## Contents

**Foreword**  
*xi*

**Introduction**  
*xiii*

**Contributors**  
*xix*

1 **Methodological Pluralism in Construction Management Research**  
*Andrew Dainty*  
Introduction  
1  
Research strategy and design  
3  
The dominant research paradigm within construction management  
4  
Discussion: The implications of methodological uniformity  
6  
The case for methodological pluralism in construction management research  
8  
Challenges in undertaking multi-paradigm research  
9  
Conclusions  
10  
Acknowledgements  
11  
Note  
11  
References  
12

2 **Architectural Research**  
*Alan Penn*  
Introduction  
14  
A sketch of architectural design  
15  
The structure of architectural research  
17  
Space syntax and the social logic of space  
18  
Conclusion  
25  
Note  
27  
References  
27

3 **Legal Research**  
*Paul Chynoweth*  
Introduction  
28  
The epistemology of legal scholarship  
28
4 Feminist Research

Pat Morton and Sara Wilkinson

Introduction 39
What is feminist research? 39
Locating feminism in the social sciences 40
Locating the feminist researcher 42
Ethical considerations 43
Standpoint epistemologies 44
Participatory action research 45
Oral histories and diaries and women's voices 45
Can anyone be a feminist researcher? 46
Conclusions 48
References 48

5 Approaches to Economic Modelling and Analysis

Les Ruddock

Introduction 51
General economic models 51
Relationships between economic variables – econometrics 52
Approaches and applications in the construction sector 56
Conclusions 61
References 62

6 Epistemology

Andrew Knight and Neil Turnbull

Introduction 64
Concepts 65
Classical epistemology 66
Modern epistemology 68
Postmodernism and the critique of epistemology 71
Conclusion 72
References 74

7 Scientific Theories

Göran Runeson and Martin Skitmore

Introduction 75
The philosophy behind theories 75
Scientific theories 76
## Contents

- Working as a scientist 77
- The plot gets complex 78
- Testing social science theories 79
- A solution (or two) 83
- Building new theories 83
- Conclusions 84
- References 84

### 8 Grounded Theory 86

*Kirsty Hunter and John Kelly*

- Introduction 86
- What is grounded theory? 86
- Substantive to formal theory 87
- Data collection and analysis 89
- The theory building procedure 90
- Data sorting 91
- Coding and comparison groups 91
- Theory development in case studies 93
- Grounded theory challenges 93
- Scope and limitations of theory 94
- A good theory 95
- The derived theory 96
- Summary 96
- References 97

### 9 Case Study Research 99

*David Proverbs and Rod Gameson*

- Introduction 99
- Case study research: An overview 99
- Designing case studies 100
- Identifying and selecting the case(s) 101
- Collecting the information 101
- Analysing the information 103
- Writing up 104
- Example 104
- Conclusions 108
- Acknowledgement 109
- Notes 110
- References 110

### 10 Interviews: A Negotiated Partnership 111

*Richard Haigh*

- Introduction 111
- The interview method 112
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Artificial Neural Network Modelling Techniques for Applied Civil and</td>
<td>155</td>
</tr>
<tr>
<td>Construction Engineering Research</td>
<td></td>
</tr>
<tr>
<td><em>Abdelhalim Boussabaine and Richard Kirkham</em></td>
<td></td>
</tr>
<tr>
<td>Introduction</td>
<td>155</td>
</tr>
<tr>
<td>First concepts</td>
<td>155</td>
</tr>
<tr>
<td>System dynamics</td>
<td>157</td>
</tr>
<tr>
<td>Network structure and nomenclature</td>
<td>158</td>
</tr>
<tr>
<td>System architecture design</td>
<td>160</td>
</tr>
<tr>
<td>Recent advances in construction and civil engineering research</td>
<td>166</td>
</tr>
<tr>
<td>Neuro-fuzzy modelling</td>
<td>167</td>
</tr>
<tr>
<td>Conclusion: Why neuro-fuzzy models?</td>
<td>167</td>
</tr>
<tr>
<td>References</td>
<td>169</td>
</tr>
<tr>
<td>Social Network Analysis</td>
<td>171</td>
</tr>
<tr>
<td><em>Stephen Pryke</em></td>
<td></td>
</tr>
<tr>
<td>Introduction</td>
<td>171</td>
</tr>
<tr>
<td>Why choose social network analysis?</td>
<td>172</td>
</tr>
<tr>
<td>Concepts and terminology</td>
<td>173</td>
</tr>
<tr>
<td>Finally on SNA theory and techniques</td>
<td>178</td>
</tr>
<tr>
<td>Software for the analysis of networks</td>
<td>178</td>
</tr>
<tr>
<td>Conclusion</td>
<td>180</td>
</tr>
<tr>
<td>References</td>
<td>181</td>
</tr>
<tr>
<td>Managing the Thesis</td>
<td>183</td>
</tr>
<tr>
<td><em>Alan Griffith and Paul Watson</em></td>
<td></td>
</tr>
<tr>
<td>Introduction</td>
<td>183</td>
</tr>
<tr>
<td>Defining the thesis</td>
<td>183</td>
</tr>
<tr>
<td>Having a clear research focus</td>
<td>184</td>
</tr>
<tr>
<td>Developing and managing the draft thesis</td>
<td>185</td>
</tr>
<tr>
<td>Producing the final version of the thesis</td>
<td>188</td>
</tr>
<tr>
<td>Knowing the thesis and preparing for the viva voce</td>
<td>189</td>
</tr>
<tr>
<td>Conclusions</td>
<td>192</td>
</tr>
<tr>
<td>References</td>
<td>192</td>
</tr>
<tr>
<td>Further reading</td>
<td>192</td>
</tr>
<tr>
<td>Getting Your Research Published in Refereed Journals</td>
<td>193</td>
</tr>
<tr>
<td><em>Will Hughes</em></td>
<td></td>
</tr>
<tr>
<td>Introduction</td>
<td>193</td>
</tr>
<tr>
<td>Writing good journal papers</td>
<td>193</td>
</tr>
<tr>
<td>Elements of a journal submission</td>
<td>198</td>
</tr>
<tr>
<td>Editorial processes</td>
<td>202</td>
</tr>
<tr>
<td>Publication and dissemination</td>
<td>205</td>
</tr>
<tr>
<td>Conclusion</td>
<td>205</td>
</tr>
<tr>
<td>Note</td>
<td>206</td>
</tr>
<tr>
<td>References</td>
<td>206</td>
</tr>
</tbody>
</table>