

Giving wings to logic: Mary Everest Boole's propagation and fulfilment of a legacy

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Abstract. In his influential *Laws of Thought* (1854), the mathematician George Boole presented a formulation of logic using algebraic expressions and manipulations. His widow, Mary Everest Boole, undertook an ambitious project of disseminating his ideas by introducing lay audiences to the law of pulsation, a prescription for correct reasoning that incorporates two of his fundamental insights. Contemporary scholarship presents a fragmented picture of Mary Boole, regarding her largely as a source of information on the religio-psychological impetus for her husband's contributions to logic, among other matters. Some studies rightly acknowledge that her better-known commentary on educational reform relates to a promotion of the *Laws of Thought*, yet these typically fail to expand on how she articulated such relationships for readers. This paper provides a more complete understanding of her efforts by examining texts on various subjects motivated by a dedication to propagating as much as fulfilling the intellectual legacy she associated with her husband. In doing so it considers her interventions – like those undertaken by other Victorian women who sought to cultivate scientific enterprises – within a contextual framework broad enough to include strategic responses to cultural realities and possibilities.

The influential member and sometime head of the respected Department of Education at the University of Chicago, Ralph Tyler, employed language imbued with historical significance when he declared his admiration for Mary Everest Boole. According to his mid-twentieth-century testimonial, 'her conceptions of child psychology and of learning, as well as her understanding of the psychological nature of mathematics and science, make her a pioneer in this generation as in the last'.¹ This is high praise, to be sure. But it also strongly suggests that her reputation, while deserving of note, was at that time undervalued. If that were truly Tyler's concern then, it continues now. More than fifty years after this assessment, it is disheartening to find that this remarkably dedicated and formidably gifted woman remains an obscure figure in the modern history of science. Many will associate her with her husband, George Boole, the innovative mathematician and logician, yet few will be in a position to fully appreciate the scope

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¹ R. W. Tyler, quoted in E. M. Cobham, *Mary Everest Boole: A Memoir with Some Letters*, Ashington, 1951, 11.