

UNIVERSITY OF SYDNEY

SCHOOL OF MATHEMATICS AND STATISTICS

Statistics Seminar

Friday, 29 Feburary 2008, 2.00pm

Carslaw 173

Statistical Model versus Fit versus Data

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Abstract

The ongoing evolution of Statistics from philosophy towards information science has sharpened focus on questions such as:

–Data is often not certifiably random. What then is the role of a general probability-based statistical model?

-A general probability-based statistical model is often fitted after imposing further assumptions, explicitly or implicitly. What then is the role of the general model? What is the role of the further assumptions?

These topics are explored through a brief historical analysis of how technology shapes statistical theory and through a technical case-study. In the latter, risk adaptation over a very large class of Bayes estimators is used to fit the unknown dependence of univariate or multivariate responses on a set of non-random covariates.

Enquiries about the Statistics Seminar should be directed to Jean Yang (jeany@maths.usyd.edu.au)