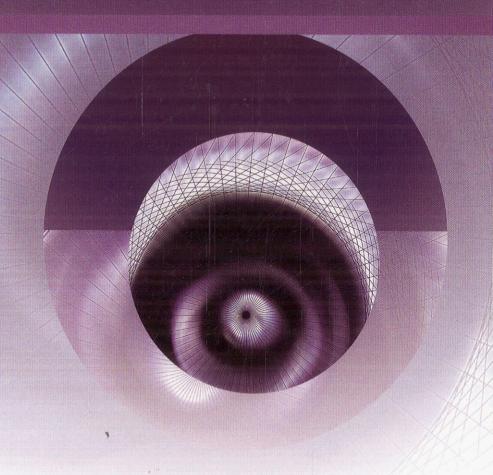
Advanced Research Methods in the Built Environment



Contents

reword roduction antributors	xi xiii xix
Methodological Pluralism in Construction Management Research Andrew Dainty	1
Introduction	1
	3
	4 6
Challenges in undertaking multi-paradigm research	9
	10
-	11 1 1
	12
Architectural Research Alan Penn Introduction A sketch of architectural design The structure of architectural research Space syntax and the social logic of space Conclusion Note	14 15 17 18 25 27
References Legal Research Paul Chynoweth Introduction The epistemology of legal scholarship	27 28 28 28
	Methodological Pluralism in Construction Management Research Andrew Dainty Introduction Research strategy and design The dominant research paradigm within construction management Discussion: The implications of methodological uniformity The case for methodological pluralism in construction management research Challenges in undertaking multi-paradigm research Conclusions Acknowledgements Note References Architectural Research Alan Penn Introduction A sketch of architectural design The structure of architectural research Space syntax and the social logic of space Conclusion Note References Legal Research Paul Chynoweth Introduction

	In search of a methodology The cultural dimension Conclusion References	31 35 37 37
4	Feminist Research Pat Morton and Sara Wilkinson	39
	Introduction What is feminist research? Locating feminism in the social sciences Locating the feminist researcher Ethical considerations Standpoint epistemologies Participatory action research Oral histories and diaries and women's voices Can anyone be a feminist researcher? Conclusions References	39 40 42 43 44 45 45 46 48
5	Approaches to Economic Modelling and Analysis Les Ruddock Introduction General economic models Relationships between economic variables – econometrics Approaches and applications in the construction sector Conclusions References	51 51 52 56 61 62
6	Epistemology Andrew Knight and Neil Turnbull Introduction Concepts Classical epistemology Modern epistemology Postmodernism and the critique of epistemology Conclusion References	64 65 66 68 71 72 74
7	Scientific Theories Göran Runeson and Martin Skitmore	75
	Introduction The philosophy behind theories	75 75
	Scientific theories	76

	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 Summary	96
	References	96 97
	References	7/
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 Notes	109
	References	110
	neterences	110
10	Interviews: A Negotiated Partnership	111
	Richard Haigh	
	Introduction	111
	The interview method	112

	Interviews in the built environment disciplines Planning, conducting and analysing interviews Conclusion References Further reading	115 116 120 120 120
11	Questionnaire Design and Factor Analysis Mike Hoxley	122
	Introduction	122
	Construction Attitude scales	123
	Piloting	124 125
	Sampling	125
	Administration	126
	Coding	127
	Software packages	127
	Coding missing values Data entry	127 128
	Factor analysis	128
	Summary	133
	References	134
12	Using Software to Analyse Qualitative Data Andrew King	135
	Introduction	135
	Why use software?	136
	Comparison of software	136
	Methodology and software	137
	Analytic distance Learning to use CAQDAS	139 139
	The quality of qualitative research	140
	Conclusion	141
	References	141
13	Getting Started in Quantitative Analysis	144
	Chris Leishman	
	Introduction	144
	The essence of sampling theory	145
	Other common forms of hypothesis test Inference and causality – basic regression models	147 148
	Multiple regression models	150
	Concluding remarks	153
	Reférences	154

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

18	Researcher Attitudes and Motivation David Boyd	207
	Introduction	207
	Inner self	207
	Personal environment	211
	The research project	212
	Research environment	213
	Conclusion: Keeping going and succeeding	214
	References	215
19	Built Environment Futures Research: The Need for	
	Foresight and Scenario Learning John Ratcliffe	216
	Introduction	216
	Concept and context	216
	Conclusion	226
	References	227
Inde	ex	229