## **OBITUARIES**

In the last months of 2000 the Editor was informed on the passing away of two remarkable men, one renowned in science, the other in business. Both had a clear relation to computer chess. We therefore considered it appropriate to honour them by an obituary for which we relied on sources indicated in the footnotes. –Ed.

## **DAVID CHAMPERNOWNE (1912-2000)**

The Editor<sup>1</sup>

On August 19, 2000 the Cambridge economist David Champernowne passed away. He was a long-time friend of Alan Turing, a pioneer of computers and computer chess, from the time that they were undergraduates together at King's College, Cambridge. In 1948 the two men devised a chess-playing program which they called TUROCHAMP. It was one of the first such programs and although it was elementary and only ever beat one opponent, Champernowne's wife, who was a beginner, it incorporated important methods of evaluation.

They also devised a form of chess, called round-the-house chess, in which each player had to move before the other had run round the house – if you got back before your opponent had moved, you were entitled to another move. Fast running tended to prevent good thinking, they found, so the problem was to choose the right balance. More importantly, Champernowne was one of the first people with whom Turing discussed his idea of a Universal Machine (now called a Turing machine), and when Turing invented a machine for calculating the zeros of the zeta function, Champernowne lent a hand in grinding some of the wheels.

Changing to economics, Champernowne went on to do doctoral research into income distribution, and was elected in 1937 to a research fellowship. In more recent years, he returned, as he put it, to his old love, worrying at the problem of why the distribution of income and wealth tends to become less and less equal. All this came to fruition in *Economic Inequality and Income Distribution*, written with Frank Cowell and published by Cambridge University Press in 1998.

In 1936 Champernowne took an assistant lectureship at the London School of Economics where he worked closely with William Beveridge for two years. He became a university lecturer in statistics in Cambridge in 1938 and was drafted into the Prime Minister's Statistical Department two years later. In 1941 he was made Assistant Director of programmes in the Ministry of Aircraft production.

After the war Champernowne returned to his birthplace as director of the Oxford Institute of Statistics, with a fellowship at Nuffield College. He did not, however, find the Oxford intellectual and organisational environment as attractive as Cambridge, and although he was made professor of statistics in 1948, he was soon exploring the possibility of moving back to Cambridge. In 1959 he resigned his Oxford chair to become a reader in economics at Cambridge and a fellow of Trinity. In 1970 he was given a personal chair, as there were no vacancies, becoming a professor of economics and statistics. The most tangible result of Champernowne's first ten years back in Cambridge was his three-volume study *Uncertainty and Estimation in Economics* (1969). The appearance of this work prompted the British Academy to elect him a Fellow in 1970. The year after that he became an Editor of the *Economic Journal*, concentrating especially on theoretical and mathematical articles.

David Gawen Champernowne won a scholarship from Winchester to Cambridge in 1931, took a double first in mathematics in two years and then a first in Part II of the economics Tripos to top it off. He published his first papers while still an undergraduate – on the number 0.1234567 891011..., which is now known as Champernowne's constant – but all his life he remained something of a schoolboy, living in a rather fanciful and abstract world, and known to all as Champ. He is survived by his wife, Wilhelmina Dullaert, and their two sons.

David Champernowne, FBA, Professor of Economics and Statistics at Cambridge University, 1970-78, was born on July 9, 1912. He died on August 19, 2000, aged 88.

Our source is *The Times* of August 25, 2000, Obituaries, p. 23.