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JOHN GRANT FAUVEL (1947-2001)



John Fauvel, who died on 12 May 2001 at the age of 53, was one of Britain's most distinguished historians of mathematics, and was emerging as a true and productive scholar in the subject when a long-running liver condition suddenly worsened and claimed his life.

John Grant Fauvel was born on 21 July 1947, in Glasgow. After attending school at Trinity College, Glenalmond, he obtained a BA in Mathematics at Essex University in 1970 (including a dissertation on *Homotopy theory*), an MSc at Warwick University in 1973 (with a dissertation on *Algebraic K-theory*), and an MPhil in Mathematics at Warwick University in 1977 (with a dissertation on *Fuzzy theory*). He obtained visiting appointments in the History of Science, Art and Astronomy at Birmingham Polytechnic (1975–78) and at Wolverhampton Polytechnic (1977) and started working for the Open University in 1974 as an Associate Lecturer. Following Temporary Lectureships in the Institute for Educational Technology (1975) and Staff Tutor posts in the Arts Faculty and Mathematics Faculty (now the Mathematics and Computing Faculty) in 1975–78, he joined the Mathematics Faculty in 1979 as Lecturer in Mathematics with Special Responsibility for the U-area. Over the next

20 years, during which he was promoted to Senior Lecturer, he served on the Course Teams for A381, Science and belief: from Darwin to Einstein, AM289, History of mathematics, U202, Inquiry, MA290, Topics in the history of mathematics, and more recently on the Mathematics entry suite (particularly MU120, Open mathematics). He was an organiser and presenter of a number of programmes in a radio series Mathematics Miscellany in the 1990s.

John was the New Zealand Mathematical Society's Visiting Lecturer for 1998; in 1999 he gave an MAA invited lecture, on the subject of 'The history of mathematics and its future', at the Joint Mathematical Meetings of the MAA and AMS, San Antonio, USA, and was a Fulbright Scholar and visiting professor of mathematics at Colorado College, Colorado Springs, USA; and in March 2000 he was Huffman Scholar in Residence at Miami University, Oxford, Ohio, USA.

John was chair of HPM (the International Study Group on the Relations between History and Pedagogy of Mathematics, affiliated to the International Commission on Mathematics Instruction) from 1992 to 1996, co-organised several of its international conferences, and co-chaired the ICMI Study on *The role of the history of mathematics in the teaching and learning of mathematics*, published as *History in mathematics education* by Kluwer in 2000. He was President of the British Society for the History of Mathematics from 1991 to 1994, and went on to establish their attractive *Newsletter*, which has created a remarkable sense, not only of community but of family for the scattered members of that international group. He was also on the editorial boards of a number of journals in the areas of mathematics, education, history and cultural studies, including *Science and Education*, *For the Learning of Mathematics*, *Themes*, *Paradigm* and *Radical Philosophy*.

John always maintained a lively interest in the public worlds of arts and ideas. An openly gay man, he lived his life positively and joyously, with great good humour and tolerance. He loved diversity and was outraged by hypocrisy. He campaigned energetically against laws, persons and practices responsible for injustice, bringing to bear the same sharp intelligence that characterised his academic work. He wrote a hard-hitting, analytic and beautifully argued editorial ('A moste horrible infamy') castigating Keele University for the way they disposed of the Turner collection of rare mathematical texts. He was also active in the campaign to prevent the destruction of the grave of 19th-century Jewish mathematician J. J. Sylvester, which might otherwise have been turned into a north London car park. He had suffered for some years from a defective bile duct, and early in 2001 was put on the list for a liver transplant, but in the event his liver deteriorated more quickly than anticipated, making the operation impossible.

John's interests covered much of the history of mathematics and its uses in education. He published much less than he knew, and shared his extensive knowledge and considerable library readily and easily with anyone. John had a rare ability to know how Open University students would respond, so that in his hands teaching at a distance became much more of a conversation. As a result he rapidly became one of the Open University's great teachers, and it is as a teacher and a scholar that he will be remembered. The current Open University course, *Topics in the history of mathematics*, reveals his sureness of touch on every page he wrote, and the successful source book that accompanies it (*The history of mathematics, a reader*) has done much to stimulate a revival in the history of mathematics across the United Kingdom and indeed internationally – even making it to the ill-fated Dome. The great innovation of that course is that it continually engages the student with the

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question of what it is to be a historian. Helped by John's sensitive attention to detail, students grapple with texts and learn to come to careful, balanced judgements about their content, context and significance, and in this way become historians.

John edited or co-edited ten books which are among the most instructive and enjoyable in the subject. Of these, one of the first, *Let Newton be!* brought together a number of leading Newton scholars to create one of the most readable and accurate books on that diverse and fascinating figure. One of the last, *Oxford figures*, was the first to cover 800 years of mathematics at Oxford. Edited jointly by John, Raymond Flood and Robin Wilson, these books not only display John's erudition in several essays, but are also strikingly well illustrated, for he had a fine eye. John's particular field, among so much that he knew about, was the British 17th century. He wrote and lectured on Napier, Wallis and Newton, and inspired others; recently his PhD student Jackie Stedall completed her thesis on *The algebra of John Wallis*, and was awarded a Leverhulme Research Fellowship.

John had an instinct for the important, but often overlooked, detail. In his work on British mathematicians, and in his essays on mathematics in Oxford, his intention was always to amplify the received picture, and inevitably to change it as a result. He was thus able to bring out the significance and originality of the best work and tie it to its contemporary implications, and to illuminate the activities of mathematicians and their students when the subject was in the doldrums. He was also attentive to how history gets written, and in his account of the work of Cajori, an early and important American historian of mathematics, he discovered how Cajori, who was based in Colorado, used a system of proxies to read the archives in New York upon which much of his work was based.

John's early death has robbed the communities of mathematicians, historians of mathematics, mathematical educators, and historians of science of much of the fruits of his research. Nonetheless, his papers and books have done much to recapture the lives of British mathematical communities down the centuries. His personal devotion to the idea of community reminds us also of his real influence on the communities he created. More than anyone else, he built up the British Society for the History of Mathematics into an international body through his remarkable editing of its *Newsletter* and by seeing the importance of its links with the corresponding society in Canada. He was influential in creating HIMED (History of Mathematics in Education), a group that has worked energetically to bring good history of mathematics in a useful way into the classroom, and again, as with his work with Jan van Maanen, he was keenly aware of the importance of the international aspect of such work. John's way of working enabled many others to work, and to raise the quality of their work; because of this the communities he joined have an excellent chance of building on what he did, and did so well.

Publications

- 1. (with C. Chant, eds) Darwin to Einstein: historical studies on science and belief (Longmans, London, 1980)
- 2. (with S. Brown and R. Finnegan, eds) Conceptions of enquiry: a reader (Methuen, London, 1981).
- 3. (with J. J. Gray, eds) The history of mathematics: a reader (Macmillan, London, 1987).
- 4. 'Cartesian and Euclidean rhetoric', For the Learning of Mathematics 8 (1988) 25–29.
- 5. (with R. Flood, M. Shortland and R. J. Wilson, eds) Let Newton be!: a new perspective on his life and works (Oxford University Press, 1988; German edition, 1993; Japanese edition, 1994).
- 'Platonic rhetoric in distance learning: how Robert Record taught the home learner', For the Learning of Mathematics 9 (1989) 2-6.

- 7. Mathematics through history: a resource guide (QED Books, London, 1990).
- 8. (with P. Gerdes) 'African slave and calculating prodigy: bicentenary of the death of Thomas Fuller', *Historia Mathematica* 17 (1990) 141–151.
- Editor: History in the mathematics classroom: the IREM papers (The Mathematical Association, 1990).
- 'Tone and the teacher: instruction and complicity in mathematics textbooks', The teaching and learning of school mathematics (eds D. Pimm and E. Love, Hodder & Stoughton, London, 1991) 111-121.
- 11. 'Using history in mathematics education', For the Learning of Mathematics 11 (1991) 3-6.
- (with P. RANSOM, P. WALLIS and R. WALLIS) Mathematical tradition in the North of England (NEBMA, 1991).
- 13. Editor: For the Learning of Mathematics 11, part 2 (1991) (special issue on history in mathematics education).
- 14. 'Newton and mathematical language', Lenguajes Naturales y Lenguajes Formales 8 (1992) 95–104.
- 15. 'Utilização da história da matemática na educação do jovem matemático', Educação e Matemática 27 (1993) 3-5.
- 16. 'A Saxon mathematician', [17] 1-19.
- 17. (with R. Flood and R. J. Wilson, eds) Möbius and his band: mathematics and astronomy in nineteenth-century Germany (Oxford University Press, 1993).
- **18.** 'Mme Newton Pom-Pom du Chatelet', *The unexpected mathematicians: ten plays for radio* (Open University, 1994) 59–74.
- Women and mathematics', Companion encyclopedia of the history and philosophy of the mathematical sciences (ed. I. Grattan-Guinness, Routledge, London, 1994) 1526–1532.
- **20.** 'Mathematics and poetry', Companion encyclopedia of the history and philosophy of the mathematical sciences (ed. I. Grattan-Guinness, Routledge, London, 1994) 1644–1649.
- 21. 'The mathematicians', Lit & Phil Bicentenary Lectures 1993 (Literary and Philosophical Society, Newcastle upon Tyne, 1994) 163–179.
- 22. (with R. J. WILSON) 'The lull before the storm: combinatorics and religion in the renaissance', *Bulletin of the Institute of Combinatorics and its Applications* 11 (1994) 49–58.
- 23. 'Revisiting the history of logarithms', [25] 39–48.
- **24.** (with A. Graham, eds) *Empowering students through the history of statistics* (Centre for Mathematics Education, Open University, in association with the British Society for the History of Mathematics, 1995).
- 25. (with F. Swetz, O. Bekken, B. Johansson and V. Katz, eds) *Learn from the masters!* (Mathematical Association of America, Washington, 1955).
- 26. 'Empowerment through modelling: the abolition of the slave trade', Vita mathematica: historical research and integration with teaching (ed. R. Calinger, Mathematical Association of America, Washington, 1996) 125–130.
- 27. 'J. J. Sylvester and the papers of "old father Harriot", The Harrioteer (Sept. 1996) 2-5.
- 28. 'James Joseph Sylvester: poet', De Morgan Association Newsletter 5 (1997) 5-7.
- 29. (with J. Van Manen) 'The role of history of mathematics in the teaching and learning of mathematics: discussion document for an ICMI Study 1997–2000', Bulletin of the International Commission on Mathematics 42 (1997) 9–16; British Society for the History of Mathematics Newsletter 33 (1997) 46–53; Newsletter of the International Study Group on the Relations between History and Pedagogy of Mathematics 40 (1997) 3–7; Lettera Pristem 23 (1997) 8–13 (Italian); Erevnitiki Diastasi tis Didaktikis ton Mathimatikon 2 (1997) 116–126 (Greek).
- **30.** 'Algorithms in the pre-calculus classroom: who was Newton-Raphson?', *Mathematics in School* 27 (4) (1998) 45–47.
- 31. 'A moste horrible infamy', British Society for the History of Mathematics Newsletter 40 (1999) 1-7.
- 32. 'Caring for the mathematical past: a recent British experience', European Mathematical Society Newsletter 31 (1999) 10-11.
- 33. 'Interview with Jan van Maanen (Groningen), Chair of HPM', European Mathematical Society Newsletter 34 (1999) 16-17.
- 34. '800 years of mathematical traditions', [42] 1-27.
- 35. 'Georgian Oxford', [42] 150–167.
- 36. 'James Joseph Sylvester', [42] 218-239.
- 37. 'Mathematics education', *The history of of mathematics from antiquity to the present: a selective annotated bibliography* (ed. A. C. Lewis, American Mathematical Society, Providence, 2000) 642–653.
- **38.** 'Newton's mathematical language', *Foundations of Newtonian scholarship* (eds R. H. Dalitz and M. Nauenberg, World Scientific, Singapore, 2000) 145–159.
- **39.** 'The role of history of mathematics within a university mathematics curriculum for the 21st century', *Teaching and Learning Undergraduate Mathematics* 12 (2000) 7–11.
- 40. (with R. FLOOD) 'John Wallis', [42] 96-115.
- 41. (with R. GOULDING) 'Renaissance Oxford', [42] 40-61.

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- 42. (with R. Flood and R. J. Wilson, eds) Oxford figures: 800 years of the mathematical sciences (Oxford University Press, 2000).

 43. (with J. Van Maanen, eds) History in mathematics education: the ICMI study (Kluwer, Dordrecht,

- **44.** 'Bibliography for further work in this area', [43] 371–418. **45.** 'John Napier 1550–1617', European Mathematical Society Newsletter 38 (2000) 24–25.
- 46. 'Interview with Bernhard Neumann', European Mathematical Society Newsletter 39 (2001) 9-11.

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