EDITOR'S INTRODUCTION

Jean van Heijenoort died in March 1986. 23 July 1992 would have been his eightieth birthday. *Modern Logic* marks van Heijenoort's birthday anniversary with this Special Issue devoted entirely to his life and work.

Van Heijenoort was one of the foremost historians of logic of his generation, and his work helped shape the standards for the history and historiography of logic and set the defining tone for the history of logic not only for his generation of logicians and historians and philosophers of logic, but for the next generation as well. His collection *From Frege to Gödel: A Source Book in Mathematical Logic, 1879 – 1931* not only presented a documentary history of mathematical logic during its crucial formative period, but defined that history by setting its chronological limits, tracing the main streams of its development and helping to formulate the ideas and topics of primary focus for historians of logic and logicians alike. In this sense, van Heijenoort stands as a pioneer in the historiography of logic; for his work of historical interpretation is based upon a close and careful first-hand consideration of the original sources of research in logic utilizing his gifts as linguist, historiographer, and contributor to original technical research, rather than simply as historian, as had been typical of earlier generations. As Thomas Drucker (*1991*, xv) wrote, the purpose of the history of logic (as for history of science in general) is "to replace the naive wonder at monuments with a sense for the tools and materials required for their creation." This feature of the history of mathematics has been made prominent by van Heijenoort, whose studies not only provided expositions of the work of the leaders in logical research as if their work were merely museum curiosities, but likewise evaluated the contributions which their work made to the over-all development of logic and captured what is most alive in that work while seeking to utilize it for further development of the subject. Thus van Heijenoort's most original contributions to the falsifiability tree method can be understood (as Anellis's contribution to this issue shows) in terms of his perception of the history of proof theory specifically and of the history of logic in general.

Van Heijenoort's work has been an inspiration and guideline for much of the work being carried out in the history of logic in our time. His influence has been so pervasive that even those who oppose his views have of necessity considered them, however critically. We are therefore particularly pleased to include among the papers of this special issue the paper "Historical Development of Modern Logic", previously unpublished, from van Heijenoort's *Nachlaß*. This paper, to a greater extent than those of the more philo-

sophical of his papers, sketches in broad outline as well as in minute technical detail his understanding of the main lines of the development of mathematical logic. This paper therefore gives a more accurate expression of van Heijenoort's thinking on the history of modern logic than do the handful of his more philosophically informed publications.

A portrait is given by Anita Burdman Feferman and Solomon Feferman of van Heijenoort's politically eventful and captivating life together with a brief curriculum vitae of his academic career and a sketch of his professional work both in logic and as Trotsky scholar and bibliographer. The remainder of the papers included in this issue present a wide focus on van Heijenoort's life and work, ranging from the personal reflections and recollections of such of his friends and colleagues as W.V. Quine and John W. Dawson, Jr., to the philosophical analysis, criticism, and reconstruction of van Heijenoort's conception of the history of logic by Jean-Yves Girard and Jesús Padilla-Gálvez based largely upon van Heijenoort's published writings. Van Heijenoort's student Irving H. Anellis uses informally distributed manuscripts as well as published materials to provide a detailed technical survey of van Heijenoort's contributions to the history of proof theory and especially to the falsifiability tree method. Gregory H. Moore's paper meanwhile explores the theme of the relationships and interactions between logic and mathematics that van Heijenoort raised in a number of his published historico-philosophical writings, including the posthumously published paper "Système et métasystème chez Russell" (*1987*). Van Heijenoort dealt with this issue from the perspective of the historical development of logic. Moore's treatment concentrates on examples from the last fifty years.

References.

Drucker, T., *Introduction*, in T. Drucker (editor), *Perspectives on the history of mathematical logic* (Boston/Basel/Berlin, Birkhäuser, 1991), xv-xxiii.

van Heijenoort, J., *Système et métasystème chez Russell*, in The Paris Logic Group (editors), *Logic Colloquium '85* (Amsterdam/London/New York, Elsevier North-Holland, 1987), 111-122.

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