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 49**5** or 280**1** are to entries so numbered in *A bibliography of symbolic logic* (the JOURNAL, vol. 1, pp. 121–218).

David Hilbert's lectures on the foundations of geometry 1891–1902. edited by Michael Hallett and Ulrich Majer, David Hilbert's Lectures on the Foundations of Mathematics and Physics, 1891–1933, vol. 1. Springer, Berlin, Heidelberg and New York, 2004, xviii + 661 pp.

Hilbert's book ***Grundlagen der Geometrie*** of 1899 has played a peculiar role in the development of the foundations of mathematics. It has been hailed as the dawn of a new era, as in Weyl's 1944 paper *David Hilbert's mathematical work*. However, Hilbert's topic, the study of axiomatic geometry in the synthetic tradition of Euclid, has been an absolutely marginal field in 20th century mathematics. The Ω-***Bibliography of Mathematical Logic*** listed just a few dozen papers up to 1986, many of which are of no concern. The importance of Hilbert's geometry is to be searched elsewhere than in its influence on research in geometry, so outdated after a century that journals dedicated to geometry would not even publish such material anymore. Hilbert's role was rather, as Weyl emphasizes, to show the possibility of formalization of mathematical arguments to the extent that one can check their correctness without the need to think of their intuitive content. Thus, geometry gave a model for how to formalize mathematics and how to pose the central foundational questions, such as those of consistency, completeness, and decidability. Yet, anyone who has started to really formalize Hilbert's proofs will soon have noticed that claims to rigorous formalization in Hilbert, such as Weyl's, are exaggerated: Consider Hilbert's very first axiom I1 which reads, from the popular seventh edition of 1930: "For two points *A*, *B* there exists always a line *a* such that