X Modern Logic ω

Boole 1815-1864. L'Oiseau de nuit en plein jour, par Souleymane Bachir Diagne avec des notes et annexes de Marie-José Durand. Paris, Belin, 1989. 262 pages.

Reviewed by

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The book under review is a volume in the collection "Un savant, une époque," designed to present history through the biographies of scientists. It is apparent that the author has made an extensive study of the secondary literature on Boole's life and work. The material is nicely presented in a compact readable monograph.

There are four chapters comprising 200 pages, plus 10 appendices of about 40 pages more, though no index. Chapter one is an account of Boole's personal development: shoemaker's eldest son, recognized early as highly gifted, impelled by family exigencies to take on, at age 16, financial responsibility by becoming assistant to a schoolmaster, starting at age 21 his own boarding school, teaching himself higher mathematics, writing research papers, one of which was awarded a Royal Society gold medal and, though without formal higher education, applied for and was appointed in 1849 to be the Professor of Mathematics at the newly established Queen's College in Cork. Married late in life to Mary Everest – who survived him by some 50 years – he fathered 5 daughters, all of whom turned out to be remarkable, though left fatherless when the eldest was 8 years old.

Chapter two describes the then contemporary ideas conducive to Boole's creating an algebra of logic: symbolical algebra, the calculus of operators, and the 'new analytic' – in logic the recognition that Aristotle may not have said the last word on the syllogism. In this connection the acrimonious plagiarism dispute between De Morgan and Sir William