Figures

Keith O'Rourke

May 14, 2011

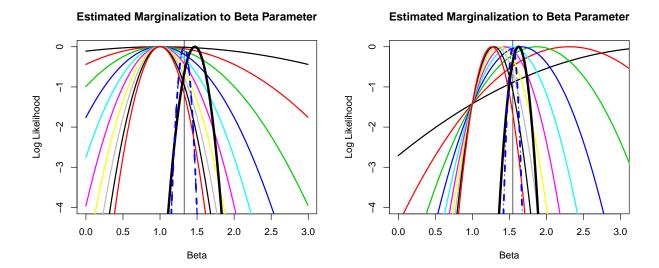


Figure 1: (Left) Estimated Almost Individual and pooled (dashed) log likelihoods for B marginalized over sigma. The thick dark line represents three identical log likelihoos. (Right) Estimated Almost Individual and pooled (dashed) log likelihoods for B marginalized over sigma **AND** an intercept. Note the decrease in clarity.

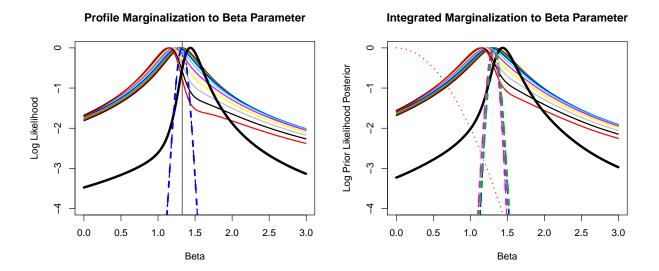


Figure 2: (Left) Profile Almost Individual and pooled (dashed) log likelihoods for B marginalized over sigma. The thick dark line represents three identical log likelihoos. (Right) Approximate Integrated Almost Individual and pooled (dashed) log likelihoods for B marginalized over sigma. Log prior shown as dotted line. It has a slight effect, shifting the log posterior slightly to the left of the log combined likelihoods.

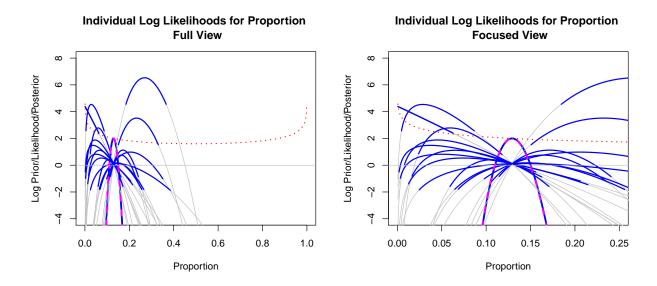


Figure 3: (Left) Global view: Individual and pooled (dashed) log likelihoods (single parameter). (Right) Focussed view: Individual and pooled (dashed) log likelihoods (single parameter). Log prior shown as dotted line. Note that it has essentially no impact, log posterior approximately equal to log combined likelihood.

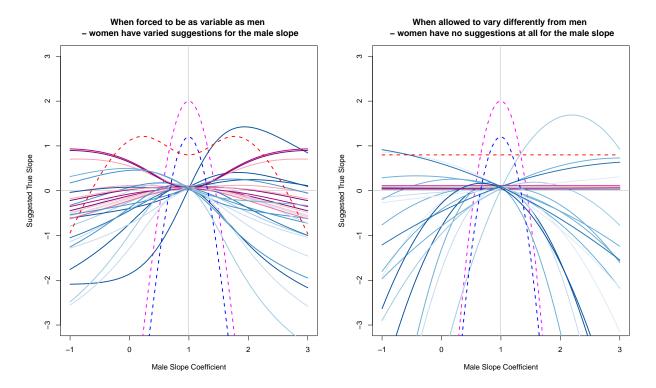


Figure 4: (Left) Common sigma: Profile Almost Individual and pooled (dashed) log likelihood. (Right) Separate sigma: Profile Almost Individual and pooled (dashed) log likelihood. Note that the log likelihood curves for females become straight lines

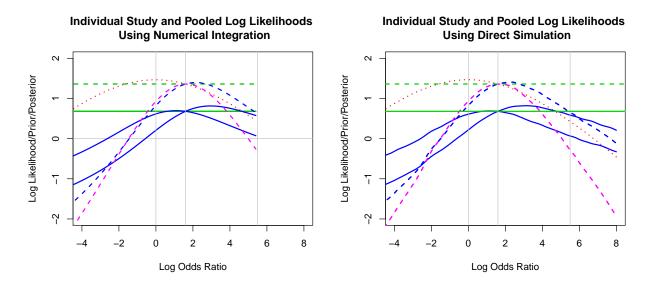


Figure 5: (Left) Numerical Integration: Integrated and Profile Almost Individual and pooled (dashed) log likelihood. (Right) Direct Simulation: Integrated and Profile Almost Individual and pooled (dashed) log likelihood. Note that the profile log likelihood curves are straight lines, representing no information, while the integrated log likelihoods are quite curved.

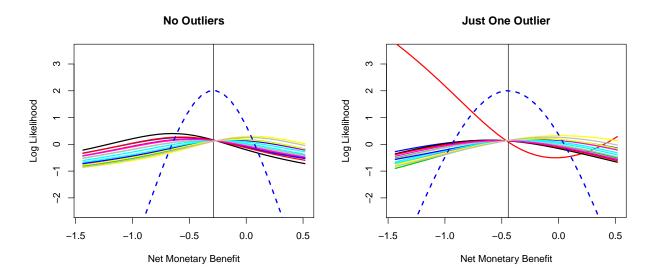


Figure 6: (Left) No Outlier: Profile Almost Individual and pooled (dashed) log likelihood. (Right) One outlier: Profile Almost Individual and pooled (dashed) log likelihood.

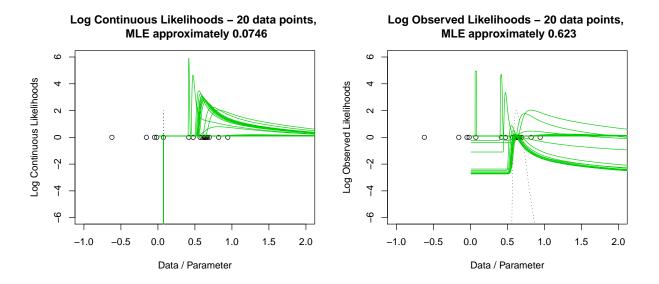


Figure 7: (Left) Continuous Observation Data Model: Profile Almost Individual and pooled (dotted) log likelihood. (Right) Discrete Observation Data Model: Profile Almost Individual and pooled (dotted) log likelihood.