I. A sequential form of review

The books of the Very Short Introduction series by Oxford present an unusual opportunity for reviewers. Since they are ambitiously offered as concise but accessible surveys of their fields or figures, it makes sense to subject them to a two-tiered and sequential style of review. First, an interested non-specialist might best provide an unbiased perspective on the success of the book in its appeal to general audiences. Second, someone with a background on the book’s subject matter might provide additional insight that is also in part reactive to the remarks of the previous reviewer. To this end English Professor David Gratz contributed his view of Priest’s book based entirely on his cold reading of it with absolutely no prior discussion of it with his co-author. Only then did Philosophy Professor V. Alan White, with Gratz’s review in hand, attempt to render his own assessment of the work. To retain the integrity of this process, Gratz’s original review has been minimally edited for style only, so that his initial impressions are preserved apart from any later feedback from White.

II. Gratz’s review

In the final chapter of *Logic: A Very Short Introduction*, Graham Priest states “By and large, logicians, philosophers, and mathematicians prefer to write for each other. Finding things written for relative beginners is not easy.” This book is an admirable and effective attempt to fill that gap. One in the Oxford series of *Very Short Introductions*, it surveys the development of logic in 115 small pages, with room for pictures, cartoons, summaries of chapter highlights, and a glossary of terms and symbols. Priest includes fourteen brief chapters, moving from definitions of validity, through explanations of truth functions, quantifiers, and conditionals, and ending with two chapters on probability. Along the way he makes consistent use of symbolic logic, slowly introducing the symbols and using them in increasingly complex situations as the book progresses, but without ever requiring much more than a grasp of basic algebra of his reader.

Priest says he is not writing a textbook, but an introduction to “the roots of logic, which sink deep into philosophy.” As an educated amateur, with little formal training in logic and thirty-five years since my freshman philosophy course, I found the book to be challenging but always understandable with some effort. Certainly, there are enough equations and symbolism so anyone unused to the subject is unlikely to be able to skim the book with much success, and the graphs and equations are central to the reasoning, even though the problems are always stated in normal English to begin with. But Priest does not bog us
One of Priest’s real strengths is the range of interesting examples he incorporates, from simple problems to introduce symbols and concepts to classical paradoxes and Lewis Carroll wordplay. In the course of the book he manages to find time to examine the Ontological and Cosmological arguments for the existence of God, along with the Argument from Design. His final chapter, on Decision Theory, focuses on Pascal’s Wager and ways to evaluate it (although it ends with a Devil’s wager which leads us in a different direction.) In fact, another important strength is his choice to end most chapters with an example or further problem which calls into question some of the conclusions we have just read, forcing readers to confront the ongoing challenges facing scholars in the field. He claims his aim is to challenge readers to figure out what we make of the matters being discussed, and in this he has been very successful.

My one significant criticism of the book is that, in an apparent attempt to show how logic can lead us to counterintuitive results, the author at times becomes too cute (and a bit condescending). As an example, he begins Chapter 2 (Truth functions) with the statement “our intuitions can get us into trouble sometimes,” and follows it with a sequence of inferences: “The Queen is rich./Either the Queen is rich or pigs can fly. The Queen isn’t rich./Pigs can fly.” The separate steps are valid; the conclusion does not appear intuitively credible. Priest asks, “What has gone wrong?” After a discussion of truth tables, he ends the chapter concluding “our original intuitions about this inference were wrong,” because the inferences are valid—if only “vacuously valid . . . because the premises could never be true together.” But this is a vacuous argument: pigs don’t fly, and any moderately intelligent reader noticed almost immediately that the problem in the inferences was the conflicting premises. We seem to have sunk to word games, and I was seriously tempted to put aside the book at this point.

The situation is not much improved when, at the end of Chapter 5 (Self-Reference), Priest returns to the example and concludes: “This gives us another diagnosis of why we find the inference intuitively invalid. It is invalid.” So readers may wonder why he told us we were wrong in Chapter 2. And then he returns to part of the original set of inferences: Q or P, not Q. Therefore P. We had agreed this seemed intuitively valid, but now he tells us that again “our intuitions about this must be wrong. . . . When we think the inference to be valid, we are perhaps forgetting such possibilities, which can arise in unusual cases, like those which are provided by self-reference.” But there appears to be no self reference in the story of queens and pigs, and no apparent reason this inference must be invalid. Priest might be better advised to distinguish between his straightforward examples and other possible applications of his symbolic reasoning.

One reason this example and a couple of minor similar ones are irritating is that they interrupt a book which, as mentioned before, otherwise does a nice job of investigating and explaining classic paradoxes and important questions. In this regard, the second half of the book is probably even better than the first—there seem to be fewer games being played. Overall, the book requires careful reading, but most of the time it rewards the effort with a sense of real insight into the topics discussed. It is not only very short, but very interesting.

III. White’s reaction and review

In undertaking this project I was prepared for my colleague’s remarks in many ways, for I had already read the book and, knowing him as I do, I suspected Gratz not only would enjoy the book as I did, but
for much the same reasons. What I was not prepared for was the keen insight Gratz had on some parts of the book that struck me as one who already knew something about Priest’s philosophy of logic.

To explain a bit, Priest has advanced in other writings his form of paraconsistent logic. Specifically, paraconsistency attempts to do away with some untidiness in classical propositional calculus with respect to the relation of validity where, for example, \((P \& \sim P) \Rightarrow Q\) is held to be a valid inference. Any logic professor knows the discomfort of addressing this sort of oddity of an otherwise seemingly rigorous treatment of logic in her classes—“Well, it’s a requirement of consistency of entailment that contradictions entail anything...”—the ellipsis of a greasy explanation glaringly clear.

My colleague puts his finger directly on this issue in his remarks about chapters 2 and 5. Priest’s treatment of validity in chapter 2 is the classical one which simply swallows the bitter inference from contradictions to anything. In chapter 5 Priest uses the context of self-referential statements to show how added paraconsistent assumptions about truth—essentially, bivalence is dropped as a strict truth-functional principle—can lead to the conclusion that the above inference scheme is in fact invalid. In keeping with the open-minded tone of the book, however, Priest leaves the reader to consider which view of validity is most intuitively appealing. Still, for a reader like my colleague who is looking for a basic introduction to formal logic, the foray into rather deep matters like alternative theories of deductive validity may be a bit much. (Though, from my perspective, still very well done.)

Otherwise, my critical comments on the book are overwhelmingly positive. Priest’s writing is lucid and even sparkles now and again. He surveys truth-functional logic to first-order predicate calculus to modal logic on the deductive side, and finishes the book with three polished discussions of inductive logic, including decision theory. Along the way there are fascinating treatments of temporal logic, fuzzy logic, and the knotty problem of vagueness. A concluding chapter on the history of logic as it relates to the chapters of the book is a thoughtful and useful resource complete with specific recommendations for further reading. All in all, though at times Priest’s book may a tad ambitious for the uninitiated (the author aptly warns in the preface that careful re-reading of passages would often be necessary!), this is a terrific book not only for the tyro, but as an enjoyable refresher even for us older hands in logic who have taught Copi through more than half of its 11 editions.

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