

Meddelelser, v/Morten Frydenberg
Institut for Biostatistik
Århus Universitet

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MEDDELELSER

Dansk Selskab for Teoretisk Statistik

Foredrag i selskabet

tirsdag den 24. marts 1998 kl 17:00, H.C. Ørsted Institut, Århus ?

The shrinkage effect, cross validation calibration, and the construction of prognostic indices

Werner Vach

Department of Statistics and Demography, Odense University

The construction and validation of predictors is paid more and more attention in biometry, especially in the context of prognostic indices. A very influential contribution was the paper by van Houwelingen and le Cessie, which appeared in 1990 in *Statistics in Medicine*. In this paper they illustrate a so called shrinkage effect, which can be observed if prognostic indices are validated using independent data sets. Additionally they propose to improve prognostic indices by shrinkage methods, and propagate a cross validation calibration procedure to compute the necessary shrinkage factor.

In this talk it is demonstrated, that the shrinkage effect and the improvement of predictors by shrinkage are independent phenomena. For this we first investigate the source of the shrinkage effect and show, that it is closely related to the phenomenon of regression to the mean. Furthermore this investigation shows, that the shrinkage effect is no argument for the change of prediction rules, and must be taken into account only for the validation. In a second step we show, that the improvement of predictors by shrinkage is mainly due to the fact, that we can improve any unbiased estimator by some shrinkage with respect to the MSE. Furthermore it is shown, that for the specific predictor proposed by van Houwelingen and le Cessie the improvement of the average prediction error is to be paid by large deteriorations for some patients. This rises also the question, whether the average prediction error is an appropriate measure in medical applications.

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torsdag den 26. marts 1998.

Bidrag bedes sendt til:

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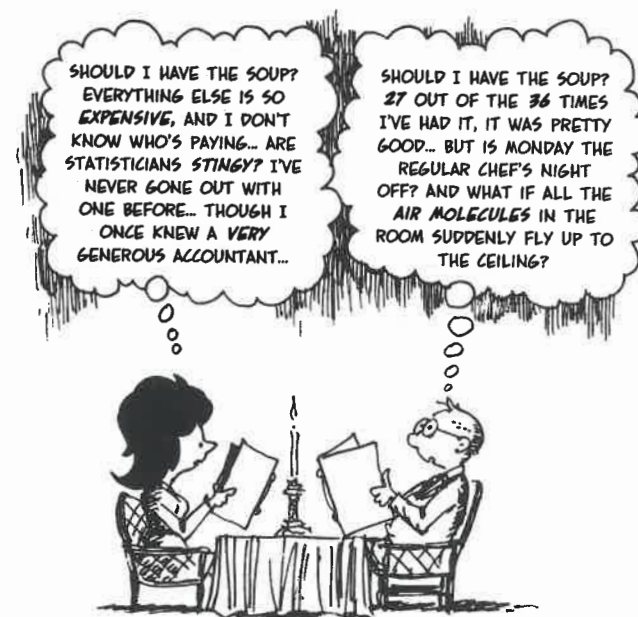
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BASED ON INCOMPLETE INFORMATION...



"The Cartoon Guide to Statistics" af Larry Gonick & Woolcott Smith

Department of Theoretical Statistics
University of Aarhus

Thursday, 12 March, 1998 at 14.15 in H2.28

Antonieta A. Q. Peres, DEMAT-UFRRJ, Seropédica, RJ, Brazil:

A study of mortality and air pollution for São Paulo, Brazil

We study the effects of climatic and pollution conditions on the daily death counts for people more than 65 years old in São Paulo, Brazil, from 1991 to 1993. We use a state space model, first introduced by Jørgensen *et al.* (1995), in which the daily counts, given a gamma latent process, follows a Poisson distribution. The time varying covariates may enter the model either via the observed process or via the latent process.

REFERENCE:

Jørgensen, B., Lundbye-Christensen, S., Song, P.X.-K. and Sun, L. (1995). A state space model for multivariate longitudinal count data. Technical Report #148, Department of Statistics, University of British Columbia.

Organizer: Jens Ledet Jensen

SEMINAR I MATEMATISK STATISTIK OG SANDSYNLIGHEDSREGNING.

Afdeling for Teoretisk Statistik, Københavns Universitet.

Seminarerne afholdes kl. 15:15 præcis i auditorium 10 på H.C. Ørsted Instituttet.

Der serveres te i lokale E325 kl. 15:00.

Onsdag den 11. marts: Ruggero Bellio (University of Padova):

Computer algebra and likelihood asymptotics.

Computer Algebra systems represent a powerful though still underused facility available to research statisticians. In particular, they may be very useful in likelihood asymptotics.

In this talk, it will be presented a package of REDUCE procedures for likelihood asymptotics, called AMCA (*Asymptotic Methods by Computer Algebra*). The package, which was developed during the last two years jointly with Alessandra Brazzale, is capable of handling two classes of statistical problems. I will give a brief introduction to some general problems related to the implementation of asymptotic calculations on a computer algebra system, and an explanation of the main features of the package.

Two examples of applications will be presented. They may be considered as illustrative examples of use of the AMCA package, but they also have an intrinsic interest. The first example is related to the problem of performing conditional simulations. The second example is related to the use of Barndorff-Nielsen's Modified Profile Likelihood as an inferential tool.

Onsdag den 1. april: Martin Richter (ATS-KU):

Approximationer af stokastiske differentialligninger.

Vi betragter to eksempler

$$dX_t = (A + BX_t) dt + D dW_t, \quad X_0 = x_0, \quad (1)$$

hvor A er en d -dimensional søjle, B hhv. D er $d \times d$ og $d \times m$ matricer og W en m -dimensional Brownsk bevægelse, og

$$dY_t = (a + bY_t) dt + \sigma Y_t^\gamma dW_t, \quad Y_0 = y_0 > 0, \quad (2)$$

hvor a , b er reelle tal, σ og γ positive tal og W en 1-dimensional Brownsk bevægelse. Parametrene i den anden model er valgt, så der findes en entydig stærk løsning.

Vi skal se, hvordan vi ved brug af Itô's lemma kan opstille de klassiske skemaer, Euler, Milstein og strong 1.5 for de to eksempler. Desuden bliver det illustreret, hvilke problemer der opstår, når man ønsker at opstille skemaer af højere orden.

Onsdag den 15. April: Stephen Chamberlin (York University):

Self-similarity of mathematical likelihood.

We study sufficiency in terms of the extent to which the Taylor series expansion of the normed log likelihood function generated by the sampling distribution of a statistic conforms to that of the sample normed log likelihood function and give an associated self similar property of mathematical likelihood.

Onsdag den 29. april: Helle Sørensen (ATS-KU):

Titel og abstract offentliggøres senere.

Onsdag den 6. maj: Bent Jørgensen (University of British Columbia and Odense University):

Basu's Theorem and Generalizations.

We show the following generalization of Basu's Theorem: Let (S, A) be sufficient, the conditional distribution of S given A be complete, and (A, U) be ancillary. Then S and U are conditionally independent given A . Basu's original theorem corresponds to the special case where A is constant. The theorem also extends a conditional independence result for transformation models originally due to Stein, where U is invariant and A is the invariant reduction of the sufficient statistic. For inference, the result implies that only ancillaries which are functions of the sufficient statistic need to be considered, or in other words that the order in which ancillarity and sufficiency are invoked is immaterial.

p.a.v. Michael Sørensen.

4th Sensometrics Meeting 1998 The Royal Veterinary and Agricultural University Copenhagen 6-8 August 1998

Background

Sensometrics is a research field covering mathematical and statistical analysis of data from sensory and consumer science. Sensory data are typically derived by a panel of human assessors that objectively evaluate a number of products in terms of their sensory attributes and from consumer studies. Sensory analysis is more and more commonly used by the food industry as a tool for measuring important characteristics of food products, but also has applications in other fields, such as personal care products and household cleaning products. Sensory science also include basic research, e.g. studies of relationships between analytical sensory measurements and product acceptability data from consumers and to instrumental measurements.

Preliminary session list

Analysis workshop

Assessor analysis

Design of sensory and consumer studies

Relating sensory and consumer preference data

Relating sensory and instrumental data

Sensometrics and mathematical psychology

Sensometrics in industry

Statistical testing in multivariate methods for sensory data

Time intensity data

List of invited speakers

- Professor Byron Jones, Department of Medical Statistics, De Montfort University, The Gateway, Leicester LE1 9BH, UK. (Prel. title: A review of methods for the design and analysis of cross-over trials.)
- Sijmen de Jong, Unilever Research Vlaardingen, P.O. Box 114, 3130 AC Vlaardingen, The Netherlands.
- Professor Peter Juslin, Dep. of Psychology, Uppsala University, Box 1225 S-751 42 Uppsala, Sweden. (Prel. title: The sensory sampling model: Theoretical developments and empirical findings)
- Professor Georges Le Calvé, Department of Mathematics and Statistics, University of Rennes II, 6 avenue Gaston Berger, 35043 Rennes Cedex, France. (Prel. title: Statistics and sensory analysis: who is taking advantage of the other?)
- Professor Rolf Sundberg, Department of Mathematical Statistics, Stockholm University, S-106 91 Stockholm, Sweden.

Workshop

During the meeting there will be a workshop on **Statistical analysis of sensory profiling data**. All participants are encouraged to try their favorite technique on the data, see the home-page for further information, downloading of data and deadlines.

Call for papers

You are invited to present a paper or poster within the topics of the meeting. Authors wishing to give a presentation or a poster must submit abstracts (no more than one page) in English by 15 March 1998. Final selection of papers and posters will be made by the end of April 1998. For all oral presentations an extended abstract will be asked for by 1 July. All papers will be published in Food Quality and Preference after the standard referee process. Please mail, fax or email your abstract to the scientific contact address. Please include full name, address and email of first author together with an indication whether a poster or an oral presentation is preferred.

Important dates			Participation fees	
Abstract submission deadline	15 March	1998	Before 1 May 1998	DKK 1.700*
Selection of papers and posters	1 May	1998	After 1 May 1998	DKK 2.500
Registration fee paid by	1 May	1998	Accompanying persons	DKK 1.500
Workshop abstract deadline	1 May	1998		
Extended abstract deadline	1 July	1998		
Workshop contribution deadline	1 July	1998		

*Expected registration fee for speakers: DKK 1.000.

The fees include three lunches, a get-together evening buffet, a conference banquet and an on site cafe serving refreshments during the entire meeting.

Organising Committee

Per Bruun Brockhoff(Chair), Ib Skovgaard, Magni Martens, Wender Bredie, Rasmus Bro, Judith Henning, Morten Svarre, Diane Thomsen, Garnt Dijksterhuis, El Mostafa Quannari, Anthony Hunter.

Scientific Committee

Pascal Schlich (Chair), Per Bruun Brockhoff, Garnt Dijksterhuis, Hildegard Heymann, Joachim Kunert, Hal J.H. MacFie, A. W. MacRae, Jean McEwan, Magni Martens, Tormod Næs, Sebastiano Porretta, Pieter Punter, El Mostafa Quannari, Ib Skovgaard.

Scientific contact address

Sensometrics 1998, Per Bruun Brockhoff, Department of Mathematics and Physics, KVL, Thorvaldsensvej 40, DK-1871 Frederiksberg C, Denmark. E-mail: sensom98@dina.kvl.dk, fax: +45 35 28 23 50

Further information: <http://www.dina.kvl.dk/sensom98>



4TH SENSOMETRICS MEETING 6 - 8 August 1998 Copenhagen, Denmark

CONGRESS REGISTRATION FORM INVOICE

Please use **BLOCK CAPITALS** when completing this form!

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If you fax this form please do not send it by post or fax it again.

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Country:

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Accompanying Person(s):

Prof/Dr/Mr/Mrs/Ms

Last name:

First name(s):

Prof/Dr/Mr/Mrs/Ms

Last name:

First name(s):

REGISTRATION FEES:

(All in Danish Kroner (DKK) and per person)

	DKK	DKK
Participants:		
Before 1 May	1.700	
After 1 May	2.500	
	1.500	
Accompanying persons		
ACCOMMODATION (Important: This ensures your reservation)		
	Cat. A,B &C:	Cat D:
Deposit per room	DKK 1.500	DKK 1.000

TOTAL DKK



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Category	Single room DKK per night	Please check!	Double Room or Twin DKK per night	Please check!
A*****	1.400 - 1650		1.600 - 1.900	
B****	1.100 - 1.350		1.200 - 1.500	
C***	750-990		910 - 1.290	
D**	525 - 700		750 - 850	

Prices are per room, per night and include: Buffet breakfast, 15% service charge and 25% VAT.
Gratuities are not necessary.

Arrival and Departure

Arrival date: /August 98 Departure date: /August 98 N° of nights:

Special Requests:

Please note: Rooms will be allocated on a first come first served basis. Hotel accommodation cannot be processed unless a deposit per room is enclosed with this registration form. No registration or room reservation will be confirmed until International Conference Services A/S has received your payment.

Payment

All payment must be in Danish Kroner (DKK) only, made payable to International Conference Services. **Please make sure that your name, address, and "Sensometrics" are clearly stated on all payments and transfer documents.**

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SHORT COURSE IN BIOSTATISTICS

MEASUREMENT ERROR MODELING – LINEAR AND NON-LINEAR REGRESSION MODELS

AAS, NORWAY, JUNE 3 – 5, 1998

A course on **Measurement error modeling – linear and non-linear regression models** will be given at Aas, Norway, June 3 – 5, 1998.

John Buonaccorsi will teach the course. He is a Professor of Statistics, University of Massachusetts at Amherst. He has been working with models for measurement error for a long time; for references to some of his work, see for instance the recent book on this topic by Carroll, Ruppert and Stefanski (1995).

Course venue:

The venue of the course will be the Agricultural University of Norway at Aas, which is located 30 km south of Oslo. Aas is easily accessible from Oslo by train or by car.

COURSE DESCRIPTION:

This course will introduce measurement error models, investigate the consequences of measurement error, and then discuss approaches to correcting for measurement error based on additional data/information which allows for estimation of measurement error parameters. Problems treated include misclassification of categorical variables in analyzing proportions or contingency tables, and measurement error in the response and/or predictor variables in linear and nonlinear regression models. Both theory/methods and applications will be covered.

1. Measurement error models.

What is measurement error? Misclassification of categorical variables. Measurement error models for quantitative variables (including additive and non-additive measurement error).

2. Types of additional data used to correct for measurement error.

Replication, validation data (internal and external).

3. Misclassification in the analysis of categorical data.

Estimation of a single proportion; analysis of contingency tables.

4. Measurement error in regression.

A. Linear regression.

Simple and multiple linear regression.

B. Nonlinear regression models.

General nonlinear models, generalized linear models,
binary regression models.

The exercise work includes theoretical as well as practical exercises. Hands-on exercises with computing, using SAS, SAS/IML and SPLUS where possible, will also be included.

There will be a course exam, organized as a take-home exam, after the course. This may include some theoretical, as well as practical problems.

Course programme:

Lectures: 08.45 – 11.00
Exercise work: 11.15 – 12.15
Lunch: 12.15 – 13.00
Lectures: 13.00 – 15.00
Exercise work: 15.00 – 16.00
Concluding discussion: 16.00 – 16.30

Accommodation:

Accommodation in single rooms at student dormitories will be available at a price of NOK 350 including breakfast. The student dormitories are located approximately 500 meters from the course venue.

Course fee:

The course is sponsored by Biometric Society, Nordic Region. The course fee for members of Biometric Society will be NOK 2.500. For non-members the price is NOK 3.000. The course fee includes lunches during the course, hand-outs etc. Accommodation is not included.

Organizers:

The course is organized by Are Aastveit, Trygve Almøy, and Petter Laake

Registration and further information:

Final date for registration is **April 1, 1998**. The number of participants will be limited to about 30.

For registration and further information please contact:

Are Aastveit, Department of Mathematics, Agricultural University of Norway
P.O. Box 5035, 1432 Aas-NLH, NORWAY
Tel: +47 6494 8872 Fax: +47 64948879 E-mail: are.aastveit@imf.nlh.no

SHORT COURSE IN BIOSTATISTICS

Aas, Norway, June 3-5, 1998

Registration Form

Family name:

First name:

Affiliation

Mailing address:

Telephone:

Fax:

E-mail:

Member of Biometric Society: Yes () No ()

Accommodation:

Student dormitory: ()

No accommodation: ()

Date:

Signature:

Kindly remit the amount to Union Bank of Norway, Oslo, 1654.25.21590, Course in Biostatistics 1998, P.O. Box 5035, 1432 Aas, NORWAY,
SWIFTCODE: UBNONOKK

Mail this registration form within April 1 to:

Are Aastveit
Department of Mathematics
Agricultural University of Norway
P.O. Box 5035
1432 Aas-NLH, NORWAY

Kalender

(arrangementer annonceret i MEDDELELSER)

Dato	Med. nr.	Aktivitet
11/3 98	1	Seminar. Ruggero Bellio: Computer algebra and likelihood asymptotics (ATS,KU).
12/3 98	2	Seminar. Antonieta A. Q. Peres. A study of mortality and air pollution for São Paulo. (ATS, AAU)
12/3 98	1	Seminar. Hans J. Munkholm: Poul Heegaard (1871-1948) - hans matematik g hans person (Aalborg).
1/4 98	2	Seminar. Martin Richter. Approximationer af stokastiske differentia ligninger. (ATS,KU)
15/4 98	2	Seminar. Stephen Chamberlin. Self-similarity of mathematical likelihood. (ATS,KU)
29/4 98	2	Seminar. Helle Sørensen. (ATS,KU)
6/5 98	2	Seminar. Bent Jørgensen. Basu's Theorem and Generalizations. (ATS,KU)
3-5/6 98	2	Short Course in Biostatistics. John Buonaccorsi. Measurement error modeling - linear and non- linear regression models. (Aas, Norge) Registration date 1. April
8-12/6 98	1	17. Nordiske konference i matematisk statistik. Helsingør. Http://www.dsts.dk/nordisk.konf/
6-8/8 98	2	4 th Sensometrics Meeting 1998. (København) http://www.dina.kvl.dk/sensom98
7-10/8 98	97,9	European summer school. Markov Chain Monte Carlo Methods. Deadline for applications 27. March
24-28/8 98	97,9	19 th International Society for Clinical Biostatistics Meeting. Dundee. Deadline for abstracts 15. April.
24-28/8 98	97,6	COMPSTAT 98. Bristol UK. Fax: +44 1582 760981. E-mail: compstat-98@bristol.ac.uk . WWW: http://www.stats.bris.ac.uk/compstat/

Deadlines i 1998

Frist for indlevering af bidrag:

26. marts 1998
24. april 1998
25. maj 1998

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2. juni 1998

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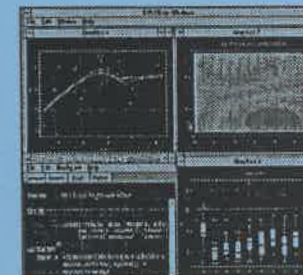
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