem 5.3 in the sequel. We lay down these lengthy proofs in [Appendix A](#).

4. TABLES AND FIGURES

The heading for [Table 2](#), for example, will go in the top of the [table](#) as follows, flushed to the left margin:

Table 2. Estimated average sample size, its estimated standard error, and other entries

along with the weight functions $g(k)$ and $h(p)$

Note that a table's caption does not end with a period. The caption for [Figure 8](#), for example, will go under the figure as follows, flushed to the left margin:

Figure 8. Bar graphs of four datasets on beetle infestation of Mexican bean crop.

Note that a figure's caption ends with a period. One may note that the entries given in our [tables](#) in this section were generated via computer simulations with 10,000 replications for each configuration. The [figure](#) shown on top of this paragraph was generated by S-Plus.

Tables and figures should be embedded in the text until a manuscript is finally accepted for publication. At that point, the tables and figures should be included as separate sheets or files. For detailed last-minute instructions, contact the Editor.

5. THE CITATION AND LAYOUT OF THE REFERENCES

At the end of the paper, the cited articles, books and other materials will be [arranged alphabetically](#). In the case of multiple references by the same author(s), these should be arranged chronologically one after the other. In case of multiple authors, look at the examples shown in the end that suits a particular situation.

In the list of references, [please follow the following rules very closely](#). Each major word in the title of a paper or book must be capitalized.

A paper's title will end with a comma, which will be followed by the [full name \(in italics\) of the journal](#). Then, give a space followed by the [volume number \(not bold or italic\)](#) with an immediate colon (:), a space and then the page numbers.

[A book's title is italicized](#). There is a special way to supply a publisher's name for a book. Please look at examples given at the end of this document and adhere to these rules closely in order to minimize corrections and changes when checking your galley(s).

Inside the text, the material from the list of references will be cited as follows. One will refer to [Abraham \(1996\)](#) as needed. See also [Anscombe \(1949, 1950, 1952\)](#) for many details. [Birnbaum and Healy \(1960a,b\)](#) had generalized the lemma. One could refer to [Allen et al. \(1972\)](#) or [Berti et al. \(1992\)](#) instead. One should be particularly careful about the phrase "et al." which [ends with a period](#). One should get a general picture from this.

But, we cannot write simply [Bechhofer et al. \(1954\)](#) for obvious reasons. Look at the reference list. There is a paper of [Bechhofer, Dunnett, and Sobel \(1954\)](#) that has been cited, and also there is a paper of [Bechhofer, Gupta, Epstein, and Sobel \(1954\)](#)! If we simply write [Bechhofer et al. \(1954\)](#) in the text, a reader may not be able to identify the right paper that is needed at this step. In such a situation, one should clearly spell out the citation as [Bechhofer, Dunnett, and Sobel \(1954\)](#) or [Bechhofer, Gupta, Epstein, and Sobel \(1954\)](#).

One may note that the required Cornish-Fisher expansion is easily found in [Johnson and Kotz \(1970, pp. 125-127\)](#).

Please read on for more notes to set up the list of references. The next Section 5.1 has important information.

5.1. Special Notes: List of References

One should carefully study how references to journal articles and books are included at the end of an article. Note that the [titles of all journals](#) are given [fully](#), but with one special subtlety: Instead of writing, for example, *Journal of the American Statistical Association* or *The Annals of Mathematical Statistics*, we [allow *Journal of American Statistical Association* or *Annals of Mathematical Statistics*](#). These are only examples. One will follow this basic rule with all journals. Authors should pay special attention to [details](#) including capitalization, italics, volume and page numbers, commas, colons, and spacing.

Also, please watch how the reference to a book is formatted. Please note the minute details including the publisher's name, city, and year of publication.

[An article in an edited volume](#) is cited differently from an article in a journal. For an article that appeared in an edited volume, the citation must include the year of publication, all names of editors, page numbers, and the publisher's name and city in a specific way. Please follow these guidelines very closely.

We have included a large set of examples in the reference list given at the end of this piece. In case of confusion, please look at one of the examples from this list that best suits a particular situation. Please note that this list includes references that have not been cited within the text. In a submitted article, however, one will include an item in the reference list if and only if that item has been mentioned within the text. We have provided a list of references for illustrative purposes only.

6. AFTER A MANUSCRIPT IS ACCEPTED FOR PUBLICATION

These are some of the things that the authors should take care of immediately after a manuscript is [finally accepted](#) for publication in *Sequential Analysis*. Please check the layout and examine if the manuscript's general appearance is consistent with the journal's most recent published articles. [Minding the minute details would be crucial at this point](#).

Please update the references by providing any missing information, for example, the year of publication, page numbers, volume number of the journal, publisher's names in the case of a book or an edited volume. [Please take a look at the most recent issue of *Sequential Analysis*](#) as needed.

When appropriate, authors may like to acknowledge help from the Associate Editor, referees, and others under "**ACKNOWLEDGMENTS.**" Any appreciation for funding may be added here too.

[Congratulations to the author\(s\)](#). Now they are ready to E-mail the very latest electronic version of their manuscript, which will ultimately appear in print in a future issue of *Sequential Analysis*.

Using a final TEX or Word file, the papers will be typeset at an appropriate time and only the [corresponding author](#) will receive an e-mail from the publisher with instructions on how to proofread and submit corrections to the material. Please remember that one normally gets [only about 48 hours for proofreading](#).

6.1. The Final Step

When a manuscript is ready to be sent to the Editor, the author(s) must include a [TEX](#) or

Word file along with a PDF version of the final manuscript in their E-mail to the Editor (nitis.mukhopadhyay@uconn.edu). That way, the Editor will receive from a corresponding author the two latest complete files which will then be forwarded to the publisher when it is time for “queuing”.

Please do not send a Postscript or a DVI.

If the final TEX file includes special macros and figures, the authors are requested to send EVERYTHING (including the latest PDF file) in one zip file with a description of its content to the Editor.

6.2. Copyright Transfer and Reprints

When galleys are E-mailed to the corresponding author, one will find a copyright transfer form and a reprint order form. Copyright transfer forms must be filled out and signed by at least one author, then immediately faxed or e-mailed directly to the Production Editor. If this form is not submitted promptly, an accepted article will be delayed for publication.

After a paper appears in print in SQA, its PDF file is made available only to the corresponding author. This file is for personal use only and may not be copied and disseminated in any form without prior written permission from Taylor and Francis Group, LLC.

APPENDIX A: PROOFS OF LEMMAS

Some major derivations are included in this section. The equation numbers (A.1), (A.2), etc. will be flushed to the right margin.

One may include more than one appendix when appropriate. This will largely depend on the material of a paper.

APPENDIX B: PROOFS OF THEOREMS FROM SECTION 3

Other major derivations are included in this section. The equation numbers (B.1), (B.2), etc. will be flushed to the right margin.

ACKNOWLEDGMENTS

We thank Professor X for his/her candid remarks. We also appreciated the comments made by the Associate Editor and two referees. Please edit and/or add what sounds appropriate.

REFERENCES

- Abraham, D. A. (1996). A Page Test with Nuisance Parameter Estimation, *IEEE Transactions in Information Theory* 42: 2242-2252.
- Allen, J. D., Gonzalez, D., and Gokhale, D. V. (1972). Sequential Sampling Plans for the Bollworm, *Helliothis zea Environmental Entomology* 1: 771-780.
- Anscombe, F. J. (1949). The Statistical Analysis of Insect Counts Based on the Negative Binomial Distribution, *Biometrics* 5: 165-173.
- Anscombe, F. J. (1950). Sampling Theory of the Negative Binomial and Logarithmic

- Series Distribution, *Biometrika* 37: 358-382.
- Anscombe, F. J. (1952). Large Sample Theory of Sequential Estimation, *Proceedings of Cambridge Philosophical Society* 48: 600-607.
- Barrigossi, J. A. F. (1997). Development of an IPM System for the Mexican Bean Beetle (*Epilachna Varivestis* Mulsant) As a Pest of Dry Bean (*Phaseolus Vulgaris* L.), Ph.D. diss., University of Nebraska-Lincoln.
- Bechhofer, R. E. (1954). ...
- Bechhofer, R. E. (1978). ...
- Bechhofer, R. E. and Albert, M. (1949). ...
- Bechhofer, R. E., Albert, M., and Dunnett, C. (1945). ...
- Bechhofer, R. E., Dunnett, C., and Albert, M. (1947). ...
- Bechhofer, R. E., Dunnett, C., and Kiefer, J. (1961). ...
- Bechhofer, R. E., Dunnett, C., and Kiefer, J. (1963). ...
- Bechhofer, R. E., Dunnett, C., and Sobel, M. (1954). A Two-Sample Multiple Decision Procedure for Ranking Means of Normal Populations with a Common Unknown Variance, *Biometrika* 41: 170-176.
- Bechhofer, R. E., Epstein, B., and Albert, J. (1957). ...
- Bechhofer, R. E., Epstein, B., and Sobel, M. (1952). ...
- Bechhofer, R. E. and Gupta, S. S. (1954). ...
- Bechhofer, R. E., Gupta, S. S., Epstein, B., and Kiefer, J. (1948). ...
- Bechhofer, R. E., Gupta, S. S., Epstein, B., and Sobel, M. (1951). ...
- Bechhofer, R. E., Gupta, S. S., Epstein, B., and Sobel, M. (1954). On a Sequential Reliability Problem, *Annals of Mathematical Statistics* 25: 321-334.
- Berti, A., Zanin, G., Baldoni, G., Grignani, C., Mazzoncini, M., Mon-temurro, P., Tei, F., Vazzana, C., and Viggiani, P. (1992). Frequency Distribution of Weed Counts and Applicability of a Sequential Sampling Method to Integrated Weed Management, *Weed Research* 32: 39-44.
- Binns, D. (1975). Sequential Estimation of the Mean of a Negative Binomial Distribution, *Biometrika* 62: 433-440.
- Birnbaum, A. and Healy, W. C., Jr. (1960a). Estimates with Prescribed Variance Based on Two-Stage Sampling, *Annals of Mathematical Statistics* 31: 662-676.
- Birnbaum, A. and Healy, W. C., Jr. (1960b). Remarks on Estimates with Prescribed Variance Based on Two-Stage Sampling, personal communication.
- Chatterjee, S. K. (1959). On the Extension of Stein's Two-Sample Procedure to the Multinomial Problem, *Calcutta Statistical Association Bulletin* 8: 121-148.
- Cooke, P. J. (1971). Sequential Estimation in the Uniform Density, *Journal of American Statistical Association* 66: 614-617.
- Ghosh, M. and Mukhopadhyay, N. (1981). Consistency and Asymptotic Efficiency of Two-Stage and Sequential Estimation Procedures, *Sankhya, Series A* 43: 220-227.
- Ghosh, M., Mukhopadhyay, N., and Sen, P. K. (1997). *Sequential Estimation*, New York: Wiley.
- Hyakutake, K. (1992). Selecting the Better Component of a Bivariate Exponential Distribution, *Statistics & Decisions* 10: 153-162.
- Isogai, E. and Uno, C. (1994). Sequential Estimation of a Parameter of an Exponential Distribution, *Annals of Institute of Statistical Mathematics* 46: 77-82.
- Johnson, N.L. and Kotz, S. (1970). *Distributions in Statistics: Continuous Distribution 1*,

- New York: Wiley.
- Klein, J. P. and Moeschberger, M. L. (2003). *Survival Analysis*, second edition, New York: Springer-Verlag.
- Kuno, E. (1969). A New Method of Sequential Sampling to Obtain Population Estimates with a Fixed Level of Accuracy, *Research in Population Ecology* 11: 127-136.
- Lerche, H. R. (1986). An Optimal Property of the Repeated Significance Test, *Proceedings of National Academy of Sciences U.S.A.* 83: 1546-1548.
- Mukhopadhyay, N. (2002). Sequential Sampling, in *The Encyclopedia of Environmetrics*, vol. 4, A. H. Shaarawi and W. W. Piegorsch, eds., pp. 1983-1988, Chichester: Wiley.
- Mukhopadhyay, N. and Datta, S. (1995). On Fine-Tuned Bounded Risk Sequential Point Estimation of the Mean of an Exponential Distribution, *South African Statistical Journal* 29: 9-27.
- Mukhopadhyay, N. and Diaz, J. (1985). Two-Stage Sampling for Estimating the Mean of a Negative Binomial Distribution, *Sequential Analysis* 4: 1-18.
- Mulekar, M. S. and Young, L. J. (1991). Approximations for a Fixed Sample Size Selection Procedure for Negative Binomial Populations, *Communications in Statistics-Theory & Methods* 20: 1767-1776.
- Mulekar, M. S. and Young, L. J. (2004). Sequential Estimation in the Agricultural Sciences, in *Applied Sequential Methodologies*, N. Mukhopadhyay, S. Datta, and S. Chattopadhyay, eds., pp. 293-318, New York: Dekker.
- Onsager, J. A. (1976). The Rationale of Sequential Sampling, with Emphasis on Its Use in Pest Management, *Technical Bulletin* 1526, Washington, D.C.: Agricultural Research Service, USDA.
- Rosner, G. L. and Berry, D. A. (1995). A Bayesian Group Sequential Design for a Multiple Arm Randomized Clinical Trial, *Statistics in Medicine* 14: 381-394.
- Sen, P. K. (1985). *Theory and Applications of Sequential Nonparametrics*, Philadelphia: SIAM.
- Spiegelhalter, D. J., Freedman, L. S., and Parmar, M. K. B. (1994). Bayesian Approaches to Randomized Trials, *Journal of Royal Statistical Society, Series B* 157: 357-416.
- Starr, N. and Woodroffe, M. (1972). Further Remarks on Sequential Estimation: The Exponential Case, *Annals of Mathematical Statistics* 43: 1147-1154.
- Stein, C. (1949). Some Problems in Sequential Estimation (abstract), *Econometrica* 17: 77-78.
- Sterling, W. L. (1976). Sequential Decision Plans for the Management of Cotton Anthropods in Southeast Queensland, *Australian Journal of Ecology* 1: 265-274.
- Takahashi, H. (1990). Asymptotic Expansions for Repeated Significance Tests for the Normal Means, *Journal of Japan Statistical Society* 20: 51060.
- Woodroffe, M. (1977). Second-Order Approximations for Sequential Point and Interval Estimation, *Annals of Statistics* 5: 984-995.
- Wu, Y. (2005). *Inference for Change-Point and Post-Change Means After a CUSUM Test*, Lecture Notes in Statistics 180, New York: Springer-Verlag.
- Zabell, S. (1976). Rates of Convergence for Conditional Expectations, I. Large Deviation Case; and II. General Theorems, unpublished.
- Zacks, S. and Mukhopadhyay, N. (2005). Bounded Risk Estimation of the Exponential Parameter in Two-Stage Sampling, *Sequential Analysis*, in press.

Zou, G. (1998). Weed Population Sequential Sampling Plan and Weed Seedling Emergence Pattern Prediction, Ph.D. diss., University of Connecticut-Storrs.

Last Updated May 8, 2006