PART IV

CASE STUDIES

Fisher and Jeffreys were occupied with very different problems. Fisher studied biological problems, where one had no prior information and no guiding theory ..., and the data taking was very much like drawing from Bernoulli's urn. Jeffreys studied problems of geophysics, where one had a great deal of cogent prior information and a highly developed guiding theory ..., and the data taking procedure had no resemblance to drawing from an urn ... As science progressed to more and more complicated problems of inference, the shortcomings of the orthodox methods have become more and more troublesome ... Scientists, engineers, biologists, and economists with good Bayesian training are now finding for themselves the correct solutions appropriate for their problems, which can adapt effortlessly to many kinds of prior information, thus achieving a flexibility unknown in orthodox statistics.

Jaynes, 2003, pp. 496–497