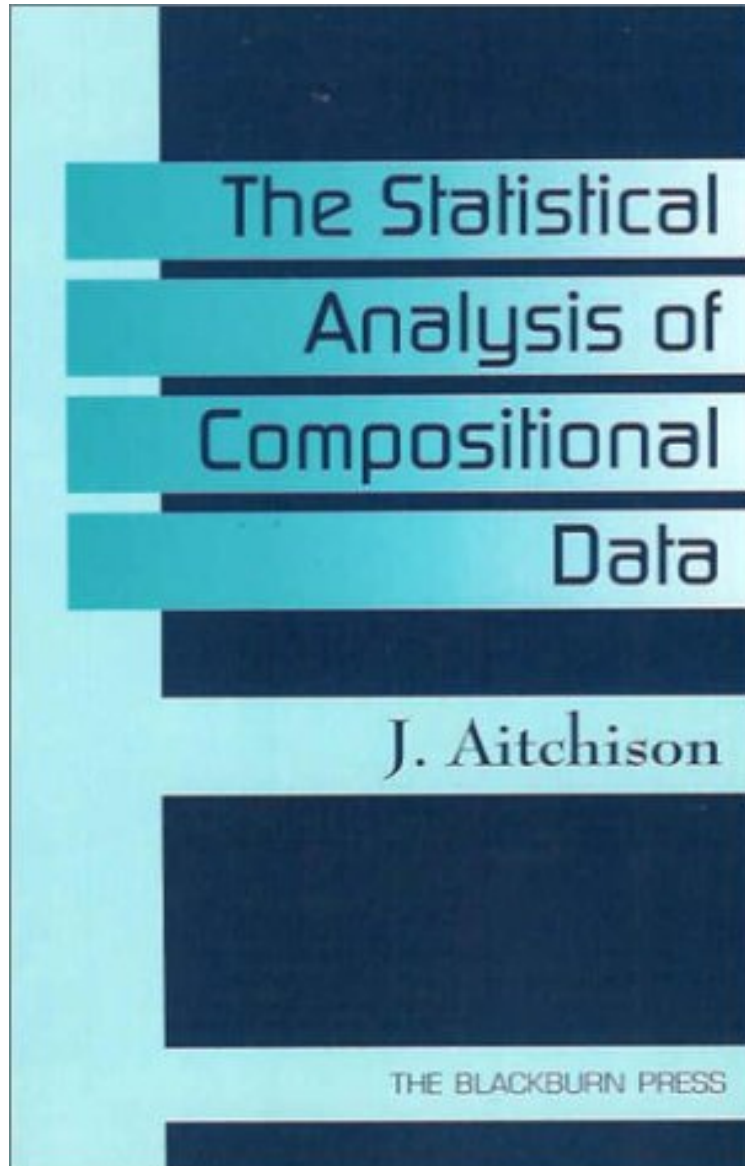


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J. Aitchison : The Statistical Analysis of Compositional Data before purchasing it in order to gage whether or not it would be worth my time, and all praised The Statistical Analysis of Compositional Data:

This book was originally published in 1986. It is reprinted here with a new foreword, extensive postscript detailing

developments in the field since publication and a selection of more recent literature references. A recent excursion on the web in search of "compositional data" produced over 3000 entries within a great variety of disciplines. In agriculture, land use compositions; in archaeology, chemical compositions of ceramics; in developmental biology, shape analysis relating (head, trunk, leg) compositions to height; in economics, household budget patterns; in environometrics, pollutant compositions; in geology, major oxide compositions of rocks and sediment (sand, silt, clay) compositions; in literary studies, sentence compositions; in manufacturing, global car production compositions; in medicine, blood, urine and renal calculi compositions; in ornithology, plumage and artefact colour compositions of the greater bower bird and sea bird time budgets; in palaeontology, zonal pollen compositions; in psephology, US Presidential election voting proportions; in psychology and sociology, time budgets of various groups; in waste disposal studies, waste composition. There can be little doubt that appropriate statistical analysis of such compositions is a requirement of many problems in many disciplines. This book provides a clear and systematic account of statistical methods designed to meet the special needs of the compositional data analyst. From the motivation of a number of practical examples from different disciplines and from a re-examination of the difficulties inherent in the inappropriate standard methods, the author argues that any successful statistical methodology must be based on the simple perception that only the relative magnitudes of the components of a composition matter, not their absolute values. "All along Aitchison motivates his mathematics by showing how it can answer the real questions of scientists . . . An enthralling instance of statistics at the service of modern science." The Times Higher Education Supplement "This book is the definitive work in its area and is likely to be the standard reference for decades to come." Mathematical Reviews "This splendid monograph develops sensible models for distributions on simplexes." Journal of the Royal Statistical Society "It is very well written and provides the only unified approach in existence to the analysis of compositional data." International Statistical Institute