Table of contents

List of tables xv
List of figures xvii
Preface 1

SECTION 1 9

CHAPTER 1
Introducing metaphor 11
1.1 Some terms for analysing metaphors 11
1.2 Inter-relations between metaphors 12
1.3 The theory of conceptual metaphor 13
1.4 Characterising conceptual metaphors and metaphor themes 17
1.5 Literal language, conventional metaphor and original metaphor 21
1.6 Convention, commonsense and latent ideology 25
1.7 Conclusion: CATEGORY IS DIVIDED AREA 30

CHAPTER 2
Metaphors of power 35
2.1 Introduction 35
2.2 IMPORTANT IS BIG, POWER / CONTROL IS ABOVE, IMPORTANCE / STATUS IS HIGH 35
2.3 IMPORTANT IS CENTRAL 40
2.4 RACE IS COLOUR, GOOD IS PURE / CLEAN / WHITE 45
2.5 DISEASE IS INVASION 49
2.6 ACTIVITY IS MOVEMENT FORWARDS and the Cult of Speed 51
2.7 Time and space metaphors 60
2.8 TIME IS MONEY / COMMODITY 68
2.9 Education, socialisation and time: *Harry Potter and the Philosopher's stone* 69
2.10 ACTIVITY IS FIGHTING 72
2.11 The adversarial system in law, politics, the media and philosophy 78
2.12 SEX IS VIOLENCE and rape 83
2.13 Summary 85

CHAPTER 3
Metaphors for humans and the living world 89
3.1 Introduction 89
3.2 HUMAN IS FOOD 89
3.3 Life as a commodity 90
3.4 QUALITY IS MONEY/WEALTH 95
3.4.1 Privatisation of natural "resources". 97
3.5 ORGANISATION / SYSTEM IS MACHINE 100
3.6 HUMAN IS MACHINE 103
3.6.1 Lexical evidence for the prevalence of the metaphor 103
3.6.2 Science, technology and the mind / body as machine 107
3.6.3 Objections to mechanistic views of humans 111
3.6.4 The Santiago theory of cognition 113
3.6.5 Haraway's cyborg manifesto. 114
3.7 Summary 117

CHAPTER 4
Humans as animals, literal or metaphorical? 119
4.1 Impositive metaphors and subjective metaphors 119
4.2 LANDSCAPE/WEATHER IS A HUMAN BODY? 121
4.3 HUMAN IS ANIMAL? 125
4.3.1 Human as more or less / a kind of animal – selfish, competitive and aggressive. 128
4.3.2 Humans as more or less animals – but co-operative and symbiotic. 140
4.3.3 Humans as in many respects animals 144
4.3.4 Humans as possibly like animals in many respects, but ideally as different. 148
4.3.5 Humans as in some/few respects like an animal. 153
4.3.6 Human reductionism 157
4.4 Summary 159

CHAPTER 5
Interactions between metaphor themes 163
5.1 Introduction 163
5.2 Multivalency 164
5.2.1 Multivalency → MORE = GOOD 165
5.2.2 Multivalency → CHANGE = SUCCESS / DEVELOPMENT. 170
5.3 Evaluative oppositions 177
5.3.1 RELATIONSHIP IS PROXIMITY/COHESION V. FREEDOM IS SPACE TO MOVE 178
5.3.2 Change v. stability in Relationships. 187
5.4 A complex case of metaphor theme interaction 192
5.5 Diversification 197
5.5.1 Diverse metaphors for emotion 197
5.5.2 Diverse metaphors for education 206
5.5.3 Summary of diversification 213
5.6 Summary of metaphorical interactions 214

INTRODUCTION TO SECTION 2

CHAPTER 6
Are metaphorical themes universal? 217
6.1 Mind, body and culture 217
6.2 Metonymy as basis of all conceptual metaphor themes 218
6.3 EMOTION IS SENSE IMPRESSION 224
6.3.1 Damasio's theory of the emotions 224
6.3.2 EMOTION AS CAUSE OF EMOTION metonymy 230
6.3.3 Specific emotional / bodily responses 236
6.4 The cultural influences on emotion metaphors 243
6.4.1 Metaphor themes for anger in English 244
6.4.2 Cultural variations in metaphor themes for anger 248
6.4.3 Humoral theory and the body-cultural history debate 250
6.5 Challenges to the universality of conceptual metaphor themes. 256
6.5.1 No such exact target concept exists in one culture / languageas exists in another. 257
6.5.2 No such exact source concept exists in one culture / language as exists in another 260
6.5.3 Target varies with the source 262
6.5.4 Sources and targets are paired differently 265
6.5.5 Different grounds or partial mapping of potential correspondences. 267
6.5.6 General identity of pairing with specific differences 270
6.6 Grady, primary metaphors and multivalency 270
6.7 Questioning the metonymic basis of metaphor themes 273
6.8 The body as biological or historical and cultural? 276

CHAPTER 7
Grammar, metaphor and ecology 281
7.1 Introduction 281
7.2 The Noun-Verb / Thing-Process construction 282
7.3 The Typical Clause and Canonical Events 284
7.4 Canonical events, the Newtonian world-view and industrialisation 288
7.4.1 Industrialising nature 290
7.4.2 The role of ideological metaphors in the industrialisation of nature 295
7.5 Modern scientific challenges to Newtonian dynamics 298
7.6 Congruent language and grammatical metaphor 302
7.7 Grammatical metaphors for modern science 305
7.7.1 Activation of tokens 307
7.7.2 Activation of experiences (phenomena) 307
7.7.3 Ambient structures or dummy subjects: prop it and existential there 308
7.7.4 Activation of circumstances 309
7.7.5 Creative processes and cognate objects 309
7.7.6 Reciprocal and reflexive verbs 309
7.7.7 Ergativity 310
7.7.8 Nominalization 313
7.8 Niitsi'powahsin (Blackfoot) grammar as radical metaphor 315
7.8.1 Emphasis on "verbs" in Niitsi'powahsin 317
7.8.2 "Nominalisations" 319
7.8.3 Niitsi'powahsin (Blackfoot) speakers' perspectives 320
7.9 Other relevant aspects of Blackfoot world-view 323
7.10 Possession 326
7.10.1 Action schema 327
7.10.2 Location, existence and other schemas 327
7.10.3 Ideology and the action schema 328
7.11 Conclusion and summary: process philosophies and ideologies 330

CHAPTER 8
Capitalism and the developmentof ideological metaphors 335
8.1 Introduction 335
8.2 The ideological tradition of capitalist economic philosophy 336
8.2.1 Competition and conflict 337
8.2.2 Self-interest, individualism and the family 344
8.2.3 Man is animal 349
8.2.4 Property 351
8.2.5 Summary 357
8.2.6 Newtonian influence on economic philosophers 359
8.2.7 Man and society as machines 361
8.2.8 Quality and quantity 365
8.2.9 QUALITY IS WEALTH/MONEY 367
8.2.10 Economic virtues and TIME IS MONEY/COMMODITY 373
8.2.11 Progressivism in Darwin: CHANGE = GOOD 379
8.2.12 Capitalist economic philosophers, experientialism and the contemporary theory of metaphor 380
8.3 A critique of Lakoff's moral politics 383
8.4 Reductionism or not? 388
8.4.1 Feyerabend, Prigogine and reductionism 390
8.4.2 Experiential cognitive science as reductionism 392
8.4.3 Literalisation, reductionism and ideology 393
8.4.4 A less-reductionist model of discourse 393
8.5 Envoi: a meditation on incarnation 395
8.6 Summary and conclusion 401

Bibliography 403

Main index 415

Name and author index 423

Index of languages 427

Index of metonymy themes (X AS Y) metaphor themes (X IS Y), metaphor equations (X = Y) and theme reversals* 429

List of tables

Table 1.	Lexis for the conceptual metaphor theme UNDERSTAND IS HOLD/GRASP	14
Table 2.	Mappings in the conceptual metaphor THINKING IS MATHEMATICAL CALCULATION	16
Table 3.	Ideological and interpretive effects of original and conventional metaphors	29
Table 4.	The world's tallest buildings	38
Table 5.	World's ten largest agglomerations	42
Table 6.	Ten fastest-growing cities	42
Table 7.	Linnaeus's classification of the species homo sapiens in *System Naturae* (1798)	45
Table 8.	Olympic 100 metres gold medal times	55
Table 9.	Time and motion study chart for office workers	67
Table 10.	Frequency of lexis for time in *Harry Potter and the Philosopher's Stone*	70
Table 11.	Relative military expenditures in 1999	76
Table 12.	The attrition rate for rape in England and Wales	84
Table 13.	Positive and pejorative metaphors in HUMAN IS MACHINE/IMPLEMENT	106
Table 14.	Percentages of Actors and Sayers by each category of natural participants in *The Times* and *The Prelude*	124
Table 15.	What are human beings?	128
Table 16.	Leech (Popper)'s 4 (3) worlds of knowledge	147
Table 17.	Romanes' comparison between phylogenetic development and ontogenetic development	149
Table 18.	Summary of interpretations of the statement HUMAN IS ANIMAL	160
Table 19.	Comparison of life-satisfaction with purchasing power by country	166
Table 20.	Characteristics of the 4 ages (yugas) of Hindu cosmology	174
Table 21.	Ideological and metaphorical oppositions.	177
Table 22a.	Metonymic categories: part to whole ICMs	220
Table 22b.	Metonymic categories: parts of an ICM	221
Table 23.	The moods created by colour	231
Table 24.	An overview of physiological metonymies for basic emotions	237
Table 25.	Cultural comparisons in the conceptualisation of anger	247
Table 26.	The four humours and their correspondences in medieval medicine	251
Table 27.	Emotions and the liver in Mbula	254
Table 28.	Emotion and internal organs in Chinese	255
Table 29.	Contrasts between objects and processes	283

Table 30.	Grammar, expressions and meanings in the clause (1)	285
Table 31.	Grammar, expressions and meanings in the clause (2)	306
Table 32.	Patterns of ergative verbs	310
Table 33.	Patterns of non-ergative verbs	311
Table 34.	Grammar and the relative profiles of things and processes	314
Table 35.	The Blackfoot equivalent of "that boy brought a chair"	323
Table 36.	A formulaic description of schemas used for the expression of predicative possession	327

List of figures

Figure 1.	Alternative classifications	23
Figure 2.	The sub-themes of the metaphor theme ACTIVITY IS FIGHTING	72
Figure 3.	Sub-themes for the metaphor theme HUMAN IS ANIMAL in *Metalude*	149
Figure 4.	Ideological oppositions in the Truman doctrine speech	192
Figure 5.	Position of dominant metaphors in the education reform consultation document in relation to tradition and reform	209
Figure 6.	Sub-themes for EMOTION IS SENSE IMPRESSION	224
Figure 7.	Inter-relations of metaphor themes to produce ANGER IS HOT FLUID IN CONTAINER	247
Figure 8.	The action chain	284
Figure 9.	The canonical event model	285
Figure 10.	Processes and their participants in the clause	305
Figure 11.	Process, participants, circumstances and their realisation in the clause	305
Figure 12.	A model of language, discourse, mind, body and culture	394