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# Epistemic Game Theory

In everyday life we must often reach decisions while knowing that the outcome will not only depend on our own choice, but also on the choices of others. These situations are the focus of epistemic game theory. Unlike classical game theory, it explores how people may reason about their opponents *before* they make their final choice in a game. Packed with examples and practical problems based on stories from everyday life, this is the first textbook to explain the principles of epistemic game theory. Each chapter is dedicated to one particular, natural way of reasoning. The book then shows how each of these ways of reasoning will affect the final choices that can rationally be made, and how these choices can be found by iterative procedures. Moreover, it does so in a way that uses elementary mathematics and does not presuppose any previous knowledge of game theory.

ANDRÉS PEREA is Associate Professor in the Department of Quantitative Economics, Maastricht University, The Netherlands. He has taught courses on epistemic game theory at several European universities and is the author of *Rationality in Extensive Form Games* (2001).

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# Epistemic Game Theory
## *Reasoning and Choice*

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To my children Maria and Lucas

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Frontmatter
More information

# *Contents*

*List of figures* *page* xi
*List of tables* xiii
*Acknowledgments* xvii

**1 Introduction** 1

**Part I Standard beliefs in static games**

**2 Belief in the opponents' rationality** 13
2.1 Beliefs about the opponent's choice 13
2.2 Utility functions 17
2.3 More than two players 21
2.4 Choosing rationally 25
2.5 Strictly dominated choices 30
2.6 Belief in the opponents' rationality 37
2.7 Graphical method 45
2.8 Algorithm 46
2.9 Proofs 50
Practical problems 56
Theoretical problems 62
Literature 63

**3 Common belief in rationality** 68
3.1 Beliefs about the opponents' beliefs 68
3.2 Belief hierarchies 80
3.3 Epistemic model 85
3.4 Common belief in rationality 91
3.5 Graphical method 95
3.6 Existence 98
3.7 Algorithm 102



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CAMBRIDGE

Cambridge University Press
978-1-107-00891-5 - Epistemic Game Theory: Reasoning and Choice
Andrés Perea
Frontmatter
More information



3.8 Order independence 110
3.9 Proofs 112
Practical problems 118
Theoretical problems 123
Literature 124

**4 Simple belief hierarchies** 134
4.1 Simple belief hierarchies 134
4.2 Nash equilibrium 146
4.3 Computational method 150
4.4 Belief that opponents hold correct beliefs 161
4.5 Proofs 167
Practical problems 171
Theoretical problems 175
Literature 177

**Part II Lexicographic beliefs in static games**

**5 Primary belief in the opponent's rationality** 187
5.1 Cautious reasoning about the opponent 187
5.2 Lexicographic beliefs 190
5.3 Belief hierarchies and types 195
5.4 Cautious types 199
5.5 Primary belief in the opponent's rationality 200
5.6 Common full belief in "primary belief in rationality" 202
5.7 Existence 210
5.8 Weakly dominated choices 213
5.9 Algorithm 215
5.10 Proofs 220
Practical problems 234
Theoretical problems 239
Literature 241

**6 Respecting the opponent's preferences** 250
6.1 Respecting the opponent's preferences 250
6.2 Common full belief in "respect of preferences" 253
6.3 Existence 258
6.4 Why elimination of choices does not work 261
6.5 Preference restrictions and likelihood orderings 263
6.6 Algorithm 269
6.7 Order independence 276
6.8 Proofs 278
Practical problems 292

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CAMBRIDGE

Cambridge University Press
978-1-107-00891-5 - Epistemic Game Theory: Reasoning and Choice
Andrés Perea
Frontmatter
More information



Theoretical problems 296
Literature 298

**7 Assuming the opponent's rationality** 301
7.1 Assuming the opponent's rationality 301
7.2 Common assumption of rationality 305
7.3 Algorithm 314
7.4 Order dependence 320
7.5 Proofs 321
Practical problems 332
Theoretical problems 337
Literature 339

**Part III Conditional beliefs in dynamic games**

**8 Belief in the opponents' future rationality** 347
8.1 Belief revision 347
8.2 Dynamic games 350
8.3 Conditional beliefs 358
8.4 Epistemic model 366
8.5 Belief in the opponents' future rationality 369
8.6 Common belief in future rationality 375
8.7 Existence 379
8.8 Algorithm 383
8.9 Order independence 392
8.10 Backwards order of elimination 397
8.11 Backward induction 410
8.12 Games with unobserved past choices 419
8.13 Bayesian updating 424
8.14 Proofs 428
Practical problems 447
Theoretical problems 453
Literature 454

**9 Strong belief in the opponents' rationality** 468
9.1 Strong belief in the opponents' rationality 468
9.2 Common strong belief in rationality 473
9.3 Algorithm 483
9.4 Comparison with backward dominance procedure 493
9.5 Order dependence 501
9.6 Rationality orderings 503
9.7 Bayesian updating 514
9.8 Proofs 515

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CAMBRIDGE

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978-1-107-00891-5 - Epistemic Game Theory: Reasoning and Choice
Andrés Perea
Frontmatter
More information



Practical problems 537
Theoretical problems 543
Literature 545

*Bibliography* 552
*Index* 559

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Cambridge University Press
978-1-107-00891-5 - Epistemic Game Theory: Reasoning and Choice
Andrés Perea
Frontmatter
More information

# *Figures*


| | | |
|---|---|---|
| 1.1 | Logical connection between the chapters | *page* 4 |
| 2.1 | Where to locate my pub? | 14 |
| 2.2 | A beliefs diagram for "Where to locate my pub?" | 16 |
| 2.3 | A beliefs diagram for "Going to a party" | 19 |
| 2.4 | Beliefs diagram for "Waiting for a friend" | 24 |
| 2.5 | A probabilistic belief in "Waiting for a friend" | 26 |
| 2.6 | A beliefs diagram for "The traveler's dilemma" | 37 |
| 2.7 | A beliefs diagram for "Where to locate my pub?" (II) | 39 |
| 2.8 | A beliefs diagram for "Going to a party" (II) | 41 |
| 2.9 | An alternative beliefs diagram for "Going to a party" | 42 |
| 2.10 | A beliefs diagram for "Waiting for a friend" (II) | 44 |
| 2.11 | Map for "Where to locate a supermarket?" | 56 |
| 2.12 | The big race | 61 |
| 3.1 | A beliefs diagram for "Where to locate my pub?" (III) | 69 |
| 3.2 | A beliefs diagram for "Going to a party" (III) | 72 |
| 3.3 | An alternative beliefs diagram for "Going to a party" (II) | 73 |
| 3.4 | A beliefs diagram for "Going to a party" with new utilities for Barbara | 75 |
| 3.5 | A beliefs diagram for "Waiting for a friend" (III) | 77 |
| 3.6 | An extended beliefs diagram for "Where to locate my pub?" | 82 |
| 3.7 | An extended beliefs diagram for "Waiting for a friend" | 84 |
| 3.8 | An extended beliefs diagram for "Going to a party" with utilities from Table 3.3 | 85 |
| 3.9 | An alternative extended beliefs diagram for "Going to a party" | 92 |
| 3.10 | Common belief in rationality is always possible | 100 |
| 3.11 | Houses for sale in "The mother-in-law" | 122 |
| 4.1 | A beliefs diagram for "Teaching a lesson" | 136 |
| 4.2 | A beliefs diagram for "Going to a party" (IV) | 139 |
| 4.3 | A beliefs diagram for "Movie or party?" | 143 |
| 4.4 | Suppose that $t_i$ assigns positive probability to $t_j$ and $t_j'$ | 163 |
| 4.5 | Type $t_i$ must assign probability 1 to a single type $t_j$ for player $j$ | 163 |




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CAMBRIDGE

Cambridge University Press
978-1-107-00891-5 - Epistemic Game Theory: Reasoning and Choice
Andrés Perea
Frontmatter
More information




| | | |
|---|---|---|
| 5.1 | A walk through the forest | 236 |
| 5.2 | Stealing an apple | 239 |
| 6.1 | Possible hiding places in "Runaway bride" | 266 |
| 6.2 | Arrangement of tables in "Take a seat" | 274 |
| 6.3 | Street in "Planting a tree" | 293 |
| 6.4 | Castle in "Lasergame" | 295 |
| 8.1 | Painting Chris' house | 348 |
| 8.2 | Example of a dynamic game | 352 |
| 8.3 | Player 1 does not know player 2's previous choice | 353 |
| 8.4 | Player 1 forgets information he previously had | 356 |
| 8.5 | Strategy combinations that lead to an information set | 362 |
| 8.6 | Painting Chris' house with restricted price sets | 370 |
| 8.7 | Painting Chris' house with an initial offer for you | 371 |
| 8.8 | Graphical representation of "Two friends and a treasure" | 398 |
| 8.9 | Round 5 of "The shrinking treasure" | 412 |
| 8.10 | Round 4 of "The shrinking treasure" | 413 |
| 8.11 | Round 1 of "The shrinking treasure" | 414 |
| 8.12 | Reduced decision problem for round 1 of "The shrinking treasure" | 415 |
| 8.13 | Graphical representation of "Bargaining with unobserved past choices" | 420 |
| 8.14 | The role of Bayesian updating | 427 |
| 8.15 | Selling ice cream | 449 |
| 9.1 | Painting Chris' house (II) | 469 |
| 9.2 | Watching TV with Barbara | 474 |
| 9.3 | The heat of the fight | 496 |
| 9.4 | A map of the airport in "Time to say goodbye" | 542 |


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978-1-107-00891-5 - Epistemic Game Theory: Reasoning and Choice
Andrés Perea
Frontmatter
More information

# *Tables*

2.1 Number of customers you would obtain if you believe that Barbara chooses $a$ *page* 15
2.2 Number of customers you would obtain if you believe that Barbara chooses $f$ 15
2.3 Your utilities in "Going to a party" 17
2.4 Alternative utilities in "Going to a party" 20
2.5 Alternative utilities in "Going to a party" (II) 20
2.6 Expected utilities for you in "Waiting for a friend" 25
2.7 Compensation you receive in "The traveler's dilemma" 36
2.8 Your expected compensation if you choose price 100 with probability 0.45 and price 300 with probability 0.55 37
2.9 Utilities for you and Barbara in "Going to a party" 40
2.10 Reduced game after step 1 in "The traveler's dilemma" 51
2.11 Utilities for Barbara, Chris and you in "Going to a party" 59
2.12 New utilities for Chris in "Going to a party" 60
3.1 Number of customers you would obtain if you believe that Barbara will only choose from $\{c, d, e\}$ 70
3.2 Utilities for you and Barbara in "Going to a party" (II) 72
3.3 New utilities for Barbara in "Going to a party" 74
3.4 An epistemic model for "Going to a party" with utilities from Table 3.3 88
3.5 An epistemic model for "Waiting for a friend" 89
3.6 An alternative epistemic model for "Going to a party" 93
3.7 Epistemic model for "Going to a party," deduced from the cycle of arrows in Figure 3.10 100
3.8 Compensation that you and Barbara receive in "The traveler's dilemma" 108
3.9 Reduced game after step 1 in "The traveler's dilemma" (II) 108
3.10 Reduced game obtained after step 2 in "The traveler's dilemma" 108
4.1 Utilities for you and the teacher in "Teaching a lesson" 135



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Andrés Perea
Frontmatter
More information




| | | |
|---|---|---|
| 4.2 | Utilities for Barbara and you in "Going to a party" | 139 |
| 4.3 | Utilities for you and the teacher in "Teaching a lesson" (II) | 153 |
| 4.4 | Utilities for Barbara and you in "Going to a party" (bis) | 155 |
| 4.5 | Utilities for you, Barbara and Chris in "Movie or party?" | 159 |
| 4.6 | Utilities in "Summer holiday" | 174 |
| 5.1 | Utilities for you and Barbara in "Should I call or not?" | 188 |
| 5.2 | Utilities for you and Barbara in "Where to read my book?" | 190 |
| 5.3 | Some lexicographic beliefs you can hold about Barbara's choice in "Where to read my book?" | 192 |
| 5.4 | An epistemic model with lexicographic beliefs for "Where to read my book?" | 198 |
| 5.5 | An epistemic model with lexicographic beliefs for "Should I call or not?" | 205 |
| 5.6 | An epistemic model with lexicographic beliefs for "Where to read my book?" (II) | 206 |
| 5.7 | Utilities for you and the teacher in "Teaching a lesson" (III) | 207 |
| 5.8 | Reduced game after eliminating your irrational choice *Wed* | 207 |
| 5.9 | Reduced game after eliminating the teacher's choice *Thu* | 208 |
| 5.10 | Reduced game after eliminating your choice *Tue* | 208 |
| 5.11 | Reduced game after eliminating the teacher's choice *Wed* | 209 |
| 5.12 | Reduced game after eliminating your choice *Mon* | 209 |
| 5.13 | Reduced game after eliminating the teacher's choice *Tue* | 209 |
| 5.14 | An epistemic model with lexicographic beliefs for "Teaching a lesson" | 210 |
| 5.15 | Utilities for you and Barbara in "Hide-and-seek" | 211 |
| 5.16 | "Teaching a lesson" with an additional choice *Thu* for you | 219 |
| 6.1 | Utilities for you and Barbara in "Where to read my book?" (II) | 251 |
| 6.2 | An epistemic model for "Where to read my book?" | 251 |
| 6.3 | Utilities for you and Barbara in "Dividing a pizza" | 256 |
| 6.4 | An epistemic model for "Dividing a pizza" | 257 |
| 6.5 | Utilities for you and Barbara in "Hide-and-seek" (II) | 259 |
| 6.6 | Utilities for you and Barbara in "Spy game" | 262 |
| 6.7 | An epistemic model for "Spy game" | 262 |
| 6.8 | Utilities for you and Barbara in "Runaway bride" | 267 |
| 6.9 | An epistemic model for "Runaway bride" | 268 |
| 6.10 | Utilities for you and Barbara in "Take a seat" | 275 |
| 6.11 | An epistemic model for "Take a seat" | 276 |
| 6.12 | Utilities for you and Barbara in "A historical trip" | 294 |
| 7.1 | Utilities for you and Barbara in "Spy game" (II) | 302 |
| 7.2 | An epistemic model for "Spy game" (II) | 304 |
| 7.3 | An epistemic model for "Spy game" (III) | 304 |
| 7.4 | Utilities for you and Barbara in "Dividing a pizza" (II) | 307 |
| 7.5 | An epistemic model for "Dividing a pizza" (II) | 309 |


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978-1-107-00891-5 - Epistemic Game Theory: Reasoning and Choice
Andrés Perea
Frontmatter
More information



7.6 An epistemic model for "Spy game" (IV) 313
7.7 Utilities for you and Barbara in "Take a seat" (II) 319
7.8 Utilities for you and Barbara in "Where to read my book?" (III) 321
7.9 On self-admissible pairs of choice sets 339
8.1 An epistemic model for "Painting Chris' house" 368
8.2 An epistemic model for the game in Figure 8.2 369
8.3 An epistemic model for the game in Figure 8.7 372
8.4 An alternative epistemic model for "Painting Chris' house" 377
8.5 An alternative epistemic model for the game in Figure 8.7 379
8.6 Full decision problems in the game of Figure 8.7 384
8.7 Decision problems after step 1 in the game of Figure 8.7 385
8.8 Decision problems after step 2 in the game of Figure 8.7 386
8.9 Decision problems after step 3 in the game of Figure 8.7 387
8.10 Full decision problems in the game of Figure 8.1 391
8.11 Decision problems after step 1 in the game of Figure 8.1 391
8.12 Decision problems after step 2 in the game of Figure 8.1 392
8.13 Decision problems after step 3 in the game of Figure 8.1 392
8.14 Changing the order of elimination in the game of Figure 8.1 393
8.15 Changing the order of elimination in the game of Figure 8.1 (II) 394
8.16 Full decision problem at $h_4$ in "Two friends and a treasure" 399
8.17 Simplified full decision problem at $h_4$ in "Two friends and a treasure" 400
8.18 Full decision problem at $h_2$ in "Two friends and a treasure" 400
8.19 Full decision problem at $h_1$ in "Two friends and a treasure" 400
8.20 Reduced decision problem at $h_1$ in "Two friends and a treasure" after first round of elimination 401
8.21 Final decision problem at $h_1$ in "Two friends and a treasure" 401
8.22 Final decision problem at $h_3$ in "Two friends and a treasure" 402
8.23 Reduced decision problem at $\emptyset$ in "Two friends and a treasure" after first round of elimination 402
8.24 Final decision problem at $\emptyset$ in "Two friends and a treasure" 403
8.25 Stage 1 of "Bargaining with commitment" 408
8.26 Reduced decision problem at $\emptyset$ in "Bargaining with commitment" 410
8.27 Decision problems at $h_1, h_2, h_3$ and $h_4$ in "Bargaining with unobserved past choices" 422
8.28 Reduced decision problems at $h_1, h_2, h_3$ and $h_4$ in "Bargaining with unobserved past choices" 423
8.29 Decision problem at $\emptyset$ in "Bargaining with unobserved past choices" 424
8.30 Reduced decision problem at $\emptyset$ in "Bargaining with unobserved past choices" 424
8.31 Final decision problem at $\emptyset$ in "Bargaining with unobserved past choices" 424

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Cambridge University Press
978-1-107-00891-5 - Epistemic Game Theory: Reasoning and Choice
Andrés Perea
Frontmatter
More information



8.32 An epistemic model for the game in Figure 8.14 427
8.33 The utilities for you and Barbara in "Two parties in a row" 448
9.1 An epistemic model for "Painting Chris' house" (II) 471
9.2 Another epistemic model for "Painting Chris' house" 473
9.3 An epistemic model for "Watching TV with Barbara" 476
9.4 Full decision problems in "Painting Chris' house" 489
9.5 Reduced decision problems after step 1 in "Painting Chris' house" 489
9.6 Final decision problems after step 2 in "Painting Chris' house" 490
9.7 Full decision problems in "Watching TV with Barbara" 490
9.8 Reduced decision problems after step 1 in "Watching TV with Barbara" 491
9.9 Reduced decision problems after step 2 in "Watching TV with Barbara" 491
9.10 Reduced decision problems after step 3 in "Watching TV with Barbara" 492
9.11 Reduced decision problems after step 4 in "Watching TV with Barbara" 492
9.12 Final decision problems after step 5 in "Watching TV with Barbara" 493
9.13 Full decision problems in "The heat of the fight" 497
9.14 Reduced decision problems after step 1 of the iterated conditional dominance procedure in "The heat of the fight" 498
9.15 Final decision problems for the iterated conditional dominance procedure in "The heat of the fight" 499
9.16 Changing the order of elimination in "Painting Chris' house": Step 1 502
9.17 Changing the order of elimination in "Painting Chris' house": Step 2 502
9.18 Changing the order of elimination in "Painting Chris' house": Step 3 503
9.19 The reduced decision problems $\Gamma^k(\emptyset)$ for the example "Watching TV with Barbara" 505
9.20 Utilities for you, Barbara and Chris in "Dinner for three" 541

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CAMBRIDGE

Cambridge University Press
978-1-107-00891-5 - Epistemic Game Theory: Reasoning and Choice
Andrés Perea
Frontmatter
More information

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Frontmatter
More information



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