

## *Preface*

It was at dinner with Ted Robert Gurr that the idea to write this book emerged. His introductory book *Politimetrics* (*sic*) had just been published and both of us felt that another book, at a more advanced level, should be produced. But the more advanced book had to remain within the confines of the philosophy of the elementary book. This philosophy is that politometrics is a set of techniques devised to allow more theoretical flexibility—it is not an end in itself. This book is offered to political scientists with this philosophy in mind. Politometric techniques are an aid to, not a replacement for, theoretical thinking.

The book is in three parts. In the first part the student is introduced to the philosophy and formal interpretation of regression. This is done using only bivariate regression arguments, because it is essential that the student understand the assumptions underlying the regression procedure. Having grasped the fundamental arguments while discussing the most simple form of regression, the student is in a position to comprehend the more sophisticated regression procedures that appear in the second part of the book.

In the second part of the book the student is introduced to ideas of matrix algebra. Matrix algebra is useful when dealing with the multivariate regression situations encountered in Part Two and absolutely necessary for the arguments about identification in Part Three. Also in Part Two there is some consideration of regression models which are other than linear.

Part Three advances the student into multivariate multiequation situations. Political processes at their very simplest can only be accommodated by such models. Techniques are described which allow the theoretician such theoretical flexibilities as reciprocity in political processes.

To make the book as useful as possible, I have included at the end of each chapter suggested further readings of two kinds. The first is substantive and includes references to political science research which exploits some of the techniques used in the preceding chapter. In this manner I hope to provide the more pragmatic student with some reason for continuing with the book, as well as a general reading list in politometric matters. The reader will notice that as the book becomes more sophisticated, the references reduce in number. I hope that as a result of this book the next writer at this level will not have the same reference resource problem. The second type of further reading is statistical. It is included so that the student can look at the various mathematical proofs of the regression processes that I allude to but do not discuss in detail. The references in footnotes are cited in shortened form when the books or articles are listed in Further Readings at the end of the chapter.

In producing the book I have been constantly encouraged by Ted Robert Gurr here at Northwestern University. Kenneth Janda, also at Northwestern University, read an earlier draft and made some extremely valuable comments. Other than these I wish to acknowledge the tremendous help of Linda Radomski, University of Miami Medical School. She took the original first draft and carried out such a careful and responsible editing job that it was only necessary for me to rewrite parts for a final draft.

I am also very grateful to Jane Tyler of Northwestern University, who helped prepare the final draft, the copy-edited version, and the galleys. She made this normally wretched process more tolerable. Any mistakes are mine.

*Evanston*  
*June 1975*

GORDON HILTON