

Contents

<i>Preface</i>	<i>page ix</i>
Part I Background	
1 Introduction	3
2 The program and its roots	12
3 Introduction and Elimination conditions in a general setting	19
4 The Belnap program	26
Part II Implication relations	
5 The theory of implication relations	35
6 Implications: Variations and emendations	39
7 Familiar implication relations: Deducibility and logical consequence	42
8 Implication relations: Direct and derived	45
9 Implications from implications	53
10 Implication relations and the a priori: A further condition?	70
Part III The logical operators	
11 Hypotheticals	77
12 Negations	91
13 Conjunctions	108
14 The disjunction operator	117
15 The logical operators parameterized	127
16 Further features of the operators	134
17 The dual of negation: Classical and nonclassical implication structures	142
18 The distinctness and relative power of the logical operators	151
19 Extensionality	158
20 Quantification	181
21 Identity	202

22	Special structures I: Logical operators on individuals: Mereology reconstituted	209
23	Special structures II: Interrogatives and implication relations	218
24	Completeness	229
Part IV	The modal operators	
25	Introduction	239
26	Modality	246
27	Modals: Existence and nonextensionality	254
28	Special modals	265
29	The possibility of necessity-style modals	290
30	Modals revisited I	301
31	Quantification and modality	312
32	Modals revisited II	318
33	Knowledge, truth, and modality	327
34	The comparative strength of modals	340
35	Kripke-style systematization of the modals without possible worlds	345
36	Model functions, accessibility relations, and theories	360
37	Migrant modals	368
Appendix A	An implication relation for the integers in the programming language BASIC	375
Appendix B	Symmetric sequents as products of implication relations and their duals	378
Appendix C	Component-style logical operators and relevance	382
	<i>Notes</i>	388
	<i>Bibliography</i>	410
	<i>Index</i>	415