

Jones, William

(b. Llanfihangel Tw'r Beird, Anglesey, Wales, 1675; d. London, England, 3 July 1749)

mathematics.

According to Welsh custom Jones, the son of a small farmer, John George, took the Christian name of his father (John) as his own surname (Jones). His mother was Elizabeth Rowland. Although Jones has little claim to eminence as a mathematician in his own right, his name is well-known to historians of mathematics through his association with the correspondence and works of many seventeenth-century mathematicians, particularly Newton.

In his early schooling Jones showed enough promise to secure the patronage of a local landowner (Bulksley of baron Hill) who helped him to enter the countinghouse of a London merchant. Subsequently he traveled to the [West Indies](#) and taught mathematics on a man-of-war. Upon his return to London, Jones established himself as a teacher of mathematics; tutorships in great families followed. One of his pupils, Philip Yorke (afterward first earl of Hardwicke), later became [lord chancellor](#); Jones traveled with him on circuit and was appointed "secretary for peace". He also taught Thomas Parker, afterward first earl of Macclesfield, and his son George, who became president of the [Royal Society](#). For many years Jones lived at Shirburn Castle, Tetsworth, Oxfordshire, with the Parker family. There he met and married Maria Nix, daughter of a London cabinetmaker; they had two sons and a daughter.

In 1702 Jones published *A New Compendium of the Whole Art of Navigation*, a practical treatise concerned with the application of mathematics to astronomy and seamanship. His second book, *Synopsis palmariorum matheseos* (1706), attracted the attention of Newton and Halley. Although the book was designed essentially for beginners in mathematics, it contained a fairly comprehensive survey of contemporary developments, including the *method of fluxions* and the *doctrine of series*. Of the binomial theorem he wrote: ". . . and in a world, there is scarce any *Inquiry* so Sublime and Intricate, or any *Improvement* so Eminent and Considerable, in *Pure Mathematics*, but by a *Prudent application* of this *Theorem*, may easily be exhibited and deduced." Although all the symbols used by Jones are sensible and concise, in only one respect does he appear to have been an innovator: he introduced π for the ratio of the circumference of a circle to the diameter.

From 1706 on, Jones remained in close touch with Newton and was one of the privileged few who obtained access to his manuscripts. About 1708 he acquired the papers and correspondence of [John Collins](#), a collection that included a transcript of Newton's *De analysi* (1669). In 1711 Newton permitted Jones to print the tracts *De analysi per aequationes numero terminorum infinitas* and *Methodus differentialis* (along with reproductions of his tracts on quadratures and cubics) as *Analysis per quantitatum series, fluxiones ac differentias; cum enumeratione linearum tertii ordinis*. In the same year Jones was appointed a member of the committee set up by the [Royal Society](#) to investigate the invention of the calculus. With John Machin and Halley, he was responsible for the preparation of the printed report. On 30 November 1712 he was elected a fellow of the Royal Society and subsequently became vice-president. He contributed sundry papers to the *Philosophical Transactions*, mostly of a practical character.

At his death Jones left a voluminous collection of manuscripts and correspondence which he had assembled mainly through his connections with Newton and the Royal Society. It seems that he intended to publish an extensive work on mathematics and, to this end, made copious notes and transcripts from manuscripts lent by Newton. This material became inextricably mixed with the original manuscripts and the transcripts of others, including those of [John Collins](#) and [James Wilson](#). John Coulson (1736) used a transcript made by Jones as the basis for an English version of Newton's 1671 tract, *The Method of Fluxions and Infinite Series*. Subsequently Samuel Horsley (Newton's *Opera omnia*, I [1779]) retained Jones's title for the tract on fluxions (1671) and copied the "dot" notation inserted by Jones. D. T. Whiteside (*Newton Papers*, I, xxxii) remarks that the sections of the Portsmouth collection relating to fluxions are "choked with irrelevant, fragmentary transcripts by Jones and Wilson." After Jones's death most of the manuscript collection passed into the hands of the second earl of Macclesfield. Two volumes of correspondence from this collection were published by Rigaud in 1841. The task of separating the mass of material compiled by Jones from Newton's original manuscripts has only recently been completed by Whiteside.

BIBLIOGRAPHY

I. Original Works. Jones's books are *A New Compendium of the Whole Art of Navigation* (London, 1702), with tables by J. Flamsteed; and *Synopsis palmariorum matheseos, or a New Introduction to the Mathematics* (London, 1706). Charles Hutton, *The Mathematical and Philosophical Dictionary*, 2 vols. (London, 1795), I, 672, lists the papers (mostly slight) published by Jones in the *Philosophical Transactions of the Royal Society* and gives some account of the disposal of his library of MSS after his death. F. Maseres, *Scriptores logarithmici* (London, 1791), contains a paper by Jones on compound interest. D. T. Whiteside, *The Mathematical Papers of Issac Newton*, I-II (Cambridge, 1967-1968), makes numerous references to Jones and his connection with the Newton MSS. A number of letters written by and received by Jones were printed in S. J. Rigaud, *Correspondence of Scientific Men of the Seventeenth Century*, 2 vols. (Oxford, 1841).

II. Secondary Literature. Biographical material is available in Hutton's *Mathematical Dictionary* (see above) and in John Nichols, *Biographical and Literary Anecdotes of Willia Bowyer, Printer, F.S.A.* (London, 1782), pp. 73-74. See also Lord Teignmouth, *Memoirs of the Life, Writings and Correspondence of [Sir William Jones](#)* (London, 1804); and [David Brewster](#), *Memoirs of the Life, Writings and Discoveries of Sir Issac Newton*, 2 vols. (Edinburgh, 1855), I, 226, II, 421.

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