

JOHANNES HUDDE
1628-1704

Jan or Johannes Hudde was born in May 1628, the son of an Amsterdam merchant and patrician, Gerrit Hudde, and his wife, Maria Witsen. He (probably) studied Law at Leiden in the early 1650s but was also greatly interested in mathematics, to which he was introduced by Frans van Schooten, Jr. Under the guidance of Van Schooten, Hudde acquainted himself not only with the classics in mathematics, but also with the new mathematical methods of Descartes. Essays by Hudde were published by Van Schooten in his *Exercitationes mathematicae* (1657) and his Latin edition of Descartes's *Géométrie* (1659-1661). These essays dealt with the so-called 'folium' of Descartes, the solution (or 'reduction') of algebraic equations of higher degrees, and the problem of 'maxima and minima'. Hudde also showed some interest in physical and astronomical problems and the production of microscopes and telescopes. In 1656 he published a short tract on dioptrics, *Specilla circularia*, while in the same year he also seems to have contributed to the debate concerning the Copernican system of the world by publishing (anonymously) two pamphlets against the anti-Copernican theologian Du Bois.

It appears that Hudde made a Grand Tour through France and Switzerland in 1659, after which he settled in Amsterdam. In the 1660s he made telescopic observations of comets and in the early 1670s Hudde was involved in appraising De Witt's formulas for the calculation of life annuities.

Although Hudde was considered to be one of the most talented students of Van Schooten, he gradually abandoned the pursuit of science and became more and more involved in the city government of Amsterdam. From 1663 onwards he held several administrative and political posts in Amsterdam and in September 1672, after the crisis in Dutch politics caused by the war against France and England had brought William III to power, the new stadholder appointed Hudde as one of the four burgomasters of Amsterdam.

By his marriage (in 1673) to Debora Blauw, widow of Joan van Waveren, Hudde was entitled to call himself Lord of Waveren, Botshol and Ruige Wilnis. From 1672 on, Hudde was burgomaster almost every other year. In between, he was often elected chancellor and deputy of the admiralty. Until the end of the decade, he was the most powerful regent of the most powerful city in the Republic.

During those years, Hudde considered mathematics to be just an interesting pastime, less important than the technical problems to which he devoted his attention well into the 1680's. But visitors, among whom Leibniz in 1676 and David Gregory in 1693, noticed that the Amsterdam burgomaster still had many unpublished mathematical writings in his drawers. And his reputation remained as impressive as ever. As late as 1697 Leibniz remarked that Hudde would have been able to solve a particular difficult problem (the brachistochrone) 'had he not ceased such investigations long ago'.

Hudde died in Amsterdam on 15 April 1704. His marriage to Deborah Blauw, who had died in 1702, had been childless. Part of his fortune was bequeathed to his protégé Burchardus de Volder. Most of his unpublished writings have been lost.

Primary works

Three essays in: Frans van Schooten, *Exercitationum mathematicarum libri V* (Leiden, 1657); 'De reductione aequationum' and 'De maximis et minimis' in: Frans van Schooten, *Geometria Renati Cartesii*, vol. 1 (Amsterdam, 1659); *Wisconstigh-Bewys der onnoselheyt van Jacobus du Bois in het bestrijden van de hypothesis van Copernicus, en de philosophie van Descartes / Demonstratio mathematica ineptiarum et ignorantiae Jacobi du Bois, ecclesiatae Leydensis, in oppugnanda hypothesi Copernicana, et philosophia Cartesiana* (Rotterdam, 1656); *Den hollenden astronomus J.D.B. gecapuchont. Zijnde een antwoord op een blauw boexken genaemt Den Ingetoomden Cartesiaen* (Leiden, 1656); a letter of Hudde to Van Schooten of 21 November 1659, in: *Journal littéraire* 1713, reprinted in: C.I. Gerhard, ed., *Der Briefwechsel von Gottfried Wilhelm Leibniz mit Mathematikern* (Berlin, 1899, repr. Hildesheim 1962), 234-237; 'Méthode des tangentes', in: *Journal littéraire* 1713, 465-469; see also the article by Vermij and Atzema, mentioned below (includes an edition-with-commentary of the manuscript of *Specilla circularia*).

Secondary sources

J.E. Elias, *De vroedschap van Amsterdam 1587-1795*, 2 vols (Amsterdam, 1903-1905; repr. Amsterdam, 1963) vol. 1, 528-529; K. Haas, 'Die mathematischen Arbeiten von Johannes Hudde, Bürgermeister von

Amsterdam', *Centaurus* 4 (1956) 235-284 (with bibliography); J.E. Hofmann, *Geschichte der Mathematik*, vol. 2 (Berlin, 1957) 45-46, 54, 74; J.E. Hofmann, 'Mutmassungen über ein derzeit verschollene Manuscript von Hudde', in: *Nova acta Leopoldina*, neue Folge, 30, no. 174 (1965) 459-466; J. MacLean, 'De nagelaten papieren van Johannes Hudde', *Scientiarum historia* 13 (1971) 144-162; W. Klever, 'Hudde's question on God's uniqueness. A reconstruction on the basis of Van Limborch's correspondence with John Locke', *Studia spinoziana* 5 (1989) 327-357; R.H. Vermij, 'Bijdrage tot de bio-bibliografie van Johannes Hudde', *Gewina* 18 (1995) 23-35; R.H. Vermij and E.J. Atzema, '*Specilla circularia*: an unknown work by Johannes Hudde', *Studia leibnitiana* 27 (1995) 104-121.
K. Haas, in: *DSB*, vol. 6, 536-538; C. de Waard, in: *MNBW*, vol. 1, 1172-1176.

[K.v.B.]