

CONTENTS

| | | |
|----------|--|-----------|
| 1 | Paradigms and Programmes | 1 |
| | <i>T.S. Kuhn: A Man for All Seasons</i> | 1 |
| | <i>The Kuhnian Paradigm</i> | 3 |
| | <i>The Marxist Paradigm for Science and Scientific Change</i> | 6 |
| | <i>Conflict Theory & Marxism</i> | 7 |
| | <i>The Strong, Weak, and Moderate Programmes</i> | 7 |
| | <i>Conclusion: Toward a New Theory of Inquiry</i> | 10 |
| | <i>Bibliography</i> | 11 |
| 2 | Give Me a Laboratory and I Will Rewrite Science | 15 |
| | <i>Anthropology of Science</i> | 15 |
| | <i>THE Laboratory Studies</i> | 18 |
| | <i>Anthropological Epistemology</i> | 21 |
| | <i>The Social Construction of Facts</i> | 22 |
| | <i>Laboratory Life</i> | 22 |
| | <i>A Note on Ethnomethodology</i> | 25 |
| | <i>Conclusion-the Laboratory Studies: A Critical Overview</i> | 26 |
| | <i>Bibliography</i> | 29 |
| 3 | Inside a Scientific Laboratory: An Ethnography of Scientific Practice | 31 |
| | <i>Preface</i> | 31 |
| | <i>Introduction</i> | 32 |
| | <i>The Discipline and the Laboratory</i> | 33 |
| | <i>The Laboratory Atmosphere</i> | 34 |

| | | |
|----------|--|------------|
| | <i>A Phenomenological Laboratory</i> | 39 |
| | <i>The Rhetoric of Persuasion in Science</i> | 40 |
| | <i>Reflections on Life Among the Colloids and the Chemists</i> | 44 |
| | <i>Contingencies and Science</i> | 47 |
| | <i>Denouement: Indra's Net</i> | 49 |
| | <i>Conclusion</i> | 51 |
| | <i>Bibliography</i> | 52 |
| 4 | The Invention of Science: An Orientalist Perspective | 55 |
| | <i>Preface</i> | 55 |
| | <i>Science and Orientalist Discourse</i> | 56 |
| | <i>The Image of Science</i> | 58 |
| | <i>How Shall We Think About Science?</i> | 60 |
| | <i>Science and the Creation of the West/East</i> | 62 |
| | <i>Can Science Be Saved?</i> | 67 |
| | <i>Conclusion</i> | 67 |
| | <i>Bibliography</i> | 68 |
| 5 | The Sociology of Objectivity | 71 |
| | <i>Preface</i> | 71 |
| | <i>Introduction</i> | 71 |
| | <i>Objectivity as a Social Fact</i> | 72 |
| | <i>The Sociology of Knowledge</i> | 75 |
| | <i>The Crisis in Science</i> | 79 |
| | <i>Science and Values</i> | 81 |
| | <i>The Psychology of Science and the Theory of Inquiry</i> | 86 |
| | <i>The Social Organization of Science</i> | 90 |
| | <i>Dialectical Sociology</i> | 93 |
| | <i>Conclusion</i> | 95 |
| | <i>Epilogue: Culture Versus Genes in Human Evolution</i> | 96 |
| | <i>Bibliography</i> | 97 |
| 6 | Social Construction: The Fundamental Theorem | 101 |
| | <i>The End of the Social?</i> | 103 |
| | <i>Social Constructionism as a Fundamental Theorem</i> | 104 |
| | <i>Social Constructionism and the Ethnography of Science</i> | 106 |
| | <i>Actor-Network Theory (ANT)</i> | 115 |
| | <i>The Variety of Constructionist Experience</i> | 115 |

| | | |
|----------|--|------------|
| | <i>Where Do We Go From Here?</i> | 118 |
| | <i>Who Is a Social Constructionist?</i> | 119 |
| | <i>Social Construction and Forms of Life</i> | 120 |
| | <i>What Have We Learned?</i> | 121 |
| | <i>Who Conceives Society? Social Constructionism Redux</i> | 122 |
| | <i>Conclusion</i> | 125 |
| | <i>Bibliography</i> | 126 |
| 7 | Wild Men and Winnowers: Donald T. Campbell | 131 |
| | <i>Introduction</i> | 131 |
| | <i>Wild Characters and Selective Winnowers</i> | 132 |
| | <i>ERISS and Civilization</i> | 133 |
| | <i>Critical Realist Sociology of Science</i> | 136 |
| | <i>Validity in Question</i> | 139 |
| | <i>Conclusion</i> | 143 |
| | <i>Epilogue: ERISS and Civilization Revisited</i> | 144 |
| | <i>Postscript: Farewell to the Winnower</i> | 145 |
| | <i>Bibliography</i> | 146 |
| 8 | Cavaliers & Pointillists: Steve Woolgar | 147 |
| | <i>Overture</i> | 147 |
| | <i>Preface</i> | 148 |
| | <i>The Journey Begins</i> | 149 |
| | <i>Ethnomethodology? (The Woolgar “?”) and Sociology?</i> | 151 |
| | <i>Woolgar and Skepticism</i> | 157 |
| | <i>Bibliography</i> | 160 |
| 9 | Surely, You’re Joking, Bruno Latour? | 161 |
| | <i>Introduction</i> | 161 |
| | <i>Laboratory Life</i> | 163 |
| | <i>A Career Unfolds</i> | 164 |
| | <i>Bruno Latour Vs. David Bloor: Ant Versus the Strong</i> | |
| | <i>Programme</i> | 175 |
| | <i>Will the Real Bruno Latour Please Stand Up</i> | 182 |
| | <i>Conclusion: Latour and Facts</i> | 183 |
| | <i>Epilogue: Reading Latour</i> | 184 |
| | <i>Postscript: A Last Word on Latour</i> | 185 |
| | <i>Bibliography</i> | 185 |

| | | |
|-----------|---|-----|
| 10 | Science East & West: Joseph Needham | 189 |
| | <i>Needham's Legacy</i> | 189 |
| | <i>Karl Marx (1818–1883): Marx's Legacy</i> | 191 |
| | <i>Friedrich Nietzsche (1844–1900): Nietzsche's Legacy</i> | 194 |
| | <i>The Legacy of Human Science</i> | 196 |
| | <i>Chuang-Tzu's Legacy</i> | 198 |
| | <i>Conclusion: History of Chinese Science in Perspective</i> | 199 |
| | <i>Bibliography</i> | 202 |
| | | |
| 11 | Dangerous Abstractions: STS and the Unabomber | 205 |
| | <i>Introduction</i> | 205 |
| | <i>STS and the Unabomber</i> | 207 |
| | <i>Conclusion</i> | 208 |
| | <i>Bibliography</i> | 208 |
| | | |
| 12 | The Yin and Yang of Scientific Practice: Philosophers and Sociologists | 209 |
| | <i>Preface</i> | 209 |
| | <i>Overture</i> | 210 |
| | <i>Introduction</i> | 210 |
| | <i>First Movement</i> | 212 |
| | <i>Intervention</i> | 215 |
| | <i>Second Movement</i> | 217 |
| | <i>Third Movement: The Practice Turn</i> | 218 |
| | YIN | 222 |
| | YANG | 223 |
| | <i>The Social & Social Construction Revisited</i> | 225 |
| | <i>Conclusion: For the Philosophers</i> | 229 |
| | <i>Bibliography</i> | 229 |
| | | |
| 13 | Requiem for Plato: The Sociology of Mathematics | 231 |
| | <i>The Stage Is Set</i> | 232 |
| | <i>The Variety of Mathematical Experiences</i> | 234 |
| | <i>The Social Roots of Mathematics</i> | 238 |
| | <i>Puzzles and Proofs</i> | 245 |
| | <i>The Robber Baron/Saintly Politician Thesis</i> | 249 |
| | <i>Conclusion</i> | 253 |
| | <i>Epilogue: What Is Mathematics Redux</i> | 254 |
| | <i>Bibliography</i> | 259 |

| | | |
|-----------|---|-----|
| 14 | Your Social Brain: Searching for Mind and Consciousness in John Wayne's America | 261 |
| | <i>Loneliness</i> | 261 |
| | <i>Mutual Presence</i> | 263 |
| | <i>Genius</i> | 264 |
| | <i>The Myth of Individualism</i> | 265 |
| | <i>Consciousness Explained</i> | 267 |
| | <i>Individual Choice in Context</i> | 269 |
| | <i>Conclusion: The Myth of Horatio Alger</i> | 271 |
| | <i>Bibliography</i> | 272 |
| 15 | Romancing & Dancing With Robots | 273 |
| | <i>Overture</i> | 273 |
| | <i>Introduction</i> | 274 |
| | <i>Social and Sociable Robots</i> | 275 |
| | <i>Theories of Mind</i> | 276 |
| | <i>Getting to the Beginning of Our Story</i> | 278 |
| | <i>Resources for a Sociological Theory of Mind</i> | 279 |
| | <i>Theory of Mind Revisited</i> | 280 |
| | <i>The Social Mind</i> | 281 |
| | <i>Robots 'R' Us and Robots as Robots</i> | 284 |
| | <i>Singing the Body Information</i> | 285 |
| | <i>Conclusion: What Now, That Robots Can Dance?</i> | 292 |
| | <i>Epilogue: The Social Turn in Social & Sociable Robotics</i> | 294 |
| | <i>Postscript: Will the Real Cynthia Breazeal Please Stand Up</i> | 295 |
| | <i>Bibliography</i> | 296 |
| 16 | Sustainable Journeys: Daedalus, Icarus, Tantalus and the Future of Science and the World | 301 |
| | <i>Preface</i> | 301 |
| | <i>Prelude</i> | 302 |
| | <i>Modern Science as a Social Problem</i> | 303 |
| | <i>The Ten Pillars of Sustainability</i> | 304 |
| | <i>Data, Data, and More Data</i> | 306 |
| | <i>The Morality of Science</i> | 308 |
| | <i>Survival Wisdom</i> | 311 |
| | <i>The United Nations Sustainable Development Goals</i> | 314 |
| | <i>Conclusion: Key Barriers to Global Problem Solving</i> | 315 |

| | | |
|-----------|--|------------|
| | <i>Guest Commentary: Peter Denton</i> | 317 |
| | <i>Bibliography</i> | 323 |
| 17 | Post-truthism: An Era or an Intellectual Strategy? | 325 |
| | <i>Introduction: Anti-intellectualism Comes Home to Roost; America 2016–1984</i> | 325 |
| | <i>The Post-truth Paradigm</i> | 330 |
| | <i>A Post-truth Era</i> | 331 |
| | <i>Post-truth, Analytically</i> | 334 |
| | <i>Conclusion</i> | 340 |
| | <i>Bibliography</i> | 341 |
| 18 | Conclusion: Paradigm for the Sociology of Knowledge | 343 |
| | <i>Part I. The Fallacies</i> | 343 |
| | <i>Classic Fallacies from Philosophy</i> | 349 |
| | <i>Part 2. Paradigm Principles: An Experiment in Abnormal Discourse</i> | 350 |
| | <i>A. The Social Construction Conjecture As the Fundamental Theorem of Sociology</i> | 350 |
| | <i>Part 3. The Social Brain Paradigm</i> | 358 |
| | <i>Penultimate Principles</i> | 361 |
| | <i>Bibliography</i> | 361 |
| | Bibliography | 363 |
| | Index | 395 |