# Table of Contents

Preface xi

Part I. Introduction 1
  1. Conceptions of intelligence 3
      Explicit theories of intelligence 3
      Implicit theories of intelligence 31
      Relations between explicit and implicit theories 38

Part II. The triarchic theory: subtheories 41
  2. The context of intelligence 43
      A contextual subtheory of intelligence 45
      A contextually derived implicit theory of intelligence 57
      Conclusions 65
  3. Experience and intelligence 67
      An experiential subtheory of intelligence 68
      What tasks measure intelligence and why? 74
      A theory of response to novelty and automatization of information processing based upon the experiential subtheory of intelligence 78
  4. Components of intelligence 97
      The unit of analysis 97
      Interrelations between components and other units of analysis 114
      Relations between components and aspects of human intelligence 118

Part III. The triarchic theory: tests 129
  5. Fluid abilities: inductive reasoning 131
# Contents

- Fluid abilities and intelligence: a capsule review of the literature 132
- Criteria for assessing commonalities in fluid (and other) tasks 133
- Theory of inductive reasoning 133
- Tests of the theory of inductive reasoning 142
- Theory of induction for metaphors 164
- Theory of judgment in causal inference 174

6. Fluid abilities: deductive reasoning 180
   - Linear syllogisms 180
   - The linguistic–spatial mixture theory 182
   - Categorical syllogisms 198
   - Conditional syllogisms 207

7. Crystallized intelligence: acquisition of verbal comprehension 214
   - Alternative cognitive approaches to the acquisition of verbal comprehension skills 215
   - Theory of learning from context 219

8. Crystallized intelligence: theory of information processing in real-time verbal comprehension 241
   - Alternative approaches to understanding real-time verbal comprehension 241
   - Theory of real-time representation and information processing 243

9. Social and practical intelligence 258
   - Social intelligence 258
   - Practical intelligence 267

Part IV. The triarchic theory: some implications 279

10. Exceptional intelligence 281
    - Intellectual giftedness: insight and the ability to deal with novelty 281
    - Other aspects of intellectual giftedness 290
    - Intellectual retardation 292

11. Implications of the triarchic theory for intelligence testing 299
    - Implications of the componential subtheory for intelligence testing 299
    - Implications of the experiential subtheory for intelligence testing 308
    - Implications of the contextual subtheory for intelligence testing 309
    - Conclusions 312
## Contents

**Part V. Concluding remarks**

12. Integration and implications
   - The triarchic theory
   - The study of intelligence

Methodological appendix: Testing componential models via componential analysis
   - Overview of componential analysis: selecting or generating a theory of relevant cognition
   - Selecting one or more tasks for analysis
   - Decomposing task performance
   - Quantification of componential model
   - Model testing: internal validation
   - Model testing: external validation
   - Reformulation of componential model
   - Generalization of componential model
   - Conclusions

References

Author index

Subject index