

Contents

Translator's Preface, vii

Preface, ix

Chapter 1. Introduction, 1

1. An Example, 1

2. Preliminary Remarks on the Notion of Logical Form, 9

3. Validity and Soundness, 13

4. Statements, Primitive Statements, and Compound Statements, 15

5. Review, 24

Chapter 2. Statement Logic, 26

1. The Symbol System of Statement Logic, 26

2. The Metalogic of Statement Logic, 53

3. Review and Overview, 115

Chapter 3. Predicate Logic, 124

1. The Symbol System of Predicate Logic, 126

2. The Metalogic of Predicate Logic, 168

3. Review and Overview, 180

Chapter 4. The Mathematical Approach to Statement Logic, 181

1. On Mathematical Approaches in General, 182

2. The Syntax of Statement Logic, 185

3. Semantics: Model Theory, 191

4. Proof Theory, 195

5. Review, 205

6. Prospects for Predicate Logic, 206

Appendix 1. An Additional Proof, 209

Appendix 2. Solutions to the Exercises, 212

By Christopher von Bülow and Alex Levine

Appendix 3. Suggestions for Further Reading, 253