Contents

List of illustrations xii
Biography xiv
Acknowledgements xv

1 **Introduction** 1

PART I 11

2 **Senge's *The Fifth Discipline*** 13
The learning man 13
Systemic thinking, system dynamics 13
Personal mastery 20
Mental models 22
Shared vision 23
Team learning 24
Openness and localness 26
Commentary 26

3 **Bertalanffy's open systems theory** 29
The seminal man 29
Open systems theory 29
Relevance to 'management and organisation' 30
General system theory 31
Systems view of people 33
A systemic discipline emerges 33

4 **Beer's organisational cybernetics** 35
The recurring man 35
Cybernetics 35

Viable system model 38
Team syntegrity 43
Cybernetics makes its mark 44

5 **Ackoff's interactive planning** 45

The planning man 45
Fables and foibles 45
Operations research 46
Interactive planning 47
Circular organisation 49
A soft turn 51

6 **Checkland's soft systems approach** 53

The man of passion and structure 53
Action research 54
Interpretive-based systemic theory 55
Soft systems methodology 56
Hard lessons from a soft thinker 60

7 **Churchman's critical systemic thinking** 61

The moral man 61
Operations research 62
Critical systemic thinking 63
The people's conscience 66

8 **Senge's *The Fifth Discipline* revisited** 67

Taking stock 67
An empowering quality 67
Commonalities and similarities 68
Two central issues for systemic thinking 69
Reflections on Part I 73

PART II
Concepts 77

9 **Towards systemic thinking** 79

Introduction 79
The Enlightenment 79
Reductionism 80

Spiritualism 81
Essence of systemic thinking 82
Between mystery and mastery 83

10 The demise of problems, solutions and normal organisational life 84

Introduction 84
From causal factors to systemic awareness 85
The 'problem' with 'problems' 88
The 'issue' with 'issues' 88
The 'dilemma' with 'dilemmas' 88

11 Getting to grips with complexity 90

Introduction 90
Two central issues revisited 91
Boundary judgements 92

12 Deepening systemic appreciation 94

13 Window 1: Systems of processes 98

What are processes? 98
Process maps 98
Improvement of efficiency and reliability 100
Categories of improvement 100
Strategies for improvement 101
Discussion 102

14 Window 2: Systems of structure 104

What is structure? 104
Improvement of effectiveness 104
Diagnosis and design 104
Strategies for improvement 105
Discussion 107

15 Window 3: Systems of meaning 110

What is meaning? 110
What is meant by agreement? 110
Improvement of meaningfulness 112

Strategies for improvement 113
Discussion 114

16 Window 4: Systems of knowledge-power 116

What is knowledge-power? 116
Why problematise knowledge-power? 116
Problematising knowledge-power 118
Improvement of fairness 119
Strategies for improvement 119
Discussion 121

17 Prismatic thought 123

Introduction 123
What is prismatic thought? 123
Creativity and transformation 124

Approach 127

18 Organisational learning and transformation 129

Introduction 129
Learning with scenarios 130
Improvement 131
Overview of process 131
Diagrammatic view of process 132
Inside view of process 135
Step on to evaluation 139
Appendix 18.1: individual learning and transformation 140

19 Systemic evaluation 142

Introduction 142
Formative and summative evaluation 142
Measurement of improvement 143
Measurement theory 143
Scales of measurement 144
Physical measures 146
Surveys 147
Ethnography 148
Documentary analysis 149
Triangulation and recoverability 149

Process of evaluation 150
An oft neglected issue 152
Appendix 19.1: logical properties of the scales of measurement 153

20 Instrumental and experiential action 154

Practical animation 157

21 Local Area Policing (LAP) in York, UK 159

Introduction 159
Note on recoverability 160
Emergence of an issue in York Division 160
Major events of the project 161
Initial reflections on the project 165
Management Group's deliberations 168
Steering Committee engages in team learning 173
PCs develop shared vision 174
Evaluation of LAP implementation 176
My role as researcher 183
Questions to ask yourself 185
Appendix 21.1: operational staff questionnaire 186
Appendix 21.2: Inspector's question sheet 188
Appendix 21.3: survey results 189

22 Reflections and key insights of systemic thinking 192

Further reading 195
Index 208