

Index

- action 205
- AGM postulates 4, 9, 10, 16, 29, 30, 31, 53, 124, 171, 183, 187, 250
- atomistic update 249
- autonomous agent 221
- autonomous belief revision, ABR 8, 23, 220, 232
- base contraction 6, 54
- base revision 6, 16, 52, 54
- basic set of postulates 10, 11
- belief base 6, 31, 53, 89
- belief set 6, 53, 228, 253
- bilattice 248
- boolean constraint propagation 36
- centering 272
- co-NP-complete 79
- coherence theory 8, 29, 30, 37, 229, 234
- communication 23, 220, 221, 242
- competence 204, 205
- complexity 78
- computational cost 30, 38, 42
- conditionalization 184
- conditional probability 159
- conditional sentence 24
- consequence operation 89, 90
- conservativity principle 30, 37, 40, 97, 229
- contraction function 3, 4, 10, 11, 128
- contraction postulates 4, 162
- counterfactual 24
- database priorities 66
- default reasoning 71
- defaults 237
- dependency-directed backtracking 36
- disagreement 104
- disjunction completeness 248, 256
- disjunction rule 186
- disjunctive residues 101
- dyadic partial meet dynamics, DPM
 - dynamics 93
- epistemic entrenchment 7, 17, 18, 21, 29, 32, 39, 44, 53, 66, 68, 78, 124, 128, 233
- epistemic relevance ordering 42, 44, 55, 59, 66, 68, 233
- erasure operator 186, 195
- expansion 3, 25
- faithful 22, 187, 192
- focusing set 62
- forget operator 186, 196
- foundations theory 29, 34, 37, 229
- frame problem 218
- full meet contraction 14
- full meet revision
- fullness 14
- fully rational base revision, FBR 85
- fuzzy logic 152
- fuzzy set 152
- Gardenfors postulates (see AGM postulates)
- Harper identity 13, 32, 67, 78
- imaging 23, 184, 208
- inconsistency 1, 3, 6, 247
- informational economy 9, 10
- inheritance net 248, 263
- integrity constraints 2, 6
- intersection criterion 14
- justification 8
- knowledge level 10, 52, 58
- level default theory (LDT) 73
- Levi identity 11, 32
- maxichoice contraction 14
- maxichoice revision 69
- maximal belief set 14
- maximal subset 7, 13
- minimal change 190, 230
- model based revision, MBR 84
- modus ponens 267
- monotonicity 25, 35, 190, 251, 259
- multiple inheritance 263
- necessity measure 21, 146
- nonmonotonicity 35, 53, 71, 224, 251, 259
- nonmonotonic reasoning 35
- NP-complete 79, 82

Index

277

- NP-hard problems 16, 79
open conditional 24
ordered belief set 147
ordinal conditional function 21
ordinal disbelief function 169
paraconsistency 247
partial meet contraction 15, 95, 124
partial meet revision 96
persistent (see faithful)
planning 23
plausibility 147, 148
polynomial hierarchy 16, 79, 82
positive undermining 231
possibilistic logic 163
possibility distribution 149
possibility measure 21
possibility theory 20, 21, 144, 151, 152,
 156
possible worlds 7, 152, 185,
postcondition 211
potential surprise 151
precondition 211
preference 151, 221
preservation criterion 25
principle of conservatism (see
 conservativity principle)
prioritized base 52, 55, 55
prioritized base revision (PBR) 82
qualitative necessity 20, 144
qualitative possibility 21, 146
Ramsey rule (see Ramsey test)
Ramsey test 24, 26, 191, 211, 248, 253
ranked default theory (RDT) 73
rationality postulates (see AGM
 postulates)
reason 34
reason maintenance 29, 34, 36, 224
recovery postulate 10
recovery properties 99
regular relation 125
revision function 3, 9, 11
revision postulates 250
reorganisation 97
safe contraction 20, 124, 126
selection function 14, 15, 92
set-up 249
simple base revision, SBR 81, 82
skeptical derivability 77
specificity ordering 153
strategic action 222
strength of belief 221 *et seq*
superselector 94
uncertain evidence 175
unified superselector 95
updating 21, 26, 183, 188, 196, 251
virtually connected relation 125