

Maseres, Francis | Encyclopedia.com

Complete Dictionary of Scientific Biography COPYRIGHT 2008 Charles Scribner's Sons
8-10 minutes

(b. London, England, 15 December 1731; d. Reigate, Surrey, England, 19 May 1824)

Mathematics.

Maseres was the son of a physician who was descended from a family that had been forced to flee France by the revocation of the [Edict of Nantes](#). At Clare College, Cambridge, he obtained his B.A. degree in 1752 with highest honors in both classics and mathematics. Upon receiving the M.A. and a fellowship from his college, he moved to the Temple and was later called to the bar. After spending a few years in the practice of law with little success, he was appointed attorney general for Quebec, in which post he served until 1769. His career in the new world was distinguished “by his loyalty during the American contest and his zeal for the interests of the province.” Upon his return to England he was appointed cursitor baron of the Exchequer, an office which he held until his death at the age of ninety-three. During this period of his life he was generally known as Baron Maseres. In addition he was at different times deputy recorder of London and senior judge of the sheriff’s court.

Three aspects of Maseres’ career are noteworthy. The first is his interest in political matters, particularly in the affairs of Canada and the American colonies. Of a considerable number of essays along these lines from Maseres’ pen, the following are typical: (1) “Considerations on the expediency of admitting Representatives from the American Colonies to the [House of Commons](#)” (1770); (2) “Account of Proceedings of British and other Protestants of the Province of Quebec to establish a House of Assembly” (anon.), (1775); (3) “The Canadian Freeholder, a Dialogue shewing the Sentiments of the Bulk of the Freeholders on the late Quebec Act” (1776–1779); (4) “Select Tracts on Civil Wars in England, in the Reign of Charles I” (1815).

A second aspect of Maseres’ long career is the peculiar nature of his mathematical contributions, reflecting his complete lack of creative ability together with naive individualism. For a proper perspective, one must recall that Maseres’ works were written about a century and a half after Viète and Harriot had ushered in the period of “symbolic algebra.” While Viète had rejected negative roots of equations, certain immediate precursors of Maseres, notably Cotes, De Moivre, Taylor, and Maclaurin, had gone far beyond this stage, as had his contemporaries on the Continent: Lambert, Lagrange, and Laplace. Despite these advances, some quirk in the young Maseres compelled him to reject that part of algebra which was not arithmetic, probably because he could not understand it, although by his own confession others might comprehend it. Unfortunately this prejudice against “negative and impossible quantities” affected much of his later work. Thus in one of his earliest publications, *Dissertation on the Use of the Negative Sign in Algebra* (1758), he writes as follows.

If any single quantity is marked either with the sign + or the sign — without affecting some other quantity... the mark will have no meaning or signification; thus if it be said that the square of -5 , or the product of -5 into -5 , is equal to $+25$, such an assertion must either signify no more than 5 times 5 is equal to 25 without any regard to the signs, or it must be mere nonsense or unintelligible jargon.

Curiously enough, in addition to Maseres, two other contemporary mathematicians opposed the generalized concept of positive and negative integers: William Friend, father-in-law of De Morgan, and Robert Simson. Maseres unfortunately influenced the teaching of algebra for several decades, as may be seen from textbooks of T. Manning (1796); N. Vilant (1798); and W. Ludlam (1809).

Perhaps the many publications with which he strove to bring mathematics to a much wider public were the most notable aspect of Maseres’ legacy. Some were original works; others were reprints of the works of distinguished mathematicians. His original books are characterized by extreme prolixity, occasioned by his rejection of algebra, and the consequent proliferation of particular cases. For example, in the *Dissertation* alluded to above, which is virtually a treatise on elementary algebra, the discussion of basic rules and the solution of quadratic and cubic equations occupy three hundred quarto pages.

Of the reprints that Maseres made at his own expense, the most significant is the *Scriptores logarithmici* (1791–1807), six volumes devoted to the subject of logarithms, including the works of Kepler, Napier, Snellius, and others, interspersed with original tracts on related subjects. Others, interspersed with original tracts on related subjects. Other republications include the following: (1) *Scriptores optici* (1823), a reprint of the optical essays of James Gregory, Descartes, Schooten, Huygens, Halley, and Barrow; (2) [Jakob I Bernoulli](#)’s tract on permutations and combinations; (3) Colson’s translation of Agnesi’s *Analytical Institutions*; (4) Hale’s Latin treatise on fluxions (1800); and (5) several tracts on English history. Presumably a number of authors were indebted to Maseres for financial assistance of this sort. There can be little doubt of his sincerity and generosity, even if somewhat misplaced.

BIBLIOGRAPHY

I. Original Works.

- (1) *A Dissertation on the Use of the Negative Sign in Algebra: containing a demonstration of the rules usually given concerning it; and shewing how quadratic and cubic equations may be explained, without the consideration of negative roots. To which is added, as an appendix, Mr. Machin's quadrature of the circle* (London, 1758).
- (2) *Elements of Plane Trigonometry ... with a dissertation on the nature and use of logarithms* (London, 1760).
- (3) *A proposal for establishing life-annuities in parishes for the benefit of the industrious poor* (London, 1772).
- (4) *Principles of the Doctrine of Life Annuities explained in a familiar manner so as to be intelligible to persons not acquainted with the Doctrine of Chances, and accompanied with a variety of New Tables, accurately computed from observations* (London, 1783).
- (5) *Scriptores Logarithmici, or a collection of several curious Tracts on the Nature and Construction of Logarithms, mentioned in Dr. Hutton's Historical Introduction to his New Edition of Sherwin's Mathematical Tables*, 6 vols. (London, 1791–1807).
- (6) *The Doctrine of [Permutations and Combinations](#), being an essential and fundamental part of the Doctrine of Chances; as it is delivered by Mr. James Bernoulli, in his excellent Treatise on the Doctrine of Chances, intitled, Ars Conjectandi, and by the celebrated Dr. [John Wallis](#), of Oxford, in a tract intitled from the subject, and published at the end of his Treatise on Algebra; in the former of which tract is contained, a Demonstration of [Sir Isaac Newton](#)'s famous Binomial Theorem, in the cases of integral powers, and of the reciprocals of integral powers. Together with some other useful mathematical tracts* (London, 1795).
- (7) “An Appendix by F. Maseres,” in William Frend, *The Principles of Algebra*, 2 vols. in 1 (London, 1796–1799), 211–456. Also “Observations on Mr. Raphson's method of resolving affected equations of all degrees by approximation,” *ibid.*, vol. 2, 457–581.
- (8) *Tracts on the Resolution of Affected Algebraick Equations by Dr. Halley's, Mr. Raphson's and Sir I. Newton's, Methods of Approximation [with those of W. Frend and J. Kersey]* (London, 1800).
- (9) *Tracts on the Resolution of Cubick and Biquadratick Equations* (London, 1803).

II. Secondary Literature.

- (10) *The Penny Cyclopaedia of the Society for the Diffusion of Useful Knowledge*, **14** (London, 1837), 480–481.
- (11) *The Gentlemen's Magazine* (June 1824); contains a list of Maseres' political writings.
- (12) Moritz Cantor, *Vorlesungen über die Geschichte der Mathematik*, **IV** (Leipzig, 1913), 80, 86–87, 92, 149–151, 271, 302; references to some periodical articles published by Maseres.

William L. Schaaf