Review of MARTIN GARDNER, THE NIGHT IS LARGE: COLLECTED ESSAYS, 1938-1995

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"Man is a small thing, and the night is very large and full of wonder." Martin Gardner derives the title of his collection of essays from this excerpt fromm a play by Lord Dunsany, one of his favorite authors. Gardner finds wonders everywhere, as evidenced by these forty-seven pieces, which originally appeared in such disparate places as *Scientific American*, *Fantasy and Science Fiction*, *Journal of Philosophy*, *The Skeptical Inquirer*, *The New York Review of Books*, and several of Gardner's monographs. Although *The Night Is Large* comprises seven sections entitled Physical Science, Social Science, Pseudoscience, Mathematics, The Arts, Philosophy, and Religion, Gardner typically takes an interdisciplinary approach, and many an essay would comfortably fit into a section different from its assigned one. Several of the articles in this volume discuss subjects in mathematical logic and foundations and so deserve more detailed consideration here.

Two of the three pieces in the Mathematics section of *The Night Is Large* deal with mathematical realism. In Gardner's words, "Do mathematical structures have a reality independent of human minds?" Although most practicing mathematicians take an objective, if not downright Platonistic, approach to the field, more anthropocentric viewpoints get expressed disproportionately often. In general, those holding a majority opinion can tend to take their outlook for granted and not expound on it, while those in the minority will have more need to articulate and maybe even proselytize for their position. Gardner's article, written some thirty years apart, straightforwaxdly and wholeheartedly attack the more subjective conceptions of mathematics. In the one case, his main target is the anthropologist Leslie Alvin White and his book *The Science of Culture*; in the other, the mathematicians Philip Davis and Reuben Hersh and their book *The Mathematical Experience*.