

Contents

Introduction 1

1. Inductive Logic and Rational Decisions by *Rudolf Carnap* 5

1. Decision Making 7
2. Actual Decisions 11
3. Rational Decisions 13
4. Credibility 17
5. Permanent Dispositions 21
6. Inductive Logic 25
7. The Question of Acceptance 29

2. A Basic System of Inductive Logic, Part I by *Rudolf Carnap* 33

1. Basic Concepts and Basic Axioms 35
 - A. *Basic Concepts* 35
 - B. *The Basic Axioms* 38
2. Individuals and Attributes 43
 - A. *Monadic Predicate Languages* 43
 - B. *Stronger Languages* 48
3. Models and Propositions 53
 - A. *The Space of Models* 53
 - B. *Propositions* 56
 - C. *Sample Propositions and Random Variables* 62
4. Pure and Applied Inductive Logic 69
 - A. *The Distinction between Pure and Applied Logic* 69
 - B. *Requirements for Primitive Attributes* 70
5. Basic Assumptions about Individuals, Attributes and Relations 77
6. Sublanguages 87
7. Regular \mathcal{C} -Functions 101
8. Coherent \mathcal{C} -Functions 105
9. Symmetric \mathcal{C} -Functions 117
10. One Family of Attributes 121

11. Representative Functions for \mathcal{M}	131
<i>A. MI-Functions</i>	131
<i>B. MI-Sequences</i>	140
<i>C. MS- and MD-Functions</i>	142
12. Representative Functions for \mathcal{C}	151
13. The Principle of Instantial Relevance	161
3. Probability Measures and Integrals by <i>Richard C. Jeffrey</i>	167
1. Introduction	169
2. Measures	173
3. Measurable Functions	183
4. Integrals	187
5. Properties of the Integral	191
6. Lebesgue-Stieltjes Integrals	195
7. Extensions and Mixtures of Measures; Stationary, Symmetric, and Bernoullian Measures	199
8. Indefinite Integrals and Derivatives	205
9. Conditioning: Probabilities and Expectations as Random Variables	211
10. De Finetti's Representation Theorem	217
Bibliographical Remarks	220
Some Recent History	223
4. The Principle of Instantial Relevance by <i>Jürgen Humburg</i>	225
5. Applications of De Finetti's Theorem to Inductive Logic by <i>Haim Gaifman</i>	235
Postscript Concerning Extension of Probability Functions	246
Selected Bibliography	253