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THE ANALYSIS  
OF VARIANCE:  
A BASIC COURSE

BEING  
NUMBER EIGHTEEN  
OF

GRIFFIN'S STATISTICAL  
MONOGRAPHS & COURSES  
EDITED BY ALAN STUART, D.Sc.(Econ.)

THE  
ANALYSIS OF VARIANCE  
A BASIC COURSE

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*Second impression*

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## PREFACE

The subject of analysis of variance, although now of a respectable age, is still one which presents numerous difficulties to the student. Many students end their training by regarding it as a slice of algebra to be carried out mechanically, without any understanding of the practical implications of what they are doing. While a facility in algebraic manipulation is desirable, a full understanding of the assumptions involved is necessary for the successful application of the technique. The idea for starting this monograph arose from teaching the need to differentiate between the use of the interaction mean square and the error mean square when carrying out a variance ratio test. Existing books are particularly weak on this topic, and yet it is from this single point that the unity of the subject can be established.

In this volume, I have tried to present a logical development, covering both the assumptions made and the algebraic derivations of the formulae. Only where repetition of the algebra would have become tedious has the work been left as an exercise to the reader. The first three chapters cover the conventional analysis of variance. The next four chapters show how the methods which have been developed can be applied to special types of experiments. Finally, Chapter 8 discusses some further points which arise occasionally in this field. All the theory of the subject necessary for a university degree course or a Dip. Tech. course has been included.

I would like to record my gratitude to my wife for her meticulous typing of the drafts and also to the publishers for their very careful setting of some difficult manuscript.

August 1965

A.H.

## PUBLISHERS' NOTE TO SECOND IMPRESSION

The continued demand for this Monograph necessitates a reprint, and the opportunity has been taken to make some minor amendments and additions to the text.

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