

# Contents

<i>Analytical table of contents</i>	x
<i>Preface</i>	xv
Introduction: Rationality	i
<b>Part A: Representing</b>	
1 What is scientific realism?	21
2 Building and causing	32
3 Positivism	41
4 Pragmatism	58
5 Incommensurability	65
6 Reference	75
7 Internal realism	92
8 A surrogate for truth	112
Break: Reals and representations	130
<b>Part B: Intervening</b>	
9 Experiment	149
10 Observation	167
11 Microscopes	186
12 Speculation, calculation, models, approximations	210
13 The creation of phenomena	220
14 Measurement	233
15 Baconian topics	246
16 Experimentation and scientific realism	262
<i>Further reading</i>	276
<i>Index</i>	283