# In This Issue

I. J. Good's article on the statistical applications of Poisson's work is based on an invited lecture that he presented at the Poisson Bicentennial Commemoration held at George Washington University in 1982. Good's renowned wit and wisdom pervade this well-written article. With regard to the Poisson distribution, he reminds us that "Poisson was scarcely responsible for introducing this distribution, nor for its applications. But there were other things for which he was responsible that were named after other people, so the eponymy does rough justice." In their discussion, Persi Diaconis and Eduardo Engel provide a subjective analysis of randomness in physical experiments such as throwing darts or flipping coins. Herbert Solomon describes Poisson's concern with moral and societal issues, as exemplified by his statistical work on jury behavior. C. C. Heyde states that "Poisson was ambitious and competitive and often provoked violent debate," and describes some of the controversy surrounding his work. Nozer D. Singpurwalla addresses the distinction between different kinds of probability, a topic of interest to both Poisson and Good.

Morphometrics, as defined by Fred L. Bookstein, is the study of the geometrical form of organisms. In other terms, it is the quantitative study of size and shape, and Bookstein is one of the leading innovators in this field. In some applications of morphometrics, two populations are compared by analyzing the multivariate distributions within the two populations of the distances between certain well-defined biological points called landmarks, or by analyzing the distributions of ratios of these distances. In other applications, two populations are compared by analyzing the smoothly varying deformation that carries the configuration of landmarks in one population into the configuration in the other. In his article in this issue, Bookstein attempts to unify these two approaches. It is not often in a statistics journal that we get to compare the skulls of man and gorilla as we do in Bookstein's Figure 1.

Bookstein's approach is not without controversy. In his discussion, Gregory Campbell is critical of Bookstein's linear approximations and states that the article "raises more issues than it answers." D. G. Kendall emphasizes global geometric studies in morphometrics and describes some of his own work that originated "in response to requests from archaeologists and astronomers." Noel Cressie discusses generalizations to higher dimensions through the use of "mathematical morphology." Paul D. Sampson provides an interpretation of the size and shape variables introduced by Bookstein, and discusses some practical issues that must be faced in applying this methodology. Colin Goodall states that "Fred Bookstein's energy, enthusiasm, leadership, and innovative thinking about morphometrics is highly valued, greatly appreciated, and a spur to further work." He then describes a two-stage procedure in which the deformation representing the biological process is estimated at the first stage, and multivariate comparisons enter at the second stage.

In his article, "Computing Environments for Data Analysis," Ronald A. Thisted describes some contemporary systems for statisticians in which computer terminals, statistical software packages, programming languages, editors, operating systems, and output devices form an integrated collection of tools to facilitate the kinds of computations that are carried out in data analysis. John M. Chambers, in his discussion, points out that "Most of the important improvements in statistical computing environments have come through advances in general computing, not from anything statisticians have done." Peter J. Huber stresses how quickly hardware and operating systems change, "with the programs somehow surviving several such changes."

Herbert Robbins celebrated his 70th birthday on January 12, 1985. Tze Leung Lai and David Siegmund review his illustrious career and provide a careful survey of his influential contributions in the areas of empirical Bayes methodology, stochastic approximation, tests of power one, and sequential experimentation and optimal stopping. A list of Robbins' publications is included.

The Institute of Mathematical Statistics celebrated the 50th anniversary of its establishment in 1985, and Robert V. Hogg's article on the origins of the IMS is based on an invited lecture that he presented at a session devoted to that celebration at the annual meeting of the IMS in Las Vegas in August 1985. Hogg also sang a song entitled "Thanks to the IMS" (to the melody of Bob Hope's old theme song, "Thanks for the Memory"), but at the request of the Editors (in fact, at the insistence of the Editors) it was deleted from his article. However, for the sake of the music lovers among our readers, here are three of the several choruses that Hogg has written.

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## THANKS TO THE IMS

*Thanks to the IMS, Henry Rietz and his gang*
*That started with a bang*
*Our Institution was built till its praises we often sang*
*We thank you so much.*

*Thanks to the IMS, the Annals from the start*
*Harry Carver for his part*
*This journal then became IMS's pounding heart*
*We thank you so much.*

*Thanks to the IMS, the T-square of Hotelling*
*Really most compelling*
*Teamed with the Wilks statistics, they are very, very*
  *telling*
*We thank you so much.*

The complete lyrics are published in the November 1985 issue (Vol. 14, No. 6) of *The IMS Bulletin.*

Hogg quotes extensively in his article from a memoir that Cecil C. Craig had prepared and sent to him in anticipation of the IMS anniversary celebration. Unfortunately, Craig died in June 1985, at the age of 87. In tribute to this pioneer of the IMS who served as its first program secretary and later as its president for two years, 1942 and 1943, his memoir is also published in its entirety in this issue.

A major highlight of this issue is the interview with Erich L. Lehmann, the distinguished statistician from the University of California, Berkeley. In a wide-ranging conversation, Lehmann discusses his life, his career, and his view of contemporary statistics.