

INTRODUCTION

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This issue commemorates, at long last, the work of Kenneth Jon Barwise (1942-2000) with four articles describing its various aspects and their current ramifications. We refer to Solomon Feferman's In Memoriam (this BULLETIN, vol.6 (2000), 505-508) for a retrospective look at Barwise's career and contributions. Barwise was indeed a mathematical logician, but in a broad sense: His intellectual interests were anchored in logic, the study of the regularities of human reasoning, and his approach was mathematical, in that mathematical structures and arguments served in the articulation. However, his work was not confined to what is now regarded as the field of mathematical logic. His initiatives, consistently directed at transcending the bounds of first-order logic, broke new ground in several directions, always with a synthetic, expansive approach. Moreover, he drew others and advanced his fields of endeavor with enthusiasm and industry, as evidenced by his having had twenty-one Ph.D. students, his editing of the *The handbook of mathematical logic*, and his stewardship of the Center for the Study of Language and Information at Stanford University.

The first article, by long-time colleagues H. Jerome Keisler and Julia Knight, provides an overview of infinitary logic and admissible sets, an early confluence of model theory, set theory, and recursion theory and the area of Barwise's earliest mathematical endeavors, and describes both his fundamental contributions and how they flowed into subsequent developments. Jouko Väänänen's article then describes work in abstract model theory and generalized quantifiers, much inspired by Barwise's broad initiatives for extending first-order logic by reflecting on its properties. Barwise pivotally shifted his focus in the 1980's to natural language semantics, and the third article, by Keith Devlin, is devoted to the papers he wrote on that topic. Most, but not all of Barwise's efforts in the area focused on the development of situation semantics, and Devlin provides both a brief outline of the theory and an annotated guide to Barwise's papers on the subject. Yet another door was opened in the late 1980's and Sun-Joo Shin in the final article describes Barwise's expansive foray into homogeneous logic, logic moving beyond representation through visualization and computers to information.

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1079-8986/04/1001-0002/\$1.10