## Contents

| List of Tables and Figures |  | vii |
|----------------------------|--|-----|
| Acknowledgements           |  | ix  |
| Notes on the Contributors  |  | xi  |
| 1                          | Introduction Ross Thomson  | 1   |
| Par                        | t I Approaches and Institutions  |     |
| 2                          | Technical Change as Cultural Evolution Richard R. Nelson   | 9   |
| 3                          | Learning and Technological Change: The Perspective from Business History  Alfred D. Chandler Jr  | 24  |
| 4                          | Nineteenth-Century American Patent Management as an Invisible College of Technology Carolyn C. Cooper  | 40  |
| Par                        | t II Diffusion, Learning and Ongoing Technological Change  |     |
| 5                          | Thinking about Technological Change: Linear and Evolutionary Models  John K. Smith   | 65  |
| 6                          | Economic Forms of Technological Change Ross Thomson  | 80  |
| 7                          | A Model of the Productivity Gap: Convergence or Divergence?  Donald J. Harris  | 100 |
| Par                        | t III Competition and Learning   |     |
| 8                          | Innovative Learning and Institutions in the Process of Development: on the Microfoundation of Growth Regimes Francesca Chiaromonte, Giovanni Dosi and Luigi Orsenigo | 117 |

|      | The Dynamics of Innovation and Diffusion with Competing Techniques Willi Semmler   | 150 |
|------|--|-----|
| 10   | Learning and the Dynamics of International Competitive<br>Advantage<br>William Lazonick                                      | 172 |
| Par  | t IV Technological Development and Economic Transformation   |     |
| - 11 | History and its Lessons William N. Parker  | 201 |
| 12   | Transformational Growth and Learning: Developing Craft Technology into Scientific Mass Production Edward J. Nell             | 217 |
| 13   | Borrowing Technology or Innovating: An Exploration of Two Paths to Industrial Development Alice H. Amsden and Takashi Hikino | 243 |
| 14   | Epilogue: Institutions, Learning and Technological Change Ross Thomson   | 267 |
| In   | dex  | 281 |