Bayesian Survival Analysis. *JG Ibrahim, M-H Chen, D Sinha. Berlin, Heidelberg, New York, London, Paris, Tokyo, Hong Kong: Springer Verlag, 2001, pp.479, ISBN: 0-387-95277-2.*

If this is the age of evidence based medicine and meta-analysis rules supreme, then the 21st century will surely see Bayesian statistics triumph over the frequentist approach to analysing data. It is no longer sufficient to analyse the data in hand, rather it should be considered alongside all previous studies looking at the same outcome. We should use the historic data to inform our prior beliefs about the outcome and then modify these priors in the light of the new data using Bayesian synthesis. The frequentist approach is just a special case of the Bayesian which uses non-informative priors. The frequentist is working in the darkness of ignorance and the Bayesian is working in the light of all previous knowledge.

Forgive me if I sound rather evangelical, but this book, along with most books which advocate a specifically Bayesian approach to data analysis, does come across as a book with a mission to convert you to being a Bayesian (Thomas Bayes was a vicar after all …).

The book is about Bayesian survival analysis which is illustrated with examples that mostly use the BUGS software package. The pre-requisites for understanding and using the book are therefore a good knowledge of survival analysis, a grasp of Bayesian terminology that goes beyond translating 'Confidence Interval' as 'Credible Interval' or even 'Highest Posterior Density Interval' and an expertise in using BUGS, which is the easy way of implementing the Markov chain Monte Carlo (MCMC) and Gibbs sampling algorithms necessary for doing Bayesian analyses. If you have these pre-requisites then you will find this an interesting read.

As usual the first chapter describes motivating examples which run throughout the book. Many of the datasets used are well worked familiar examples that can be accessed in BUGS or on the book's website where BUGS code is also supplied. The chapters start with the more familiar models such as standard parametric and semi-parametric survival models and then progress through frailty models and cure rate models.

The chapter on model comparison is particularly interesting as in many situations you want to compare survival models of different types which are not nested. Several methods for Bayesian model comparison such as Bayes factors and posterior model probabilities, Bayesian Information Criterion, the conditional predictive ordinate and L measure are described.

There is also a chapter on joint models for longitudinal and survival data with applications to AIDS, cancer and quality of life studies. AIDS and cancer are both diseases which are monitored at intervals by measuring biological markers which influence changes in treatment and survival and are also subject to measurement error and intra-individual variation. The usual approach is to model the time-varying covariates longitudinally and then to estimate the survival model. The authors advocate using a joint likelihood approach instead of the two-stage procedure.

Other topics covered are the issue of missing covariate data and the design and monitoring of randomized clinical trials. The final chapter sweeps up the more unusual, or less medically mainstream, topics and some very recent developments. It briefly covers the important area of Bayesian model diagnostics, but admits that there is so far very little literature that addresses the important task of checking the adequacy of Bayesian survival models. Dirichlet processes and Polya tree priors, multivariate adaptive regression splines (MARS) and neural networks all get a mention.

As the book progresses, it becomes both more and less interesting for epidemiologists: more interesting because it addresses difficult problems and describes very recent developments, and less interesting because one is left with the feeling that the methods described become harder to understand and implement. The earlier chapters have solid examples which can be played with using BUGS but the later chapters often have examples which need specially adapted algorithms rather than the standard MCMC and Gibbs sampling and are therefore not yet implemented in standard packages. The book is caught in a dilemma. It wants to be a practical user-friendly text, but ends up being quite theoretical and pleading for more user-friendly software to be written.

In conclusion, this is definitely a worthwhile read for any statistician specializing in survival analysis. It is pitched so that part of it is readily usable by the medical statistician, but it will also provide stimulation for statisticians involved in methodological development or the writing of new software for survival analysis.

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Poverty: A Study of Town Life. Centennial edition. *B Seebohm Rowntree (ed.). Bristol: The Policy Press, 2000, pp.436. £16.99, ISBN: 1 86134 202 0.*

> 'The dark shadow of the Malthusian philosophy has passed away, and no view of the ultimate scheme of things would now be accepted under which multitudes of men and women are doomed by inevitable law to struggle for existence so severe as necessarily to cripple or destroy the higher parts of their nature.' (p.305).

The first publication of Seebohm Rowntree's study of poverty in York in 1901 concluded with this single sentence written to slam shut the door on 19th century acceptance of abject poverty and simultaneously throw the reader into the light of what was possible in a new century—if (according to Rowntree) only we counted and cared enough. The reprint, one hundred years on, is testimony to the power of this book to incrementally change the world, not just in York or Britain but much further afield. The centennial reprint is, however, mostly testimony to the absolute failure of social policy worldwide to have achieved Rowntree's goals and the relative failure of social policy within the country in which Seebohm wrote, to have rid this rich place of the effects of poverty on human nature.

The book is in essence a story of a survey. Evidence based social policy was all the rage at the end of the 19th century and 'the survey' was the most impressive measure in the evolving toolbox of the committed young rich men who sought to shake up sleepy Victorian sympathies. Seebohm was the son of Joseph, the York chocolate factory owner who encouraged and funded his offspring's exposure to the poverty that prevailed in