

## OBITUARY

WILFRED LESLIE STEVENS

The sudden death of "Tony" Stevens, leaving a wife and three young children, in June 1958 at the early age of 46 came as a great shock to his friends, and is a serious loss to the science of statistics.

Stevens was educated at Reading and Cambridge Universities. At Cambridge, after reading mathematics (he was a Wrangler and achieved Schedule B) he took the Board of Education Diploma in Teaching. His real interest, however, lay in statistics, which he studied under Dr. Wishart and Professor Eddington, and after a short interval of teaching he obtained in 1935 a post at the Galton Laboratory under Professor R. A. Fisher. He came to Rothamsted with Professor Fisher at the outbreak of the war, when the Galton Laboratory was evacuated there, though he still continued to reside in London and was indeed bombed out in the air raids.

His increasing desire to take a more active part in the war effort led, for a short time in 1941, to a transfer to the Rothamsted Statistics Department, which was then engaged on work on air raid damage in addition to its agricultural activities. Soon after the transfer, however, urgent representations were made by the Foreign Office and the British Council that Stevens should take a post at Coimbra University, Portugal, where he was personally known to Professor Tamagnini through his work on human blood groups. He eventually acceded to this request, though not without considerable hesitation. He spent the rest of the war years in Portugal, where he met his wife, who was similarly engaged in upholding British interests, and returned to England in 1944 to take a post with Imperial Chemical Industries at Billingham. Although he found much to interest him in the statistical problems arising at Billingham, both on the experimental and control side, he and his wife found life in the north of England uncongenial, and in 1947 he joined the Admiralty Statistical Department (then located at Bath) under Mr. H. L. Seal. The work there, however, did not greatly interest him, and housing difficulties and a longing for sunny climes and a Latin atmosphere led him in 1948 to accept a Chair of Statistics at São Paulo University, Brazil, where he remained till his death.

His knowledge of Portuguese and his considerable teaching skill were, of course, an immense advantage for this post. At São Paulo he rapidly established contact with the Agricultural Research Institute at Campinas, and was appointed their Statistical Advisor. This was a very fruitful liaison, and he did much to further the application of modern statistical methods to agricultural research problems and field experimentation in the State of São Paulo and in other parts of Brazil.

Stevens was a meticulous and thorough worker, capable of putting an immense amount of effort into problems that interested him, though he had little inclination to devote his time to projects in which he found neither theoretical nor practical interest. He had a keen perception for the essentials of a problem and did not accept a solution just because it had been widely promulgated or had received the stamp of high authority. He was a caustic critic, in private at least, but he wisely refrained from committing many of his more pungent criticisms to print.

Stevens will probably be best remembered for his development of a maximum likelihood method of fitting exponential curves by successive approximation (1951), and his method of handling multiway tables of non-orthogonal data (1948) also by successive approximation. Both these methods have proved their value, not only for desk computation but also for computation on electronic computers, for which successive approximation is particularly suited. His paper on control by gauging, read before the Research Section of the Society in 1948, was also a noteworthy contribution to quality control literature, and

demonstrated what was not then recognized, at least in the publications on the subject, that a pair of suitably chosen go and not-go gauges gives a method of control which per article tested is 80 per cent. as efficient as exact measurement, and is of course in many cases immensely simpler to operate.

Stevens was one of the team of authors who produced the text book *Statistical Methods in Research and Production* sponsored by Imperial Chemical Industries and edited by O. L. Davies, which was first published in 1947 and had reached its third edition by 1957. He also produced a number of neat and ingenious tables, three of which (limits of expectation for binomial and Poisson distributions, densities of organisms estimated by the dilution method, and initial differences of the powers of natural numbers) are included in Fisher and Yates's *Statistical Tables*.

F. YATES.

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