

Contents

| | |
|---|------------|
| <i>List of Tables and Figures</i> | vii |
| <i>Preface</i> | ix |
| <i>Acknowledgements</i> | xi |
| Introduction | 1 |
| Part I Mind and Brain: From Philosophy through Neuroscience to Neurophilosophy | 21 |
| 1 Philosophy and the Mind: Philosophy of Mind and Phenomenology | 23 |
| 2 Philosophy and Science: Naturalism | 43 |
| 3 Mind, Brain and Science: Psychology and Neuroscience | 69 |
| 4 Brain and Philosophy: Neurophilosophy | 91 |
| Part II The Mind–Brain Problem: From Philosophy of Mind to Philosophy of Brain | 125 |
| 5 Mental Approaches to the Mind–Brain Problem | 127 |
| 6 Physical and Functional Approaches to the Mind–Brain Problem | 155 |
| 7 Non-mental and Non-physical Approaches to the Mind–Brain Problem | 183 |
| 8 Brain-based Approaches to the Mind–Brain Problem | 212 |
| Part III Philosophy of Psychology and Neuroscience: From Explanation of Mind to Explanation of Brain | 247 |
| 9 Philosophy of Psychology: Personal versus Subpersonal Levels of Explanation | 249 |
| 10 Philosophy of Psychology: Mind and Meaning | 278 |
| 11 Philosophy of Neuroscience: Explanations, Concepts and Observer in Neuroscience | 302 |
| 12 Philosophy of Brain: Characterization of the Brain | 329 |
| Part IV Neurophilosophy of Consciousness: From Mind to Consciousness | 351 |
| 13 Arguments against the Reduction of Consciousness to the Brain | 353 |
| 14 Neural Correlates of Consciousness (NCC) | 382 |
| 15 Neural Predispositions of Consciousness (NPC) | 402 |
| 16 Conceptual, Phenomenal and Methodological Issues in the Investigation of Consciousness | 426 |

| | |
|---|------------|
| Part V Neurophilosophy of Self: From Consciousness to Self | 447 |
| 17 Brain and Self | 449 |
| 18 Brain and Self-consciousness | 471 |
| 19 Abnormalities of Self and Brain in Psychiatric Disorders | 493 |
| 20 Brain and Intersubjectivity | 512 |
| Epilogue: Is the Brain a Door Opener? | 535 |
| <i>References</i> | 539 |
| <i>Index</i> | 547 |

List of Tables and Figures

Table

| | | |
|------|---|-----|
| 13.1 | Philosophical arguments against the reduction of consciousness to a physical–material basis | 358 |
|------|---|-----|

Figures

| | | |
|-------|---|-----|
| 1.1 | Different disciplines and their domains | 12 |
| 1.1a | Philosophy of mind | 12 |
| 1.1b | Neuroscience | 12 |
| 1.1c | Reductive neurophilosophy as brain-reductive approach | 13 |
| 1.1d | Non-reductive neurophilosophy as brain-based approach | 14 |
| 1.1e | Philosophy of brain | 15 |
| 2.1 | Philosophy and naturalism | 58 |
| 2.1a | Segregation or parallelism between philosophy and science | 58 |
| 2.1b | Replacement (or incorporation) naturalism (Quine) | 64 |
| 2.1c | Cooperative naturalism | 65 |
| 4.1 | Different concepts of neurophilosophy | 99 |
| 4.1a | Reductive neurophilosophy | 99 |
| 4.1b | Non-reductive neurophilosophy | 101 |
| 4.2 | Concept–fact iterativity | 119 |
| 7.1 | ‘Inference problem’ and ‘domain problem’ in current mind–brain discussion | 196 |
| 7.1a | ‘Inference problem’ as unjustified inferences between different domains | 196 |
| 7.1b | ‘Domain problem’ as the ‘localization’ of the mind–brain problem in different domains | 209 |
| 8.1 | Different concepts of the brain | 231 |
| 11.1 | Relationship between neuroscience and other disciplines | 306 |
| 11.1a | Neuroscience, philosophy of neuroscience, philosophy of brain and neurophilosophy | 306 |
| 11.1b | <i>Incorporation model</i> : incorporation of other disciplines into neuroscience | 309 |
| 11.1c | <i>Contextualization model</i> : bilateral contextualization between neuroscience and other disciplines | 311 |

| | | |
|------|--|-----|
| 12.1 | Extrinsic and intrinsic views of the brain | 340 |
| 14.1 | Characterization of consciousness in relation to other functions | 396 |
| 15.1 | Hard problem and neural predispositions, prerequisites and correlates of consciousness | 419 |
| 20.1 | Models of the relationship between intra- and intersubjectivity | 530 |