

Contents

| | |
|--|-----------|
| List of Figures | ix |
| About the Author | xi |
| Preface to the Fourth Edition | xiii |
| | |
| 1 What is Social Network Analysis? | 1 |
| The data used in social network analysis | 3 |
| Is there a network theory? | 6 |
| An overview | 8 |
| | |
| 2 The History of Social Network Analysis | 11 |
| The sociogram and sociometry | 13 |
| Balance and group dynamics | 16 |
| Informal organisation and community relations | 20 |
| Matrices and cliques | 25 |
| Formal models of community and kinship | 29 |
| Formal methods triumphant | 34 |
| Getting by without the help of your friends | 35 |
| Entry of the social physicists | 37 |
| | |
| 3 Data Collection for Social Network Analysis | 41 |
| Asking questions | 42 |
| Making observations | 44 |
| Using documents | 45 |
| Boundaries in relational data | 46 |
| Positional and reputational approaches | 48 |
| Does sampling make sense? | 50 |
| | |
| 4 Organising and Analysing Network Data | 57 |
| Matrices and relational data | 59 |
| Matrix conventions | 63 |

| | |
|--|------------|
| An analysis of directorship data | 64 |
| Direction and value in relational data | 66 |
| Computer programs for social network analysis | 69 |
| 5 Terminology for Network Analysis | 73 |
| The language of network analysis | 74 |
| More than joining up the lines | 76 |
| The flow of information and resources | 79 |
| Density of connections | 81 |
| Density in egonets | 84 |
| Problems in density measures | 85 |
| A digression on absolute density | 87 |
| Community structure and density | 89 |
| 6 Popularity, Mediation and Exclusion | 95 |
| Local and overall centrality | 96 |
| Mediation and betweenness | 99 |
| Centrality boosts centrality | 100 |
| Centralisation and graph centres | 101 |
| The absolute centre of a graph | 105 |
| Bank centrality in corporate networks | 107 |
| 7 Groups, Factions and Social Divisions | 113 |
| Identifying subgraphs | 114 |
| The components of a network | 115 |
| The strength and stability of components | 117 |
| Cycles and circuits | 119 |
| The contours of components | 122 |
| Cliques within components | 127 |
| Intersecting social circles | 130 |
| Components and citation circles | 132 |
| 8 Structural Locations, Classes and Positions | 137 |
| The structural equivalence of points | 138 |
| Clusters and similarity | 140 |
| Divide and CONCOR | 142 |
| Divisions and equivalence | 148 |
| Regular equivalence in roles and functions | 150 |
| Corporate interlocks and participations | 152 |

| | |
|---|------------|
| 9 Social Change and Development | 157 |
| Structural change and unintended consequences | 158 |
| Small-world networks | 160 |
| Modelling social change | 161 |
| Testing explanations | 162 |
| 10 Visualising and Modelling | 167 |
| Taking space seriously | 168 |
| Using multi-dimensional scaling | 170 |
| Principal components and factors | 174 |
| Non-metric methods | 177 |
| How many dimensions? | 180 |
| Worth a thousand words? | 183 |
| Elites, communities and influence | 184 |
| Business elites and bank power | 188 |
| Notes | 195 |
| References | 207 |
| Index | 225 |