

Bernard John Norton: 1945–1984

Bernard Norton, Programme Secretary of the British Society for the History of Science since 1981, and a joint-Lecturer in the History of Science and in Philosophy at the University of Leicester, died unexpectedly from cancer on 30 December 1984. Bernard was born in London on 15 May 1945 and received a strict Roman Catholic education at the College of St. Ignatius, Tottenham (1956–60) before taking his A-levels in the more secular atmosphere of Enfield Technical College (1961–62). He began his undergraduate studies in Biology at the University College Aberystwyth, part of the federal University of Wales, where he graduated with an Upper Second Class Honours degree in 1966, acquired a passion for mountaineering, and met his future wife, Jill. In practice, since he had spent over half his academic time on the study of traditional philosophy, his degree was technically in Philosophy, with Biology as a subsidiary. Indecision as to whether to pursue further studies in ethics or in the history and philosophy of science led him to teach A-level physics for a year in a Liverpool school. This qualified him as a registered schoolteacher, but more importantly laid the foundations for his skills as an instructor of students. Following his marriage in 1967, Bernard obtained a Science Research Council scholarship which enabled him to study logic, probability theory and the history and philosophy of science with Professor Heinz Post at Chelsea College, University of London. Here he gained the M.Phil. degree in 1971 for an outstanding thesis, 'Theories of Evolution of the Biometric School'. This thesis, which laid the foundation for all his further research and formed the basis of his first two publications (1973, 1975a), was inspired by a desire to see how the fields of mathematics and biology came to be joined together and essentially involved a study of the attempts by Karl Pearson and his associates (the biometricians) to render Darwin's ideas in a mathematical form. Apart from analysing the technical ways in which biometricians contrived to recast Galton's ideas on heredity into the mathematics of multiple correlation, Bernard's philosophical interests led him to pay particular attention to the social theorising and methodological doctrines associated with Edwardian biometry. The thesis also included a preliminary examination of the biometric-Mendelian debate (1975b) which Bernard diagnosed and explained as being based less on differences at the empirical and personal levels (as was then supposed) than on differences at the methodological and ontological levels.

Although now determined to pursue an academic career, despite a distaste for school teaching, Bernard was forced to teach A-level Biology at Hove Grammar School in order to finance the completion of the thesis. However, in 1972 an Andrew Mellon pre-doctoral Fellowship and a University of London postgraduate travelling scholarship enabled him to spend two years in the Department of History and Philosophy of Science at the University of Pittsburg, where his principal teachers were L. Laudan, J. E. McGuire and J. Hodge. In 1974, despite strong references, he was disappointed at not obtaining a Tutorial Assistantship in History of Science at the University of Leicester. Instead, armed with fresh financial support from the SSRC and the Wellcome Foundation, he joined the small Department of History of Medicine at University College, London, as a doctoral student working on the history of statistics with particular application to the College's large Pearson archive. Between 1974 and 1977, when, second time lucky, he obtained a Lectureship in History of Science at Leicester, he also did some part-time teaching at Thames Polytechnic, the University of Sussex and at

the London Hospital Medical College to audiences of undergraduate and postgraduate classes of engineers, biologists and medical students.

The main thrust of the doctoral thesis, 'Karl Pearson and the Galtonian tradition' (1978a), was to expose the metaphysical foundations of population genetics which underlay Pearson's claim that statistics merely summarised facts without going beyond them (1978b). But it also explored Fisher's neo-Darwinian synthesis in the background of the social ideology of eugenics (1978c, 1981a, 1983b), the origins of Spearman's general factor of intelligence (1979, revised 1980), and prepared the way for Bernard's later interest in the increasing use of the intelligence quotient in eugenic accounts of society (1980, 1981a). The thesis established Bernard definitively as a leading expert in his chosen field—the development of ideas relating to biological statistics, eugenics and IQ testing. Moreover, it was a field in which he could speak with equal terms to practising statisticians, biologists, psychologists and educationalists, whose friendship he cultivated easily, as well as to historians, philosophers and sociologists of science. Although he never participated publicly in the debunking of Sir Cyril Burt, he was one of the first to suspect his credibility and Bernard certainly enjoyed being able to show at a meeting of the Past and Present Society in 1978 that the class and intelligence categories which Burt was still using at the end of his life, could be traced back directly to Galton's vague notions of 'civic worth' (1981a). Since 1980 Bernard was attempting to put all of his research together in a book, *Biology and Social Class*; but only three chapters had been completed at the time of his death.

Bernard wore his learning lightly and never frightened undergraduates away with technical mathematics or philosophy; indeed, simplicity of presentation, the ferreting out of the principal themes, points, arguments and counter-arguments of a topic and their presentation for consideration in a clear way, often garnished by outlandish but striking metaphors and analogies, was the secret of his success as a teacher and discussant. Students and colleagues alike found him the most approachable of men. He was an unfailingly helpful and enthusiastic colleague. His answer when burdened with another departmental duty, or another speaker to find for a BSHS meeting, was invariably: 'No problem!' His background and interest in Philosophy naturally led to close contacts and teaching in the Leicester department. In 1982 this link was formalized, when he was appointed to a joint teaching appointment in both the Philosophy and the History of Science Departments. He soon became an indispensable member of both. At the same time, his involvement in teaching in other departments, such as the Schools of Biology and Education, and in wider activities, such as the Association of University Teachers, brought him into contact with colleagues throughout Leicester University.

By the time of his death, Bernard Norton's talents were beginning to receive considerable national and international recognition. Besides the key post of Programme Secretary for our Society, he was being regularly invited to lecture at other universities, both in the UK and abroad (1981d, 1981e, 1983a, 1983c). He was, in particular, helping to plan a symposium on the history of the social and human sciences at the International Congress of History of Science at Berkeley. His research, too, was exploring new areas, especially in the Philosophy of Biology. In terms of what he had already accomplished, we can surely echo Newton's plaint on the death of a younger colleague: 'Had he lived, we might have known something'.

Leicester

W. H. BROCK

Bibliography

- 1971 *Theories of evolution of the biometric school*. Unpublished M.Sc. thesis, University of London.
- 1973 'The biometric defense of Darwin', *J. hist. bio.* **6**, 283–316.
- 1975a 'Biology & philosophy: the methodological foundations of biometry', *J. hist. bio.* **8**, 85–93.
- 1975b 'Metaphysics & population genetics: Karl Pearson and the background to Fisher's multifactorial theory of inheritance', *Ann. sci.* **32**, 537–53.
- 1976a (with E. S. Pearson) 'A note on the background to, and refereeing of, R. A. Fisher's 1918 paper "On the correlation of relatives on the supposition of Mendelian inheritance"', *Notes & rec. Roy. Soc.* **31**, 151–62.
- 1976 'The biometric-Mendelian debate from Galton to Fisher', *Proc. 9th international biometric conference*, vol. 1 (Biometric Socy., Boston, 1976), 357–76.
- 1977 'Allan David Birnbaum, 1923–1976', *J. Roy. Stat. Soc.*, **140A**, 564–5.
- 1978a *Karl Pearson and the Gallon tradition: Studies in the rise of quantitative social biology*, unpub. Ph.D. thesis, University of London.
- 1978b 'Karl Pearson & statistics: the social origins of scientific innovation', *Soc. stud. of sci.* **8**, 3–34.
- 1978c 'Fisher and the neo-Darwinian synthesis' in E. Forbes (Ed.), *Human implications of scientific advances. Proceedings of the xvth international congress on the history of science* (Edinburgh), 481–94.
- 1978d 'A "fashionable fallacy" defended', *New scientist*, **78**, 223–5.
- 1979 'Charles Spearman and the general factor in intelligence: genesis and interpretation in the light of socio-personal considerations', *J. hist. behavioural sciences* **15**, 142–57.
- 1980 'The meaning of intelligence' in D. Hamilton & J. V. Smith (Eds.), *The meritocratic intellect* (Aberdeen), 59–66.
- 1981a 'Psychologists & social class' in C. Webster (Ed.) *Biology, medicine & society 1840–1940* (Cambridge), 289–314.
- 1981b 'Evolution after Darwin', Open University Course A381, *Science and belief from Darwin to Einstein*, Block 6, Unit 13, 31–61.
- 1981c 'The Pure Gamete' [on Mendel & Bateson], script and film/video presentation, B.B.C./Open University Productions. (First shown 1 August 1981).
- 1981d 'Potere intellettuale e denaro. Considerazioni Sulle origini della statistica' in E. Giirelli-Bruni (Ed.), *Teoria della decisioni in medicina* (Verona, Bertani Editore), 29–41.
- 1981e 'La situation intellectuelle au moment des debuts de Fisher en genetique des populations', *Revue de synthese*, **102**, 231–50.
- 1982a Entries for T. D. Lysenko and T. Dobzhansky in T. I. Williams (Ed.) *A biographical dictionary of scientists*, 3rd ed. (London).
- 1982b Entries for Genotype/phenotype, statistics, eugenics, IQ, individual differences, mutation, population genetics, Mendelian, hybridization, Hardy/Weinberg, biometrics' in W. F. Bynum, E. J. Browne & R. Porter (Eds.), *Dictionary of the history of science* (London), 2nd ed., 1985.
- 1983a Comments on Patricia Pots, David Barker and L. J. Ray, *Oxford rev. educ.* **9**, 223–5.
- 1983b 'Fisher's entrance into evolutionary science: the role of eugenics' M. Grene (Ed.), *Dimensions of Darwinism* (Cambridge), 19–29.
- 1983c 'The transfer of probabilistic methods into psychology' in M. Heidelberger, L. Krüger & R. Rheinwald (Eds.), *Probability since 1800: interdisciplinary studies of scientific development* (workshop at the Centre for Interdisciplinary Research of the University of Bielefeld, 16–20 September 1982) (Bielefeld), 237–45.