Anders Hald (1913-2007)

Writings on the History of Probability and Statistics

Introduction

For his scientific, pedagogical and organisational achievements Anders Hald has been called the father of the modern Danish tradition in Statistics (Lauritzen 2008; see also Keilding (2008)). Hald came to the history of statistics late but from his retirement in 1982 until his death he devoted himself to its study and produced a substantial body of work.

Two books dominate the Hald bibliography. In the Preface to the first, *A History of Probability and Statistics and Their Applications before 1750*, Hald explained how he intended to write a book on the history of statistics in the nineteenth century as such a book was badly needed. However, he had difficulties understanding Laplace whose roots were in the eighteenth century. Reading Laplace's predecessors Hald found that the treatment of many topics in Todhunter's *A History of the Mathematical Theory of Probability: from the Time of Pascal to that of Laplace* (1865) was inadequate and so the first book was an introduction to the one he had originally planned. Laplace was the main presence in his second, much larger book *A History of Mathematical Statistics from 1750 to 1930* which took the story up to the time of Fisher and to Hald's

own entry into Statistics. A third book, *A History of Parametric Statistical Inference from Bernoulli to Fisher, 1713—1935*, picked out a single thread from the two earlier works.

Obituaries

- Neils Keiding (2008) Obituary: Anders Hald, 1913-2007, [IMS Bulletin, 2007 37 issue 1, 12.](#)
- Steffen Lauritzen (2008) Obituary: Professor Anders Hald, 1913-2007, forthcoming in *Journal of the Royal Statistical Society: Series A*.

A list of Hald's writings

Most of Hald's writings were noted in *Mathematical Reviews* and where this is the case a link is given.

Books

- *A History of Probability and Statistics and Their Applications before 1750.* Wiley Series in Probability and Mathematical Statistics. New York (Wiley). 1990. xii + 586 pp. ISBN: 0-471-50230-8. [MR: Lancaster.](#)

- *A History of Mathematical Statistics from 1750 to 1930*. Wiley Series in Probability and Statistics: Texts and References Section. A Wiley-Interscience Publication. John Wiley & Sons, Inc., New York, 1998. xx+795 pp. ISBN: 0-471-17912-4. [MR: Seneta.](#)

- *A History of Parametric Statistical Inference from Bernoulli to Fisher, 1713—1935.* Sources and Studies in the History of Mathematics and Physical Sciences. Springer, New York, 2007. xiv+223 pp. ISBN: 978-0-387-46408-4; 0-387-46408-5. [MR: Bellhouse](#).

Articles

T. N. Thiele's contributions to statistics. *International Statistical Review*. 49, (1981), no. 1, 1-20. [MR](#) Reprinted in Steffen L.

Lauritzen Thiele: *Pioneer in Statistics*. Oxford University Press, New York, 2002. [MR](#)

Statistikkens teori (Theoretical Statistics) in Københavns Universitet 1479-1979 (University of Copenhagen 1479-1979), pp. 213-327. Copenhagen: Gad, 1983.

(With S. Johansen) On de Moivre's recursion formulae for the duration of play. *International Statistical Review*. 51, (1983) no. 3, 239-253. [MR](#)

Commentary on De mensura sortis. *International Statistical Review* 52 (1984), no. 3, 229-236. [MR](#)

Galileo's statistical analysis of astronomical observations. *International Statistical Review* 54 (1986), no. 2, 211-220. [MR](#)

On the early history of life insurance mathematics. *Scandinavian Actuarial Journal*. (1987), no. 1-2, 4-18. [MR](#)

On de Moivre's solutions of the problem of duration of play, 1708--1718. *Archive for History of Exact Sciences* 38 (1988), no. 2, 109-134. [MR](#)

Hald, A. Evaluations of the Beta probability integral by Bayes and Price. *Archive for History of Exact Sciences* 41 (1990), no. 2, 139-156. [MR](#)

On the history of maximum likelihood in relation to inverse probability and least squares. *Statistical Science*, 14 (1999), no. 2, 214-222. [MR](#)

Studies in the history of probability and statistics. XLVII. Pizzetti's contributions to the statistical analysis of normally distributed observations, 1891. *Biometrika* 87 (2000), no. 1, 213-217. [MR](#)

The early history of the cumulants and the Gram-Charlier series, *International Statistical Review* 68 (2000), no. 2, 137-153. Reprinted in Steffen L. Lauritzen Thiele: *Pioneer in Statistics*. Oxford University Press, New York, 2002. [MR](#)

On the history of the correction for grouping, 1873--1922. *Scandinavian Journal of Statistics*, 28 (2001), no. 3, 417-428. [MR](#)

On the history of series expansions of frequency functions and sampling distributions, 1873-1944, Matematisk-fysiske meddelelser, 49 ISSN: 00233323, Published: Cophenhagen : C.A. Reitzels Forlag, 2002. .

The history of the law of large numbers and consistency Preprint (Københavns universitet. Department of Applied Mathematics and Statistics); no. 2, 2003. 38pp.

Nogle danske statistikeres liv og deres værker. Mathematisk-fysiske meddelelser; bd. 51,   Published: Kobenhavn : 2005. 36 pp.

Reviews of the books

Hald's books were widely reviewed in the Statistics journals and received enthusiastically.

A History of Probability and Statistics and Their Applications Before 1750

Reviewer George A. Barnard: *SIAM Review*, 33 (1991), no. 2, 286-290.

Reviewer S. C. Pearce: *Biometrics*, 47 (1991), no. 3. 1200-1200

Reviewer Eugene Seneta: *Historia Mathematica*, 18 (1991), no. 1, 75-78.

Reviewer A. W. F. Edwards: *Journal of the Royal Statistical Society. Series A (Statistics in Society)*, 155 (1992) no. 1, 172-173

Reviewer David J. Hand: *Applied Statistics*, 41 (1992) no. 1, 219-219.

Reviewer James Reilly: *The Statistician*, 41 (1992), no. 2, 254-254

A History of Mathematical Statistics from 1750 to 1930.

Reviewer A. W. Kemp: *Biometrics*, 54, (1998), no. 3, 1200-1201.

Reviewer Herbert A. David: *Journal of the American Statistical Association*, 94, (1999), no. 3, 646-648

Reviewer Eric R. Ziegel: *Technometrics*, 41 (1999), no. 1 85-85.

Reviewer Bernard Bru *Mathématiques et Sciences Humaines*, (2005), n° 171, Automne. here

A History of Parametric Statistical Inference from Bernoulli to Fisher, 1713--1935.

So far only the *Mathematical* Reviews review (above) has appeared.

If you know of any omissions in this list, please let me know.

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