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## Preface

This monograph is addressed to anyone interested in the subject of restricted-parameter-space estimation, and in particular to those who want to learn, or bring their knowledge up to date, about (in)admissibility and minimaxity problems for such parameter spaces.

The coverage starts in the early 1950s when the subject of inference for restricted parameter spaces began to be studied and ends around the middle of 2004. It presents known, and also some new, results on (in)admissibility and minimaxity for nonsequential point estimation problems in restricted finite-dimensional parameter spaces. Relationships between various results are discussed and open problems are pointed out. Few complete proofs are given, but outlines of proofs are often supplied. The reader is always referred to the published papers and often results are clarified by presenting examples of the kind of problems an author solves, or of problems that cannot be solved by a particular result.

The monograph does not touch on the subject of testing hypotheses in restricted parameter spaces. The latest books on that subject are by Robertson, Wright and Dykstra (1988) and Akkerboom (1990), but many new results in that area have been obtained since.

The monograph does have a chapter in which questions about the existence of maximum likelihood estimators are discussed. Some of their properties are also given there as well as some algorithms for computing them. Most of these results cannot be found in the Robertson, Wright, Dykstra book.

The author's long familiarity with the subject of this monograph combined with her 14-year General Editorship of *Statistical Theory and Method Abstracts* make it very unlikely that she missed any published results on the subject.

The author thanks her co-author and good friend Jim Zidek for proposing she write a monograph on estimation in restricted parameter spaces and for his encouragement and help during the writing.

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Finally, my thanks to several anonymous reviewers for their helpful comments, as well as to the staff at Springer's editorial and production departments – in particular to John Kimmel, Statistics Editor, – for their help in getting this monograph in final form.

Broek in Waterland, June 2006