Preface

Critical thinking skills are some of the most prized commodities in today's knowledge-based economy, and the study of logic is one of the best ways to develop these skills. With its emphasis on presenting, understanding, and evaluating arguments, logic has the power to make us quicker, clearer, and more creative thinkers. It can help us to articulate and support our own views, and to analyze the views of others.

In short, there are many benefits to the study of logic. But there are also potential obstacles. Logic can be intimidating. It can be frustrating. It can even be *boring*.

The Power of Logic is written with the hopes of removing these kinds of obstacles. The book features a simple and direct writing style that helps makes even the most technical matters approachable. It features a wealth of helpful tips and on-line resources to combat common frustrations. And it includes hundreds of examples and exercises that give readers the opportunity to apply their critical thinking skills to interesting arguments from philosophy, politics, and religion. Our hope is that these features help to make logic accessible and interesting, and that they enable you to put the power of logic to work in your own life.

New Features

We have made many improvements in light of critical reviews and our classroom experience with previous editions. We have also made some very specific improvements as follows:

- The book has been heavily rewritten, with a focus on eliminating excess verbiage, repetitive passages, and outdated material.
- There are dozens of new definition boxes, which emphasize key concepts and important distinctions.
- There are over a dozen new summary boxes, including summaries of the abbreviated truth-table method and the finite universe method. These boxes contain simple, clear descriptions for quick reference and study.
- Chapter 2, Identifying Arguments, provides a clearer explanation of how to reconstruct an argument.
- Chapter 3, Logic and Language, expands the discussion of propositions, sentences, and truth.
- Chapter 4, Informal Fallacies, now emphasizes how sound or cogent arguments can resemble fallacies and explains how to avoid identifying them as fallacies. It also includes a new discussion of some purported fallacies

such as the "Intentional fallacy" and the "is-ought fallacy" that are some-times invoked to avoid a more substantive discussion.

■ Chapter 9, Predicate Logic, contains a revised definition of a WFF for the language of predicate logic. Section 9.3 includes five new sets of exercises, which allows students to master the quantifier rules one at a time.

■ Chapter 10, Induction, has been reorganized and refocused. It includes a new discussion of arguments from authority, and a greater emphasis on the connection between probability and inductive logic.

Enduring Features

We have retained many of the features that have made *The Power of Logic* suc-cessful in the past.

■ Early chapters focus on relatively informal methods. More technical material is introduced gradually, with symbolic logic receiving thorough treatment in Chapters 7 to 9.

■ The writing is concise and lively throughout the text. The chapter on truth tables includes a discussion of the material conditional and its relation to the English "if-then" and emphasizes abbreviated truth tables.

■ The system of natural deduction for statement logic is entirely standard, consisting of 8 implicational rules, 10 equivalence rules, conditional proof, and *reductio ad absurdum*.

■ The chapter on inductive logic includes standard material on statistical syllogisms, induction by enumeration, arguments from authority, Mill's methods, scientific reasoning, and arguments from analogy. It also includes an accessible introduction to the probability calculus.

■ The exercises on arguments from analogy require students to evaluate a stated criticism of each argument, which makes the exercises relatively easy to grade.

As in previous editions, various paths through this book are possible, de-pending on the time available, the needs of the students, and the interests of the instructor. Here are three possibilities:

■ A course emphasizing traditional and informal logic, covering Chapters 1 to 6 and 10: Basic Concepts, Identifying Arguments, Logic and Language, Informal Fallacies, Categorical Logic: Statements, Categorical Logic: Syllogisms, and Inductive Logic

■ A course giving roughly equal emphasis to informal and symbolic logic, covering Chapters 1 to 4, 7, and 8: Basic Concepts, Identifying Argu-ments, Logic and Language, Informal Fallacies, Statement Logic: Truth Tables, and Statement Logic: Proofs

■ A course emphasizing symbolic methods, covering Chapters 1 and 2, 7 to 9, and 10.4: Basic Concepts, Identifying Arguments, Statement Logic: Truth Tables, Statement Logic: Proofs, Predicate Logic, and Probability

Supplements

An *Online Learning Center* accompanies this text at www.mhhe.com/howardsnyder5e. For instructors the site includes an updated solutions manual, a test bank, computerized test bank, and a complete chapter on modal logic for those who wish to cover this material. For students, the site offers learning objectives, and chapter summaries.

The site also provides accessibility to an online *Logic Tutor,* allowing students to do the vast majority of the book's exercises online with feedback. This includes creating Venn diagrams, truth tables, and proofs. Additionally, instructors can build proof, truth, and symbolization questions of their own that can also be graded by the *Logic Tutor.*

Craft your teaching resources to match the way you teach! With McGraw-Hill Create™, www.mcgrawhillcreate.com, you can easily rearrange chapters, combine material from other content sources, and quickly upload content you have written like your course syllabus or teaching notes. Find the content you need in Create by searching through thousands of leading McGraw-Hill textbooks. Arrange your book to fit your teaching style. Create even allows you to personalize your book's appearance by selecting the cover and adding your name, school, and course information. Order a Create book and you'll receive a complimentary print review copy in three to five business days or a complimentary electronic review copy (eComp) via email in minutes. Go to www.mcgrawhillcreate.com today and register to experience how McGraw-Hill Create™ empowers you to teach *your* students *your* way.

Acknowledgments

Many people have helped improve this text throughout the years. Our greatest debt is to C. Stephen Layman, who authored the first three editions of *The Power of Logic* and is responsible for many of its best features. We also thank Allison Rona, Anne L. Bezuidenhout, Benjamin Schaeffer, Bernard F. Keating, Charles R. Carr, Charles Seymour, Cynthia B. Bryson, Darian C. De Bolt, Eric Kraemer, Eric Saidel, George A. Spangler, Greg Oakes, Gulten Ilhan, James K. Derden, Jr., Jason Turner, Jeffrey Roland, Jen Mills, John Casey, Jon-David Hague, Jordan J. Lindberg, Joseph Le Fevre, Keith W. Krasemann, Ken Akiba, Ken King, Maria Cimitile, Mark Storey, Martin Frické, Michael F. Wagner, Michael Rooney, Mitchell Gabhart, Nancy Slonneger Hancock, Neal Hogan, Ned Markosian, Nils Rauhut, Otávio Bueno, Patricia A. Ross, Paul Draper, Paul M. Jurczak, Peter Dlugos, Phil Schneider, Phillip Goggans, Rachel Hollenberg, Richard McClelland, Rico Vitz, Robert Boyd Skipper, Ron Jackson, Sander Lee, Sandra Johanson, Ted Sider, Terence Cuneo, Tom Downing, Ty Barnes, William J. Doulan, and Xinmin Zhu.

For the fifth edition, we thank our project team at McGraw-Hill Higher Education: Jessica Cannavo, Sponsoring Editor; Robin Reed, Developmental Editor; Angela FitzPatrick, Marketing Campaign Coordinator; Jane Mohr, Lead

Finally, we thank our families—especially our children—for their patience and understanding throughout the writing process. It is to them that we dedicate this book.

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