



Statisticians Networking Forum

A Statisticians Networking Forum was held in Wollongong on October 7th and 8th. Its purpose was to identify and discuss the issues confronting statisticians and the statistical profession, and to establish networks to address some of these issues.

The Forum was a joint initiative of Queensland Rail and the Statistical Society of Australia, and it was supported by BHP and Deal with Complexity Centre Pty Ltd; MINITAB Statistical Software provided sponsorship. The Forum was conducted in parallel with WAYS'99, and Forum participants took advantage of common tea breaks and joint meal arrangements to network with the young statisticians.

After joining the WAYS'99 group on Wednesday night for dinner and a great Trivia Quiz presented by Eric Sowe and Peter Petocz, the Forum kicked off on Thursday morning under the Chairmanship of Des Nicholls. Day 1 consisted of a number of short presentations based on significant issues for statisticians and the statistical profession. These were interspersed with facilitated discussion sessions in which the participants brainstormed their views on the issues. At the end of Day 1, a snowstorm of pieces of paper with issues on them had been generated. The participants then conducted an Affinity Sort to group the issues, and counted votes to establish an "importance order" for the groups.

Day 2 began with a session on issues in the marketing of Accreditation; more detail is provided in another

article in this Newsletter. Participants then returned to the issues groups generated at the end of Day 1. They confirmed their view that the highest ranked groups were the important ones, and chose the top five to work on. Individual Forum participants chose which of the groups they wanted to work on, and retired in their groups to develop task briefs for the issues group they had chosen. These task briefs were then presented to, and discussed by, the Forum as a whole.

The groups, a brief description of their task, and their contact person, are -

1. **Statistical thinking in management:** To increase the extent to which statistical thinking is embedded in management thinking (Walter Robb, walter.robb@treasury.qld.gov.au)
2. **Statistical Society:** To enhance the professional aspects of the Statistical Society (John Henstridge, john@daa.com.au)
3. **Education in statistics:** To promote statistical thinking and integrate it through learning processes at all levels (Tim Fry, Tim.Fry@buseco.monash.edu.au)

4. **Careers:** To promote recognition of career paths in statistics in Australia (Geoff Lee, geoff.lee@abs.gov.au)
5. **Public perception:** To broaden the public understanding of the role of statistics (Geoff Robinson, geoff.robinson@cmis.csiro.au)

In addition, Eden Brinkley volunteered to act as contact between the groups and the Executive of the Statistical Society.

There is a great deal of enthusiasm amongst the groups to achieve something, and they will be developing plans to carry out their tasks. The contact people listed above would be pleased to hear from you if you are willing to contribute to their group achieving its aims.

What next?

The task briefs, the Forum discussion of them, and the issues generated on Day 1 will be put on the Web page of Deal with Complexity Centre, www.dealcomplexity.com.au

The groups, broadened by additional interested people, will work on their tasks.

There will be another opportunity to discuss the five highlighted issues, as well

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DEADLINE FOR NEXT ISSUE:

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as other issues, associated with ASC15 in Adelaide in July next year. There may possibly be another Statisticians Networking Forum earlier than that.

Thanks go to Stacey Barr, Greg Knight, Anne Rego, Alan Long and Helen MacGillivray who facilitated the Forum's deliberations, to Andrew Collins and the WAYS'99 organisers for coordinating local arrangements and to Anthony Deal of Deal with Complexity Centre who made the conference arrangements go like clockwork.

Finally, some lasting impressions

Stacey Barr juggling and Geoff Robinson on a unicycle, urging us in their introductory talk to "take risks".

Industrial strength breakfasts beside the beach, organised by the people from BHP. The main fare was a hamburger bun filled with cheese, fried egg and bacon! There were cereals and juice for the faint-hearted.

Prizes flying through the air to winners of "Buzzword Bingo" (first to spot the use of five out of a list of nominated buzzwords or buzzphrases like Benchmarking, Win-win scenario, Quality, and Martingales in Banach Space).

Doug Shaw

Marketing Statistics as a Career

A group is being formed to market statistics as a career.

The members are currently: Geoff Lee (Facilitator), Michael Adena, Margaret MacKisack, and Philip McCloud. If you would like to contribute your expertise and time to such a group please contact Geoff Lee at goeff.lee@abs.gov.au, or Philip McCloud at philip.mccloud@roche.com.

We would be particularly keen to hear from people who have experience in marketing careers to high school students.

Geoff Lee

Minutes of the Annual General Meeting of the Australian Statistical Publishing Association Inc. (ASPAI).

Held at 6.25 p.m. on Wednesday, 14 July 1999 in Carslaw Room 173, University of Sydney.

The meeting was chaired by the President, Professor Ian James.

1. Attendance, Apologies and Proxies

As per attendance book.

2. Confirmation of the Minutes

The minutes of the 1998 Annual General Meeting held on 7 July 1998 were confirmed (D. Shaw / J. Douglas).

3. Presentation of the Journal Editor's Report

The Annual Report of the Editor of the *Australian and New Zealand Journal of Statistics* (ANZJS) was tabled for discussion. In the report Simon Sheather noted that the numbers of both local and overseas submissions have increased steadily over the past two years. However the number of applications papers submitted has dropped back to only four in the past six months. He thanked the Editorial team, the Copy Editor (Ann Milligan) and Compositor (Eileen Dallwitz) for their help and support during the year.

4. Newsletter Editors' Report

The Newsletter Editors' Report was prepared by Eden Brinkley. He thanked Branches for their submissions and photographs in 1998. He reminded people that the Newsletter was an effective place to advertise jobs, books, and meetings. He asked members to promote the Newsletter as a vehicle for reaching statisticians.

5. Presentation of the Treasurer's Report

The audited financial statement was accepted (N. Weber / D. Shaw).

6. Appointment of signatories to operate accounts

The following were appointed as signatories to the ASPAI accounts: E. Brinkley, J. Wood, G. van Halderen, and A. Welsh. (Moved I. Saunders / J. Douglas.)

7. Any other business Nil.

8. Date and place of the next meeting

The next meeting will be held in Adelaide in July 2000 in conjunction with the Australian Statistical Conference. The precise date and place will be advertised in the Newsletter and Branch Secretaries will be notified.

The meeting closed at 6.38 pm.

Neville Weber,
Hon. Secretary

ACCREDITED MEMBERS

The following applications have been approved by the Central Council.

GStat:

Jos Beunen
Helen Montesin
Robert Traficante

Accredited Statisticians:

Lynne Giles
Lyle Gurrin
Graham Hepworth
Phillip Leppard
Alun Pope
Denis Reid
Victoria Ryan
Glenn Stone
Peter Wright

Neville Weber
Secretary, SSAI

Note: A full list appears elsewhere in this issue.

SSAI on the Web

A lengthy process of setting up and registering the SSAI webserver is near conclusion. You can find the new SSAI website at

<http://www.statsoc.org.au>

Please note that it is VERY MUCH UNDER CONSTRUCTION, which is a good reason for you to visit it often over the next few months and watch it develop. Apart from housing information on accreditation and the Journal, gradually there will be the opportunity for all branches and sections to reside on the website. Feedback on the site will be welcome, via a feedback form on the site itself. This is perhaps a timely opportunity to acknowledge the efforts of Alan Branford (now resident in Queensland) in maintaining the SSAI webpages at the Flinders website.

Rodney Wolff

Update

Introduction

Welcome to a new regular column of the Newsletter. The objectives of this column are:

1. to announce names of people recently awarded AStat or GStat status, together with a brief description of their backgrounds and interests.
2. to provide current news, such as continuing professional development courses
3. to inform members of other initiatives promoting professional accreditation
4. to publish answers to queries about Accreditation that may be of general interest

Brief history

Professional accreditation was launched in the SSAI in 1997. An Accreditation Committee comprising six SSAI members was formed to develop and implement an assessment process in accordance with the SSAI Rules & Regulations. 132 AStat and Gstat applications have been processed to date.

In July 1999, Central Council set up an Accreditation Marketing Committee (AMC) to develop and implement a Marketing Plan to support professional accreditation.

Marketing activities

Some background to the marketing aims can be found in an article published in the SSAI Newsletter in August, 1998. To date, the AMC has held three meetings. Its current activities include:

1. Marketing business plan The AMC is now in the process of developing and costing a business plan. The main objective will be to develop and implement strategies for promoting the benefits of Accreditation to potential employers, contractors of

statistical work, to statisticians, to significant users of Statistics, and to high school and university students as a reason to embark on a career in Statistics.

2. Web-based information The AMC plans to use the World Wide Web as a major source of promotional information for Accreditation. The SSAI has established a joint Federal and Branch Home Page, and the AMC is currently deciding on the initial functionality needed for the Accreditation part.

3. Continuing Professional Development Our intention is to establish a regular program of relevant courses and workshops to provide opportunities to keep up to date in the discipline. Accredited members will be surveyed to ascertain their needs in this respect.

4. Direct promotion of Accreditation Accreditation has now been formally noted as a desirable requirement in at least two pieces of Government legislation. We have also started circulating to Accredited members general enquiries for statistical help that are received by the SSAI. The SSAI has also been approached for information about whether particular members have been accredited.

Current AStats and GStats members

AStats:

Michael Adena
Robyn Attewell
Caro-Anne Badcock
Mary Barnes
Helen Bartley
Kaye Basford
Mark Berman
Donald Best
Edmund Bosworth
Ken Brewer
Michael Buckley
John Carlin
Lynda Chambers
Janet Chaseling

Tien Chey
Seong Woh Choo
Alan Coates
Marylon Coates
Andrew Coldman
Mark Collins
Anthony Corr
Ray Correll
Ross Cunningham
Keith Dear
Teresa Dickinson
Annette Dobson
John Donnelly
Sharon Evans
John Field
Caroline Finch
Nick Fisher

Patrick FitzGerald
Bob Forrester
Lynne Giles
Ian Gordon
David Grayson
Lyle Gurrin
Bronwyn Harch
Joan Hendrikz
John Henstridge
Graham Hepworth
Richard Jarrett
Damien Jolley
Matthew Knuiman
Terry Koen
Martin Krogh
Phillip Leppard
Lynette Lim
Ray Lindsay
John Ludbrook
James Marinopoulos
Jane Matthews
Geoffrey McLachlan
Janice Miller
Robert Murison
Stuart Newstead
Nam-Ky Nguyen
Des Nicholls
Nick Nicolopoulos
Terry O'Neill
James Pearce
John Plummer
Alun Pope
Dennis Reid
Geoff Robinson
Ken Russell
Victoria Ryan
Ian Saunders
Doug Shaw
Dennis Sinclair
David Smith
Jennifer Smith
Andrew Smith
Ross Sparks
Michael Sparks
Glenn Stone
Tony Swain
Siu-Ming Tam

Peter Thomson
Kevin Tickle
Albert Trajstman
Dennis Trewin
Richard Tweedie
Arunas Verbyla
Neville Weber
Alan Welsh
Emlyn Williams
Jeffrey Wood
Peter Wright

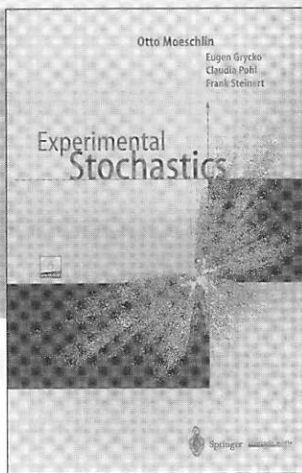
GStats:

Jos Beunen
Joel Bloch
Paul Brown
Melissa Dobbie
Peter Dunn
Donald Findley
Michael Kunkler
Patrick Lim
Michelle Lorimer
Ky Mathews
Luke McMahon
Helen Montesin
Helena Oakey
Alice Richardson
Nell Stetner-Houweling
Robert Traficante
Michelle Vella
Yuan Wu
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WESTERN AUSTRALIA

Raw Marks to TER

At the June meeting of the WA Branch Steve Hoath, the executive officer of TISC (Tertiary Institutions Service Centre) presented a talk titled "Raw Marks to TER". In the talk he covered the process that is used to convert raw Year 12 TEE (Tertiary Entrance Examinable) marks into a TER (Tertiary Entrance Rank). This is a relatively new process in WA, where a TER was used for the first time last year. Previously a TES (Tertiary Entrance Score) was produced. This was a mark out of 510 which was a combination of scaled examination marks and the score achieved in the scaling exam that was sat by all students.

Following a report which recommended that university selections should be based on both exam and school assessment marks, a new process of combining the two to pro-

duce a rank was introduced into the WA system. This process was based on that used in NSW and does not require students to sit a separate scaling exam.

Steve then went into detail about the various steps in the process of producing the TER. The first major step is the standardization of the raw exam marks using pre-determined percentiles. The next stage is the moderation of the raw school assessments marks so that they reflect the corresponding exam scores of the students. These moderated assessments are then standardized using the same process that was applied to the raw exam marks. These standardized exam and school marks are then averaged to produce the combined standardized score for each student for each TEE subject that they took. This combined score is then scaled. Previously, this would have been where the scaling test results were used. Under this new method the marks in all other subjects that the

students who took the particular subject that was being scaled also took are used to scale the scores for this subject. At this stage every student will have a scaled score for each TEE subject that they have studied. From these values the TES is calculated, using an average score of either 4 or 5 subjects.

The final stage in the production of the TER is the construction of a conversion table. This is constructed using calculated participation rates, which is the amount of the total population that could have been sitting TEE subjects that actually did, and the total range of possible TER values. The TES is then converted to a TER using this table.

Steve made the point that this process maintains the original ranking of students throughout. He also mentioned other issues that may complicate the process, such as students who were sick on the exam day and those students termed anomalous performers (those who performed a



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lot higher or lower than expected), and the techniques that are used to compensate for these.

The benefits of the TER over the TES are that it allows for more accurate comparisons between students, WA students can more easily apply for admission to Eastern States universities as their rank will be comparable, and it gives each student their position relative to other students.

Helen Teasdale

NEW SOUTH WALES

Where, oh where, has the year gone? One minute the Warriors were on the road to back-to-back Sheffield Shield glory and the next it's the end of September with only the National Soccer League to keep the football fans going. All this and yours truly has only written reports for two of the talks for the year! Shame, correspondent, shame (to be said in your best Derryn Hinch voice).

And hang my head in shame I do.

To rectify this appalling situation I have decided to go on a branch report blitz (not to be confused with a ballroom blitz) and present really quickly the goings-on at the NSW branch. To do this I need you to go back, back to a time when there was still hope that The Phantom Menace would be worth the wait, back to a time when being Jeff Kennett meant never having to say you're sorry and back to a time when John Markovski still played for the Glory. In fact I want you to go all the way back to 25 May 1999 for...

a talk by Rodger Robertson

Actually it was called "Uses and abuses...and How to lie...Aviation statistics" but I think my title is better. It manages to capture everything you need to know about the talk before it even starts. But before things go further I have to admit that I didn't actually get to this talk.

A company enforced three day jaunt to Canberra meant I missed the chance to hear Rodger speak on airline statistics, although having been delayed for an hour and a half at 6 am on the Monday morning the day before the talk for a forty minute flight to Canberra, I think I know what Rodger was going to say.

Instead I caught up with our cousins at the Canberra branch and was one of only four people who stayed on for the dinner. I must admit though that after four pre-talk glasses of wine I will probably be able to tell you more about Rodger's talk than the Canberra one. Having said this I have absolutely no idea what Rodger's talk was about. And besides, I'm still not convinced that Rodger Robertson isn't in some way related to the anti-Constable Care, Roger Rogerson, so let's just leave it there, shall we?

It's it's a ballroom blitz

It's it's a ballroom blitz

The next talk on the busy NSW branch calendar was titled...

Hierarchical Spatio-Temporal Statistical Modelling: Applications to Atmospheric/Oceanic Processes

and was given by Chris Wikle from the University of Missouri. Now again I must admit that I didn't get to this talk either, but given that it takes half an hour alone to say the title there may not have been that much to miss. However, by all accounts the talk was very good, was very well attended and very well received so I could be (very) wrong.

And the man at the back

said everyone attack

and it turned into a ballroom blitz

And the girl in the corner

said Boy, I wanna warn ya

it'll turn into a ballroom blitz

The next talk on the crowded NSW branch calendar was...

New and Old Non-parametrics

This slightly schizophrenic talk was given by the two Johnnies, Rayner and Best. With the former hailing from Wollongong Uni and the latter from the CSIRO, they should not be confused with the mighty British duo of similar name. This is mainly because neither of the Johnnies thought to bring along an oversized comfy chair and relate a rather stupid story to the audience at the end of it all.

The Rayner man kicked off proceedings after the usual rubber stamping at the SSAI and ASPAI AGM's. Our new and fearless leader, Ian James, was unable, however, to better the existing record for shortest ever AGM and consequently left the Rayner man facing a restless crowd.

But this did not deter the great man. Rising excitedly to his feet the Rayner man presented a slap-banger of a talk. Stirring the crowd into a frenzy he presented a family of distributions with different kurtoses and showed the by now buzzing audience the differences between the power curves of a range of parametric and non-parametric test statistics when sampling from these distributions. All present held their breaths as the Rayner man concluded that the power robustness of the t-test was "not there" and that non-parametric tests will perform better (power-wise) the further the departure from normality.

The applause was long and loud for the Rayner man, genius that he is. Many were thankful that Tom Cruise didn't turn up to take him away from us.

After the dazzling brilliance and sheer exuberance of the Rayner man came John Best. John came to talk on taste tests.

It must be said that the Best man could not match the Rayner man for entertainment value and so, after many pictures, many slides of datasets and even more slides of tables of analyses, the fun came to an end. For me the highlight was when the Best man had tomato nostalgia. Ahhhh, the sweet things.

The Best man did make one interesting comment though. The data presented generally had less than 10 observations, a fact that he suggested was less than ideal for statisticians but tailor made for A Current Affair. I personally feel that John was being too kind to ACA as they have been known to pass judgement on a sample of infinite variance.

So, it's goodnight from me, and it's goodnight from him...

Oh, yeah, it was like lightning,
everybody was frightening
And the music was soothing,
and they all started grooving
Yeah, Yeah, Yeah, Yeah, Yeah

The next talk on the frenetic NSW branch calendar was...

Statistics with clout - statistics that affect what you see

It must be said that this was an interesting talk. In fact, it was so interesting that even if the talk had been "Statistics with stout - drinks that affect what you see" it could not have been better.

Eric Fairclough was our speaker. Hailing originally from the UK, Eric, currently the Technical Director of the Media section at AC Nielsen, elaborated on a talk first seen at WAYS '98 (won the prize for best talk, congrats Andrew and Anne). How Andrew Oliver weaseled his way out of presenting it himself will be left to him to explain.

The talk was about television ratings and the how, why, who, what, where and hen of their collection. This rather long but thoroughly entertaining talk covered the history of ratings collection, the establishment of panels and the use of the data. Eric showed lots of graphs, in particular the horribly garish media garden, and thus got to use his new toy - a laser pointer. It was at this stage that many of us feared for Eric as he started pointing it at his own face! I

can see the headlines now, "SPEAKER TAKEN TO HOSPITAL, Blinded in Freak Accident". Fortunately it was not to be and Eric soldiered on.

Eric presented some of the types of data used: TARPS (should be familiar to our Sydney eastern suburbs viewers), share of viewing, reach and average audience. He did, however, manage to neglect the most important data type - the raymorbida, the number of people watching on the off chance that Ray Martin dies on air. Oh well.

The talk was followed by dinner at the Middle of Nowhere, which is the first right after the back of Burke and just before the black stump. Don't forget to take that left turn at Albuquerque!

Oh yeah, it was electric,
so frightfully hectic
And the band started leaving,
'cause they all stopped breathing

The next talk on the hectic NSW branch calendar was...

Inference about Statistics - Extrapolating from the CSIRO experience

given by Murray Cameron from the aforementioned organisation. This talk made it a hat-trick of misses for me - I was, sorry to say, honeymooning in New Caledonia, and the combination of sun, surf, sand and too much food was so great that I just couldn't tear myself away. Sorry. Murray may have a CSIRO experience but I unfortunately don't, so I have nothing to say, except...

Oh it's been getting so hard
Livin' with the things you do to me,
aha
Oh my dreams are getting so strange
I'd like to tell you everything I see
Oh, I see a man at the back
as a matter of fact
his eyes are red as the sun

And a girl in the corner
let no one ignore her
'cause she thinks she's the passionate one
(with many thanks to Chinn and Chapman)

Jason Boland

SOUTH AUSTRALIA

Working with students to enhance an unpopular Statistics course

At the August meeting, Anne Arnold and John Truran presented a lively talk entitled "Working with students to enhance an unpopular Statistics course".

This talk summarized work by the authors in listening to non-science students to find out why the students were unhappy with a compulsory 'service' statistics course. This was seen as a first step towards raising the students' interest in the course.

The speakers have different disciplinary backgrounds - one in statistics, the other in mathematics education. They found that a blend of their skills was particularly valuable in developing a helpful understanding of students' appreciation of the course.

The different approaches that were taken in gathering student feedback were very effective and consistent. In particular, journal-keeping inspired the students to think more deeply about the course content, and this led to some changes in the course emphasis. While a small, often vocal, minority in the class remained negative, most students found the course to be at least satisfactory, and failures in the subject were usually due to non-academic reasons. Finally, finding that the vocal minority was not representative of the class inspired the lecturer to work for still further improvements.

A lively discussion on statistical education ensued after the talk, and continued at dinner at a nearby restaurant.

The regression approach to estimating small area populations in Australia

The September meeting was held in the Adelaide office of the Australian Bureau of Statistics, the first time that the Branch had met at the ABS. The speaker was Andrew Howe of the Small Area Population Unit in the ABS. His talk was entitled "The regression approach to estimating small area populations in Australia".

Andrew's talk began by explaining that in Australia, population estimates for statistical local areas are calculated annually by the Australian Bureau of Statistics. A Census of Population and Housing is held every five years, and estimates for these census years are derived with minimal adaptations from census data. These census-based population estimates are then updated for following years based on regression techniques. The regression approach establishes relationships, based on past intercensal periods, between population and symptomatic indicators. To estimate for an intercensal period, the coefficients that were derived from the previous intercensal regression are assumed to hold. With knowledge of the growth in the indicators for the current time period, updated population estimates can then be derived.

Andrew outlined the estimation process, and discussed issues relating to measuring the performance of these regression models. Model performance is not necessarily determined by the traditional statistical diagnostics. Instead, the models are assessed by how well they estimate populations.

After the talk, a large contingent braved a wet and windy Adelaide evening to walk to a nearby Italian restaurant and sample the fare.

Other local news

Richard Jarrett has accepted a position with CSIRO in Melbourne, com-

mencing at the beginning of January 2000. The position is with the Division of Mathematical and Information Sciences and Richard will be a member of the Production Process Improvement project.

On a sadder note, Bruce Hall passed away on 27 July 1999, aged 80 years. Bruce was a member of the CSIRO Division of Mathematics and Statistics for many years before his retirement in 1984.

Lynne Giles

CANBERRA

Complex surveys and econometric analysis

Dr Robert Breunig, an econometrician in the Department of Statistics and Econometrics at the Australian National University, addressed the branch at the August meeting on how complex survey data is analysed by econometricians.

Bob set the scene by revealing that applied economists analyse household survey data collected using complex survey methodology by typically ignoring all survey effects. Instead, they treat the data as if it were obtained from a simple random sample with replacement. Bob proposed a solution to this problem: focus on models used in economics and develop techniques for estimation and inference which use information about the survey methodology to increase the accuracy of the estimators and their standard errors.

Bob introduced several measures of the rate of poverty using inequality indexes, such as the coefficient of variation, Theil (two different measures), Atkinson's measure and the Foster-Greer-Thorbecke poverty measure. A comparison was made between these measures for income collected by the Kenyan Ministry of National Planning and Development in 1986 and also for data collected in

the Mexican Household Expenditure Survey of 1989. The notions of stratification and clustering were discussed in relation to these measures and the surveys.

The use of non-parametric density estimation as a descriptive device was described in detail for two cases: stratified data, and clustered data. Plots of estimated and true densities for a mixture of two simulated Normal distributions for numerous values of bandwidth and various forms of sampling were produced and compared. One of the conclusions was that the bandwidth should be chosen based upon information known about the sample (ie if from stratified or clustered source, etc).

Looking to the future, Bob will consider: extending non-parametric density estimation to non-parametric regression; variable bandwidth or variable kernel estimation for the case of clustered data; and, combining weighted and unweighted regression estimates for linear regression models. After a number of questions from the floor, several people joined Bob for dinner at a local restaurant.

A cellular telephone consultancy

At the September meeting, Dr Aparna Huzurbazar of the University of New Mexico in Albuquerque, presented a summary of a research and consulting problem in which she used flowgraph methods to model the behaviour of radios in mobile telephone cells (called base stations in Oz).

Aparna briefly described how she became involved in the consultancy for Southwestern Bell of Dallas, Texas and described details of their Mobile Telephone Network: its components and how they are integrated. Mobile telephone cells are located throughout rural and urban areas in America, and radios handle calls within a cell.

For a cell with 8 radios, 6 are active and 2 are reserve. Radio malfunctions in cells are frequent and reduce the system capacity as well as cost the company lots of money. The client was interested in predicting the time a cell takes to reach a "critical state" (which is defined to occur if half of the radios malfunction: 4 in the example).

The theory of flowgraphs was introduced and notation including the definition of transitions between states of the flowgraph (= probability x MGF of waiting time distribution) was introduced. The notion of "solving" a flowgraph was also covered.

Aparna then summarised an analysis of some data provided by the client. The data consisted of one "total lifetime" of a cell. Altogether there were 171,486 observations. Aparna produced a model for the time until the cell reached a "critical state" (= 4 radios malfunctioned and 4 still functioning). The result was to provide the cell technicians with the median waiting time till the failure of a cell, consequently allowing them to make decisions about fixing a cell (either remotely or on-site).

After the close of the meeting, Aparna and others dined at the Anatolia Turkish Restaurant and helped Richard Morton celebrate his 60th birthday. Happy birthday Richard!

Melissa Dobbie



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Report on the 2-day biostatistical workshop:

Directions for Biostatistics in Australia: Beyond 2000

held at the Carlton Crest Hotel on 23 - 24 September 1999.

This workshop was the culmination of six months deliberation by an ad-hoc committee into the shortage of biostatisticians in Australia highlighted by John Carlin (Children's Hospital, Melbourne). The local committee comprised of Don McNeil (Macquarie Uni), Ian Marschner, Judy Simpson, Geoff Berry (Sydney Uni), Abie Ekangakie (UNSW), Annette Dobson (Uni Newcastle), Caro Badcock (AstraZeneca Pharmaceuticals), Phillip McCloud (Roche Products) and Val GebSKI (Convenor, Sydney Uni). Others involved in discussions included Niels Becker, Lynette Lim (ANU) Mat Knuiman (Univ. of WA) and Leigh Blizzard (Menzies Centre Hobart).

The first day focussed on the need to develop a strategic plan to address the training of biostatisticians in Australia. Also addressed was the issue of the deficiencies in current biostatistical curricula and the non-attractiveness of biostatistics as a career. The morning session saw Margaret McDonald from the Department of Health and Aged Care outlined the Federal Government's biostatistical need in the next millennium. Lyn Madden from the NSW Department of Health then discussed the Department's needs with respect to both biostatistical expertise as well as epidemiological input. Ian Marschner then discussed requirements of academic/research biostatisticians, focussing on their need to be able to understand and develop new methodologies. Phillip McCloud presented the current and future needs of the Pharmaceutical industry, highlighting the emergence of new biostatistical units/positions. Simon Margrie (Quintiles) outlined

the role and career directions of biostatisticians in Contract Research Organisations.

Ross Lazarus then led a discussion on information technology in teaching and learning with emphasis on adult education, case models and distance learning. The morning session concluded with a report by Annette Dobson on the distance learning model in biostatistics at the University of Newcastle and Niels Becker outlining the Key Centre as an example of collaboration amongst Universities.

The afternoon session was devoted to coming up with a strategy for moving forward a model to improve biostatistical education and careers in Australia. This was achieved using smaller groups and the following aims were agreed upon:

A task force was established to develop a proposal to put to government and industry to establish an internet based course in biostatistical methodology based on case studies as well as conventional teaching approaches. This group would then circulate the proposal to a wider audience for comments and suggestions. Areas to be addressed include teaching format of topics, collaboration between institutions, eligibility, prerequisites, academic level, accreditation, assessment faculty, funding and management.

Day two comprised of broader biostatistical discussion of interest to a larger audience of biostatisticians. Topics included: "What is the Role of Industry in the Future of Biostatistics in Australia?" "Biostatistical Methodology: Applications", "How can Statistical Packages be improved? Biostatistical Perspectives", "Biostatisticians in Australia: A Clinician's View, A Biostatistician's View."

Abstracts of the various sessions may be obtained from Don McNeil's Web site:

<http://www.stat.mq.edu.au/Department/statset.htm>

and click on workshops.

All in all the two days were highly successful with the workshop receiving press coverage (Australian 29 September 1999). The committee also acknowledges the generous support of various sponsors indicating the importance government and industry give to biostatistical development and education in Australia.

Val GebSKI
NHMRC Clinical Trials
Centre

Workshop for Australasia's Young Statisticians '99

"These happy WAYS are yours and mine, happy WAYS"

Ah WAYS, a chance to bask in the glorious spring sunshine of downtown Wollongong, a chance to celebrate the 9th anniversary of the injection of vim and vigour into the younger branches of the society and a chance to mourn the passing of an institution. For WAYS '99 marked the first time that Paul Livingstone had not graced the proceedings of the workshop with his presence, a fact which weighed heavily on the minds of all present. Oh great spiritual and moral leader, wherefore wert thou?

But this is not to say that the proceedings were mournful - oh no indeed. Fun, fast and frenetic, full of fanciful fact and fashionable fallings-down they were. Bursting with boisterous bottle bashing and laden with life limiting liver loss. And other such things.

The real joy, however, lay in the sheer depth and breadth of knowledge gained, contacts made and shoulders rubbed (with the toffs at the networking forum I mean). For WAYS was a celebration of all things statistical (and some things BHPical, but I'm not going to mention that). And as with all celebrations there must be prizes, awards to the biggest and the

best. This year's prize for best talk was given to Vasuki Prabakaran for her talk on "Multilevel models for repeated data". Vasuki won a software prize pack from Statsoft, who are thanked for their sponsorship.

Unbeknownst to most of the attendees (and in fact unknown to me until a few hours ago when I got stuck thinking for something to write) several other awards were given at WAYS. Chief amongst these were the "Richie Rich Most Extensive Wardrobe" award which went to Andrew Collins and the "BHP Best Imitation of an Industrial Process Defect Using a Paper Towel and Water" award, which went to Scott Foster. It is with a heavy heart that I admit that Scott's contribution to the Friday afternoon presentations was consigned to the rubbish bin before it could be consigned to history.

Other awards were given as follows:

- Virginia Wheway
Most Contagious
- Patrick Cilione
Best Contributor
- Jason Boland
Biggest Sponge
- Robert Clark
Clayton's "ABS talk you have when you're not having an ABS talk" award
- Ian Wright
Best Impersonation of a Thunderbird
- Ian McDermid
Best Impersonation of a Young Statistician
- Simon Barry
Most Knowledgeable on Flannel Shirt Fashions

But in all seriousness we should thank the following people and organisations that did so much to make WAYS enjoyable:

Andrew Collins, Virginia Wheway, CSIRO, Centre for Mathematics and its Applications ANU, Statsoft, BHP,

School of Mathematics and Applied Statistics UOW, Steve de Hennin at BHP, David Steel & the Surveys and Management section, Geoff Robinson, Andrew's brother and the other BBQ guy, Virg's BBQ, the seagull that

popped on Virg's head, Eric Sowe, Peter Petocz and all the other young statters who presented or participated but didn't get a mention. We love youse all. See you next year.

Jason Boland



The Young Statters enjoying a laugh in Wollongong.



Jason Boland and his "three lovely assistants"



Young and Industrial Stats on BHP Tour

Obituary

Dr David I. Saunders

Dave Saunders, a member of the Statistical Society of Australia in the 1970s, died in London on 24 April 1999. He was 49. Dave graduated from the University of Adelaide in 1971 with a first class Honours degree in mathematics, and completed his Ph.D. thesis, entitled *Branching processes with arbitrary type space*, at Flinders University in 1975.

He taught statistics and mathematics at the South Australian Institute of Technology for several years, before moving to London in September 1979. He was on a temporary (ten-month) academic exchange at Queen Mary College. He was still there 20 years later.

Dave was elected as a Fellow of the Royal Statistical Society soon after making the move to Britain permanent.

Dave had an interesting and complex personality. It is probably inaccurate to label him as a student radical, but, in the politically charged 1960s, he had strong anti-establishment sympathies. He remained an active campaigner for peace and justice throughout his life. In London, Dave became heavily involved in the Radical Statistics movement, which attempted to expose abuses and distortions in statistical practice by public figures and authorities. Dave possessed one of the sharpest minds I have encountered. Despite his acute

intellect and a genuine gift for mathematics, Dave did not attempt to build a conventional career in statistics. He preferred to follow his instincts, and, true to himself, changed fields to computer science in the early to mid 1980s. Dave's students will miss a dedicated university teacher, and his many friends will miss his scintillating company, his lifelong appreciation of Australian reds, his travel anecdotes and (perhaps less so) his self-taught guitar playing.

A longer and more personal tribute appears in the Society's web pages, at <http://www.statsoc.org.au/newsofmembers/obituaries>.

Geoff Laslett

Society Wedding of the Year

Well you had to be there. The first of two springtime invitation only statistical gatherings was held in the Blue Mountains at Jemby-Rinjah Lodge, Blackheath. The occasion was the marriage of the ever-beautiful Susan Hoffmann to Jason Boland (respectively famous and infamous throughout the NSW branch for their work serving the interests of young statisticians). After a whirlwind romance begun at ASC-14 the pair tied the knot on 11 September surrounded by family and friends (not just the statisticians).

All guests enjoyed a wonderful weekend at the Lodge, full of good food, good wine and great dancing. Many thanks to those who helped us celebrate and to all others who wished us well at the start of our life together.

Susan Hoffmann & Jason Boland



*The who's who at the Society Wedding of the Year
(from left): Paul Livingstone, Mel Maurer, Jason Boland, Susan Hoffmann,
Ben Braysheer, Mel Dobbie and Lyle Gurrin*

Some good advice!

I was at a conference in Italy recently and came across the following:

Johannesburg :

The open air meeting was nearly over, but Nelson Mandela had one last piece of advice for the youngsters in the audience.

" Do your homework" he said "watch TV just for an hour and then go back and do your work. Especially mathematics and statistics. At least 30 minutes per day. Don't leave it for two days".

IMS Bulletin (vol 28:4, 1999)

Max Bulsara

An article in a forty-year-old Sydney Morning Herald.

(I wonder how this survey was carried out?)

Saturday 1 March, 1958 Sydney Morning Herald, page 2

One of the "Big Five" British Banks, Lloyd's, has recently considered it worthwhile to conduct a survey on the fate of 100,000 paper clips. Of this number, we are told, only one-fifth served their proper purpose. No fewer than 14,163 were broken and twisted during telephone conversations; 19,413 were used as card-game stakes; 7,200 became makeshift hooks for garter belts and brassieres; 5,434 were converted to toothpicks or ear cleaners; 5,308

were used as nail cleaners; 3,916 became pipe cleaners; and the remainder were dropped on the floor and swept away or swallowed by children. It is pleasant to have statistical confirmation of one's own casual observations.

Sue Wilson

Australasian Conferences

CONFERENCE SUMMARY

SEEM3 - Third Conference on Statistics in Ecology and Environmental Monitoring, 6-10 December 1999, University of Otago, Dunedin, New Zealand

Information: Email enquiries to: igoodwin@maths.otago.ac.nz; <http://www.casm.otago.ac.nz/courses/SEEM3/>

International Biometric Society Australasian Region Biennial Conference, 12-16 December 1999, University of Tasmania, Hobart.

Information: Helen Stewart, Convention & Venue Services, University of Tasmania; tel (03) 6226 2799; fax (03) 6226 1777; email Uni.Centre@utas.edu.au; <http://www.cmis.csiro.au/biometrics99/>

15th Australian Statistical Conference, 3-7 July 2000, Adelaide.

Information: <http://www.sapmea.asn.au/15ASC.htm>

There is a list of Australasian statistics conferences for 1999 and 2000 at:

<http://www.maths.uq.oz.au/~gks/webguide/conf.html>

Clunies Ross National Science & Technology Award

29 March 2000

This prestigious annual Award was introduced in 1991 by the Ian Clunies Ross Memorial Foundation. It has now honoured forty-six special Australians who have made an outstanding contribution to the application of science and technology for the benefit of Australia.

Award recipients will be publicly honoured with a silver medal at a formal presentation and dinner to be held at Hotel Sofitel, Melbourne on Wednesday 29 March 2000.

Contact Mary Bolger on (03) 9854 6266 (Email: icr@crnet.com.au) or visit our web site at <http://www.cluniesross.org.au>

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Methods

DATE: 9am - 5pm
Friday 18 February 2000

VENUE: Macquarie University

Further details to be announced

See website <http://www.stat.mq.edu.au/RESEARCH/resreset.htm>

Enquiries:

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William Dunsmuir
Professor of Statistics
University of New South Wales
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Overseas Conferences

International Conference on Statistics, Combinatorics and Related Areas (Sixth International Conference of the Forum for Interdisciplinary Mathematics), 18-20 December 1999, University of South Alabama, Mobile, Alabama 36688, USA

Information: Satya Mishra, Dept Mathematics and Statistics, ILB 325, University of South Alabama, Mobile, Alabama 36688 USA; email: mishra@mathstat.usouthal.edu; http://www.mathstat.usouthal.edu/statistics/usa_conf.html

Workshop on Hierarchical Modeling in Environmental Statistics, 14-16 May 2000, Ohio State University, Columbus, Ohio, USA

Co-sponsored by Ohio State University and American Statistical Association's Section on Statistics and the Environment.

A tutorial on Bayesian hierarchical modeling will precede the conference on Sunday morning May 14, 2000.

For more information, contact Noel Cressie (ncressie@stat.ohio-state.edu)

XXth International Biometric Conference, 2-7 July 2000, University of California at Berkeley.

Information: website, <http://www.biostat.ucsf.edu/IBC2000/> Kevin L. Delucchi, PhD, Dept. of Psychiatry, Box 0984-TRC, University of California, San Francisco, 401 Parnassus Ave, San Francisco, CA 94143-0984; USA; e-mail: kdelucc@itsa.ucsf.edu; tel +1 (415) 476-4180; fax: +1 (415) 476-7677.

MAM3: The Third International conference on Matrix-Analytic Methods in Stochastic Models, 12-14 July 2000, Leuven, Belgium.

Information: email: MAM3@econ.kuleuven.ac.be; http://www.econ.kuleuven.ac.be/man3

Statistics and Health, 11-13 June 2000, Biostatistics Research Group of University of Alberta, Edmonton, Canada.

An international conference and workshop creating a forum where statisticians, health services researchers, epidemiologists, policy analysts and other scientists can interact to identify and discuss issues and solutions for health research. The workshop on hierarchical modeling in health services research will be given by Dr Constantine Gatonis on Sunday, 11 June 2000, including data analysis using MLn and BUGS software.

Information: http://www.stat.ualberta.ca/~brg/conf.html or email brg@stat.ualberta.ca, K.C. Carriere, Associate Professor of Statistics, Department of Mathematical Sciences, University of Alberta, Edmonton, AB T6G 2G1, Canada.

Compstat 2000, XIV Compstat conference of the International Association for Statistical Computing, 21-25 August 2000, Utrecht, The Netherlands.

Statistical computing provides the link between statistical theory and applied statistics, from development and implementation of new statistical ideas through to user experiences and software evaluation, and relevant to those in universities, industrial companies, government agencies, research institutes or as software developers.

Information and registration website: http://neon.vb.cbs.nl/rsm/compstat; Anouk Denis, fax: +31 30 253 5851, email: compstat@fbu.uu.nl or FBU Congress Bureau, Utrecht University, Attn: Mrs. Marcelle Buma, PO Box 80125, 3508 TC Utrecht, The Netherlands.

IASE Round Table Conference on Training Researchers in the Use of Statistics, Meiji University, Tokyo, Japan, August 2000.

Information: Carmen Batanero, Dept. Didactics of Mathematics, University of Granada, 18071 Granada, Spain; email: batanero@goliat.ugr.es; URL http://www.ugr.es/~batanero/iasert.htm

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