

# Foreword

In a Republican nation, whose citizens are to be led by persuasion and not by force, the art of reasoning becomes of the first importance.

—THOMAS JEFFERSON

Reason is the instrument on which we rightly depend when reliable judgments are needed. Nonrational instruments—habits and hunches and the like—are commonly employed, we know. But when circumstances are complicated, when our decisions affect our loved ones and ourselves gravely, when a great deal is at stake in passing judgment, we *reason* the matter out as best we can, because that is the most likely course to success.

There are rational methods, methods well tested and confirmed, for determining what is true. There are well-established techniques, rational techniques, for drawing new inferences from what we already know to be true. Our ignorance is vast, of course, and therefore we must often resort to some authority in reaching judgment—but the need for reason cannot be escaped even then, because we must decide as wisely as we can which authorities deserve our respect. In every serious intellectual pursuit we come ultimately to rely on reasoning, because there is nothing that can successfully replace it.

By nature we are endowed with powers of reasoning. Logic is the study of the uses of those powers. Intuitively, we may have long acted on sound principles, partly grasped. With care, we can bring these principles to the surface, formulate them precisely, and learn how to apply them with confidence to problems that may be solved by reason. In the study of logic we come first to recognize our own native capacities, and then to strengthen them through practice. The study of logic helps one to reason well by illuminating the principles of *correct* reasoning.

Whatever the sphere in which knowledge is sought—whether in science, or in politics, or in the conduct of our private lives—we use logic in reaching defensible conclusions. In the formal study of logic, with which this book is concerned, we learn how to acquire truths and how to evaluate competing claims for truth. Ideally, every college course should contribute to this end, yet we know that many do not. Much that is taught in college classes soon grows out of date. But the skills of accurate thinking never become obsolete, and the development of these skills lies squarely within the province of the study of logic. The study of logic helps us to identify arguments that are good, and to understand why they are good. The study of logic helps us to identify arguments that are bad, and to understand why they are bad. No study is more useful or more widely relevant to our serious concerns than this.

This considered assurance we give to our readers: A command of the fundamental principles of correct reasoning, which the study of this book promotes, will make a deeply satisfying, significant, and permanent contribution to one's intellectual life.

## Preface to the Thirteenth Edition

Earlier editions of *Introduction to Logic* have been warmly received by our philosophical colleagues around the world. James Druley from Reedley College, Madera, CA, who was one of the reviewers of the twelfth edition wrote: “Several times, after reading a part of the text I have thought, ‘That could not have been written any more insightfully or elegantly; that could not have been explained better.’” We are gratified by such kind words, of course, but we are not content. In this thirteenth edition we correct some inaccuracies, reformulate some dense passages, and introduce some new material. The essential structure and substance of the book have been retained, but for those who are familiar with earlier editions of the text we note here five major adjustments that we think will be helpful to both instructors and students.

*First.* The material in Part I has been compressed. Complexities in the identification of arguments are now more closely tied to the basic concepts introduced in Chapter 1, thus permitting Chapter 2 to be devoted entirely to the *analysis* of arguments. Discussion of the uses and misuses of language is now integrated with the examination of definitions, permitting the consolidation of two earlier chapters (3 and 4) into one. The account of informal fallacies (now Chapter 4) has been extended by including some fallacies that had been earlier passed over, with juicy illustrations taken from current controversies.

*Second.* The greatest change in this edition appears at the point where the construction of formal proofs of validity is first introduced, in what is now Chapter 9. Users of the book have impressed on us the need to make less formidable the tasks with which the introductory student is confronted at this juncture. The passage—from the first illustrations of formal proofs to exercise sets in which some rather complicated proofs are called for—was speedy, and for many it was frustrating. The intellectual *gradient* in this chapter has been reduced. The construction of proofs is explained and illustrated at gradually increasing levels of difficulty.

The illustrations used to this end are taken from the exercise sets that have long been relied on. However, it is also very convenient to preserve, for those and other exercises, the same numbering as was used in previous editions. Completely renumbering the exercises would prove disruptive for many.

Devising a formal proof can never be the mechanical procedure some students long for, of course, but with the path of deductive strategizing made somewhat smoother, the construction of proofs may become less puzzling and more fun. The introduction of formal proofs is now friendlier than it was, and has been expanded substantially.

*Third.* In Part III, where causal analyses are integrated into the discussion of hypotheses and their confirmation in science, the exposition has been reordered and tightened. Some historical materials thought by many to be tangential have been eliminated. This presentation (now Chapter 13) is shorter and more direct than it was, yet we have retained some of the classical illustrations of scientific method that are as beautiful as they are instructive. The scientific examples used here are taken mainly from research and discoveries of this decade.

*Fourth.* The treatment of footnotes has been changed. Notes of two kinds are distinguished. Some footnotes pertain to logical restrictions supposed by the text, or to the usage of terms in the text, or to other intellectual refinements that are properly tied to the material at that point in the text. These continue to appear, as they must, on the pages where those refinements are relevant. The majority of notes, however, supply references to articles, books, persons, speeches, research activities, and the like that readers may wish to investigate and are surely entitled to know. (The trove most commonly mined is *The New York Times*, a periodical from whose pages illustrative arguments and examples bubble perpetually.) Such references are not central to the study of logic itself. When placed on the text page they may encumber the exposition of logical concerns, and therefore they now appear as endnotes at the end of each chapter.

*Fifth.* *Introduction to Logic* in all of its editions has been rich with illustrative materials and exercises taken from events and controversies in real life, from history and some classical sources, but mainly from contemporary periodicals and books. We take pride in the fact that, as our reviewers have noted, those studying “Copi and Cohen” are inescapably introduced to a very wide range of intellectual concerns and thus learn more than logic. Exhibiting arguments and theories (good and bad) by illustrating them with genuine controversies in the world of college students, rather than illustrations concocted for the purpose, has been a notable feature of our book, and no small task to maintain. Logical theory is most fully grasped when it is vividly applied to contemporary human affairs. In this edition of *Introduction to Logic* we have added many fresh illustrations, replacing those more dated, along with some new arguments arising in connection with the lively issues of the first decade of the twenty-first century. In the selection of these illustrations and exercises we seek scrupulously to avoid partisanship. On all sides of controversial issues, good arguments, and bad ones, may appear. Support for one view or another in current controversy is not our proper business; the understanding and analysis of arguments is.

Two other changes deserve brief mention here. First, a comprehensive account of the syllogism, largely unaltered, is presented in the first chapters of Part II. However, we have changed the placement of what we call the *deduction* of the fifteen valid forms of the categorical syllogism. This deduction, unique and elegant, is very much in the spirit of analytical syllogistics, but it is not vital for a student’s understanding of syllogisms and therefore it now appears as an Appendix to Chapter 6. There are no other such appendixes. Second, the ideal number of exercise solutions to provide is perennially in dispute; some instructors prefer more, some would include none at all. We have decided to retain, at the back of the book, solutions to selected exercises in Chapters 5, 6, 7, 8, 9, 10, and 14—but also to eliminate the long discursive solutions, which are much less widely relied on, for exercises in other chapters. This has made possible the more gradual and more detailed introduction to formal proofs of validity in the body of the book.

In this thirteenth edition of *Introduction to Logic* we aim to realize yet more fully the combination of accuracy, clarity, and penetration that has always been our objective. To this end we have relied on the support and advice of students and instructors who use the book and who are sensitive to its shortcomings. We conclude, therefore, with an earnest invitation to our readers to join us in

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advancing this never-ending project. Send us corrections as needed, and suggestions of every kind. Your contributions, warmly welcome, may be most conveniently addressed to Carl Cohen at [c Cohen@umich.edu](mailto:c Cohen@umich.edu). The experience and wisdom of the students and teachers who rely on *Introduction to Logic* have helped to make it the world's most widely used book in the study of logic. We receive your responses to it with respect and heartfelt gratitude.

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