

- MO, M. (1990a). Robust additive regression I: Population aspect. Unpublished manuscript.
- MO, M. (1990b). Robust additive regression II: Finite sample approximations. Unpublished manuscript.
- MO, M. (1991). Nonparametric estimation by parametric linear regression (I): global rate of convergence. Unpublished manuscript.
- MORGAN, J. N. and SONQUIST, J. A. (1963). Problems in the analysis of survey data, and a proposal. *J. Amer. Statist. Assoc.* **58** 415–434.
- NEWBY, W. N. (1991). Consistency and asymptotic normality of nonparametric projection estimators. Unpublished manuscript.
- RAO, C. R. (1973). *Linear Statistical Inference and Its Applications*, 2nd ed. Wiley, New York.
- SCHUMAKER, L. L. (1981). *Spline Functions: Basic Theory*. Wiley, New York.
- SMITH, P. L. (1982). Curve fitting and modeling with splines using statistical variable selection techniques. Report NASA 166034, NASA, Langley Research Center, Hampton, VA.
- STONE, C. J. (1982). Optimal global rates of convergence for nonparametric regression. *Ann. Statist.* **10** 1040–1053.
- STONE, C. J. (1985). Additive regression and other nonparametric models. *Ann. Statist.* **13** 689–705.
- STONE, C. J. (1986). The dimensionality reduction principle for generalized additive models. *Ann. Statist.* **14** 590–606.
- STONE, C. J. (1989). Uniform error bounds involving logspline models. In *Probability, Statistics and Mathematics: Papers in Honor of Samuel Karlin* (T. W. Anderson, K. B. Athreya and D. L. Iglehart, eds.) 335–355. Academic, New York.
- STONE, C. J. (1990a). Large-sample inference for log-spline models. *Ann. Statist.* **18** 717–741.
- STONE, C. J. (1990b).  $L_2$  rate of convergence for interaction spline regression. Technical Report 268, Dept. Statistics, Univ. California, Berkeley.
- STONE, C. J. (1991a). Asymptotics for doubly flexible logspline response models. *Ann. Statist.* **19** 1832–1854.
- STONE, C. J. (1991b). Multivariate logspline conditional models. Technical Report 320, Dept. Statistics, Univ. California, Berkeley.
- STONE, C. J. and KOO, C.-Y. (1986a). Additive splines in statistics. In *Proceedings of the Statistical Computing Section* 45–48. Amer. Statist. Assoc., Washington, DC.
- STONE, C. J. and KOO, C.-Y. (1986b). Logspline density estimation. In *Automated Theorem Proving: After 25 Years* (W. W. Bledsoe and D. W. Loveland, eds.). *Contemp. Math.* **29** 1–15. Amer. Math Soc., Providence, R.I.
- TAKEMURA, A. (1983). Tensor analysis of ANOVA decomposition. *J. Amer. Statist. Assoc.* **78** 894–900.

DEPARTMENT OF STATISTICS  
 STATISTICAL LABORATORY  
 UNIVERSITY OF CALIFORNIA  
 BERKELEY, CALIFORNIA 94720

## DISCUSSION

ANDREAS BUJA

*Bellcore*

Previous work by Stone has been impressive, and the present paper commands even more respect. In one grand sweep, he develops convergence rates for  $B$ -spline interaction models in LS regression, in ML generalized regression, in log-density estimation and in conditional log-density estimation. In