The University of Newcastle

Kerrie Mengersen

Introduction to

Bayesian Modelling - 3

Armidale 2004

Practical BUGS

- Learning about BUGS

- BUGS / R interface

- Coding it yourself

Workshop notes will be provided in class

Free Bayesian Software

- First Bayes: teaching package
  http://www.shef.ac.uk/~st1ao/1b.html

- Bayesian inference using Gibbs sampling (WinBUGS)
  http://www.mrc-bsu.cam.ac.uk/bugs

- BNN, Gaussian processes, mixtures
  http://www.cs.utoronto.ca /~radford/

- AutoClass (unsupervised Bayesian classification based on mixtures)
  ic-www.arc.nasa.gov/ic/projects/bayes-group/group/autoclass/

The Wild Frequentist (``The Wild Rover'')

I've been a frequentist for many's the year,

And I've spent all my time playing the data by ear,

But now I'm returning with Bayes in great store,

And I never will play the frequentist no more.

Chorus: For it's no nay never, no nay never, no more,

Will I play the frequentist, no never, no more!

Walk on the Bayes Side

(``(Take a) Walk on the Wild Side'')

The governor, he welcomed us to Spain,

Promising that {\em this} time, it would not rain,

Lindley said, ``I hope you understand, that p-values have now been

banned!''

Chorus:He said, ``Hey babe -- Take a walk on the Bayes side,

I mean, hey folks -- take a walk on the Bayes side -- all right!''

Wasserman is such a sensitive male,

Got statistics that didn't have a scale,

Zellner said, ``You oughta take a look, at the stuff that's in my
book!''

Chorus: He said, ``Hey babe -- Take a look at a Bayes factor,

He says, ``Hey Larry -- take a look at a Bayes factor''

And the frequentists say, ``No, nono, nono, no, nono -- no, nono, nono,

no, nono...''