

## REVIEWS

The Association for Symbolic Logic publishes analytical reviews of selected books and articles in the field of symbolic logic. The reviews were published in *The Journal of Symbolic Logic* from the founding of the JOURNAL in 1936 until the end of 1999. The Association moved the reviews to this BULLETIN, beginning in 2000.

The Reviews Section is edited by Alasdair Urquhart (Managing Editor), Steve Awodey, John Baldwin, Lev Beklemishev, Mirna Džamonja, David Evans, Erich Grädel, Denis Hirschfeldt, Roger Maddux, Luke Ong, Grigori Mints, Volker Peckhaus, and Sławomir Solecki. Authors and publishers are requested to send, for review, copies of books to *ASL*, Box 742, Vassar College, 124 Raymond Avenue, Poughkeepsie, NY 12604, USA.

In a review, a reference “JSL XLIII 148,” for example, refers either to the publication reviewed on page 148 of volume 43 of the JOURNAL, or to the review itself (which contains full bibliographical information for the reviewed publication). Analogously, a reference “BSL VII 376” refers to the review beginning on page 376 in volume 7 of this BULLETIN, or to the publication there reviewed. “JSL LV 347” refers to one of the reviews or one of the publications reviewed or listed on page 347 of volume 55 of the JOURNAL, with reliance on the context to show which one is meant. The reference “JSL LIII 318(3)” is to the third item on page 318 of volume 53 of the JOURNAL, that is, to van Heijenoort’s *Frege and vagueness*, and “JSL LX 684(8)” refers to the eighth item on page 684 of volume 60 of the JOURNAL, that is, to Tarski’s *Truth and proof*.

References such as 495 or 280I are to entries so numbered in *A bibliography of symbolic logic* (the JOURNAL, vol. 1, pp. 121–218).

JOHN NOLT. *Logics*. Wadsworth, 1997, xii + 468 pp.

Classical logic has been the standard fare for introductory courses in logic at universities now for over 50 years. But nonclassical logics have come to be of interest to mathematicians and philosophers for a foundational comparison to classical logic and for their applications. It now seems intellectually dishonest to present classical logic as the settled sole formalization of reasoning in an introductory course on logic. This book is meant to be used to give a broader introduction to logic.

*Logics* is valuable throughout in connecting logic to reasoning. Nolt begins with good discussions of arguments, validity, and much of the background necessary to the study of formal logic. He then turns to a presentation of classical logic up through the completeness theorem for predicate logic.

Nolt’s semantics for predicate logic are new. Rather than interpreting variables as in the Tarskian approach, or varying over different interpretations of names as in Mates’s approach or Shoenfield’s approach, he expands the valuations, that is, the interpretation of the predicates and names, by considering potential names, evaluating formulas by using such potential names for objects. But no fixed supply of such names is given and the formal language is never expanded to include them, so that the potential names are in a limbo between syntax and semantics. This flaw makes his semantics unintelligible.

For his inference systems he uses natural deduction. He devotes much space to extremely long syntactic analyses, both for examples and for completeness theorems. Oddly, he doesn’t prove a deduction theorem or a strong completeness theorem for any of the logics he considers.