

Contents

Preface	page vii
1 Introduction	1
<i>Rationality</i>	5
<i>Antecedents of the present approach</i>	18
<i>The study of intelligence: history of IQ tests</i>	31
<i>Cross-cultural research</i>	43
<i>Conclusion</i>	48
2 Rational choices and plans	50
<i>Rational plans</i>	52
<i>Utility theory</i>	57
<i>Utility theory as a descriptive model</i>	67
<i>Is conformity to utility theory required?</i>	75
<i>Summary</i>	82
3 A theory of thinking	84
<i>The phases</i>	86
<i>The theory as a framework for description</i>	94
<i>The prescriptive theory</i>	103
<i>Examples and suggestions for a taxonomy of thinking tasks</i>	120
<i>Summary</i>	128
4 The scheme fleshed out: a decision-theoretic analysis of thinking	130
<i>Choice of evidence</i>	130
<i>The representation of ignorance in probability assignments</i>	147
<i>Other approaches to the value of information</i>	150
<i>Scientific method and the value of information</i>	151
<i>Interim summary</i>	154

	<i>Optimal stopping and impulsiveness</i>	155
	<i>Confirmation bias in choice of evidence from memory</i>	162
	<i>Belief perseverance, or insensitivity to evidence</i>	163
5	Conditions of effective thinking	168
	<i>Limits on cognitive processes</i>	168
	<i>Abstracting and using rules and schemata</i>	190
	<i>The memory system required for thinking</i>	195
	<i>The memory system it would be nice to have</i>	199
6	Effects of rational thinking on the individual and society	206
	<i>Rationality and happiness</i>	206
	<i>Effects of rationality on effectiveness</i>	208
	<i>Availability</i>	212
	<i>Meaningful learning</i>	218
	<i>Problem solving</i>	221
	<i>Reflective thinking and morality</i>	222
	<i>Development of identity and moral reasoning</i>	227
	<i>Thinking and pathology</i>	231
	<i>Rational thinking as a moral trait</i>	234
	<i>The attack on rationality</i>	237
	<i>Directions for research</i>	241
7	The teaching of rational thinking	244
	<i>Equal educational opportunity</i>	244
	<i>Generality</i>	245
	<i>Developmental questions</i>	247
	<i>The objectives of teaching and the teaching of thinking</i>	250
	<i>Goals, beliefs, and expectations</i>	256
	<i>Methods of teaching</i>	260
	<i>Social conditions for the encouragement of rational thinking</i>	277
	References	280
	Index	297