

Foundations of Decision Theory

Issues and Advances

Edited by
Michael Bacharach
and
Susan Hurley

Basil Blackwell

Contents

Introduction Issues and Advances in the Foundations of Decision Theory

<i>Michael Bacharach and Susan Hurley</i>	1
1 Five issues in the foundations of decision theory	1
2 Consequentialism, separability, and description	5
3 Context dependence and the proto-consequentialist assumption	12
4 Individual and group rationality	17
5 The deliberative process	20
6 New concepts of equilibrium in games	24
7 Individual rationality and the new equilibria	28
8 Is decision theory determinate?	35

1 Dynamic Consistency and Non-expected Utility

<i>Mark J. Machina</i>	39
1 Introduction	39
2 Expected utility versus non-expected utility preferences	42
3 Static and dynamic arguments against non-expected utility preferences	52
4 Critique of the dynamic arguments	59
5 Dynamically consistent non-expected utility maximizers	67
6 Modeling nonseparable preferences under uncertainty	74

2 Consequentialism and Sequential Choice <i>Isaac Levi</i>	92
1 Extensive and normal form	92
2 Act, state, consequence	95
3 Weak and strict consequentialism	102
4 Hammond's consequentialism	106

3	The Structure of Good: Decision Theory and Ethics	
	<i>John Broome</i>	123
1	Teleological ethics and agent neutrality	123
2	Teleological ethics and good	125
3	The structure of good	128
4	Locations of good	131
5	Teleological ethics and uncertainty	132
6	Decision theory and the structure of good	136
7	Three dimensions for good	139
8	Does good exist?	142
4	Decision Theory and Folk Psychology <i>Philip Pettit</i>	147
1	Introduction	147
2	Decision theory	148
3	The explication thesis	150
4	The abstraction thesis	151
5	The significance of the abstraction thesis	159
5	Decentralization, Duplicity, and Minimal Equity	
	<i>John E. Roemer</i>	176
1	Introduction	176
2	Nash implementation	178
3	Implementation with inspection	182
4	The political tradeoffs	188
5	Conclusion	191
6	Deciding How to Decide: Is There a Regress Problem?	
	<i>Holly Smith</i>	194
1	Alleged difficulties raised by the regress problem	196
2	The threat to rational decision-making with simple decision guides	198
3	Justified-belief decision guides	211
4	Conclusion	215
7	Inductive Deliberation, Admissible Acts, and Perfect Equilibrium <i>Brian Skyrms</i>	220
1	Naive Bayesians meet the theory of games	220
2	Bang-bang Bayesians with informational feedback	221
3	Deliberational dynamics	221
4	Cautious deliberators with adaptive rules	222
5	Inductive dynamic deliberation	224
6	Fictitious play by Laplacian deliberators in 2-by-2 two-person noncooperative games	226
7	Carnapian deliberators in finite noncooperative games	229

8	Bayesian generalizations of Carnapian deliberation	230
9	Nash equilibrium, admissible acts, and perfect equilibrium	231
10	Equilibrium and inductive deliberation	234
11	Analogy and correlation	238
12	Other critical inductive assumptions	239
8	Two Notions of Ratifiability and Equilibrium in Games	
	<i>Hyun Song Shin</i>	242
1	Introduction	242
2	First notion of ratifiability	246
3	Second notion of ratifiability	251
4	Beyond ratifiability	256
9	Ratifiability and Refinements (in Two-person Noncooperative Games)	
	<i>William Harper</i>	263
1	Introduction and background	263
2	Classical refinements	268
3	Forward induction	281
10	Rational Bargaining	294
	<i>Robert Sugden</i>	
1	Introduction	294
2	The Nash solution	296
3	Trembling-hand equilibrium	301
4	Rubinstein's solution	303
5	The rationale for trembling-hand equilibrium	305
6	Going beyond skepticism: Nash bargaining games	308
7	Going beyond skepticism: Rubinstein's game	313
8	Conclusion	314
	Bibliography	317
	Index	339