

CONTENTS

| | |
|---|------------|
| Acknowledgments | v |
| Series Editor's Introduction | vii |
| 1. Introduction | 1 |
| 1.1 The Monte Carlo Principle | 3 |
| 2. Generating Individual Samples From a Pseudo-Population | 5 |
| 2.1 Setting Up a Population Generating Computer Algorithm | 5 |
| 2.2 Generating Single Random Variables | 7 |
| 2.3 Generating Combinations of Random Variables | 42 |
| 3. Using the Pseudo-Population in Monte Carlo Simulation | 50 |
| 3.1 An Example of a Complete Pseudo-Population Algorithm | 50 |
| 3.2 Generating a Vector of Monte Carlo Estimates | 52 |
| 3.3 Generating Multiple Experiments | 55 |
| 3.4 Which Statistic Is to Be Saved From a Trial? | 56 |
| 3.5 How Many Trials Are Needed? | 57 |
| 3.6 Evaluating Monte Carlo Estimates of Sampling Distributions | 59 |
| 4. Using Monte Carlo Simulation in the Social Sciences | 65 |
| 4.1 Inference When Weak Statistical Theory Exists for an Estimator | 66 |
| 4.2 Testing a Null Hypothesis Under a Variety of Plausible Conditions | 72 |
| 4.3 Assessing the Quality of an Inference Method | 77 |
| 4.4 Assessing the Robustness of Parametric Inference to Assumption Violations | 82 |
| 4.5 Comparing Estimators' Properties | 88 |

| | |
|-------------------------|------------|
| 5. Conclusion | 92 |
| Notes | 97 |
| References | 99 |
| About the Author | 103 |