The jackknife method can also be used to obtain an approximately unbiased estimator $\tilde{\theta}_J$ of $\theta = g(\sigma_e^2, \sigma_v^2)$, i.e., $E(\tilde{\theta}_J) - \theta = o(t^{-1})$ for large $t$, without normality assumption. The estimator $\tilde{\theta}_J$ can be used in small area estimation to get approximately unbiased estimators of the weights in the best predictors. It may be noted that in the empirical Bayes literature (e.g., Morris (1983)), the weights are unbiasedly estimated under normality assumption in the balanced case, $n_i = m$.

Details of these results will be reported in a separate paper.

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DEPARTMENT OF MATHEMATICS AND STATISTICS
CARLETON UNIVERSITY
OTTAWA, ONTARIO K1S 5B6
CANADA

DEPARTMENT OF STATISTICS AND APPLIED PROBABILITY
UNIVERSITY OF ALBERTA
EDMONTON, ALBERTA T6G 2G1
CANADA

JUN SHAO

*University of Wisconsin-Madison*

Applications of the jackknife and other resampling methods to regression analysis have been thoroughly discussed in Professor Wu's paper. One interesting and stimulating aspect of his approach is the use of a weighting scheme that takes into account the unbalanced nature of regression data. He has provided a fundamental tool for handling very general non-i.i.d. problems for which the classical jackknife method may not work well. In Section 8, he considered extensions of his method to several non-i.i.d. situations. More research is needed and is being done in this area.

In this discussion, I would like to (A) propose another weighted resampling scheme that gives an interpretation of Wu's weighted jackknife and provides an alternative resampling estimation procedure, (B) discuss the use of Tukey's pseudovalue, and (C) obtain the stochastic order of the weighted jackknife bias estimator.

In the following, all notation will be the same as that of Wu.

**(A) Another weighted resampling scheme.** In the regression situation, the information contained in different subsets of data may be quite different. The idea of my proposed weighted resampling scheme is to take account of the unbalanced nature of the data in the resampling process. That is, the probability of selecting a subset of data is not a constant as is usually done, but is proportional to the determinant of the Fisher information matrix of the corresponding subset model with i.i.d. errors. We will see that the bias and variance