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AUTHOR:

George Ellis¹

AFFILIATION:

¹Department of Mathematics and Applied Maths, University of Cape Town, Cape Town, South Africa

CORRESPONDENCE TO:

George Ellis

EMAIL:

george.ellis@uct.ac.za

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Brian Warner (1939–2023): Astronomer, historian and academic leader

Brian Warner was a great asset to the University of Cape Town (UCT) and to science in South Africa in general. He set the Department of Astronomy at UCT on the road to being the world-class institution that it now is, and helped to build up science at UCT and in South Africa to an international level.

Prior to 1970, astronomy at UCT was taught by R. H. Stoy, who was Director of the Observatory, and by Don Fernie and Pat Wild of the Physics Department. UCT's Department of Astronomy was formally founded in 1970 with Tony Fairall as Lecturer and Pat Wild as Senior Lecturer. Brian was recruited as Head of Department in 1972. He had been a Fellow of Balliol College, Oxford (1965–1967), where he met mathematics tutor Jack de Wet, who became Dean of Science at UCT in 1971 and then recruited Brian to come to UCT. De Wet wrote to Brian when he was in Texas, telling him that he was due to retire from Oxford and was returning to UCT as Dean of Science. Brian said later "That changed everything. I knew De Wet, I admired him. I wanted to go where he went."¹ They formed a close working relationship as Jack de Wet transformed science first at UCT, and then transformed the way the then Foundation for Research Development worked (it later became the National Research Foundation).

Brian attended East Grinstead County Grammar School, and as a schoolboy befriended Patrick Moore who lived in East Grinstead. Brian and his friends used Moore's telescope. He wrote in Moore's obituary in *The Guardian*²:

There are many individuals in successive generations of professional astronomers who owe a great deal to the books and personal support of Patrick Moore. He introduced children of all ages to astronomy, and some of them became prominent professionals in astrophysics and planetary sciences. Having, as a schoolboy, lived within bicycling distance of Patrick's house in East Grinstead, I benefited from his encouragement and generosity of time and, indeed, from his introduction to those who were later to become my teachers and mentors. And I still value the inscribed books he gave me during those years. The scope of his books went well beyond introductory and popular texts – his early lunar and planetary publications were well-rounded reviews that included much from the professional literature. Some books, such as the one on Neptune (1989), were useful contributions to the history of astronomy.

Brian studied astronomy at University College London, already publishing two papers^{3,4} before completing his doctoral thesis⁵ in 1964. For his thesis research he travelled to the Radcliffe Observatory in Pretoria to use the observatory's 1.9-m telescope. Here he met David Thackeray, who specialised in astronomical spectroscopy. At the University of Texas at Austin he helped develop the new field of high-speed photometry for studying variable stars and measuring stellar radii by observing lunar occultations. He became a major figure in astronomy worldwide through his books and papers on cataclysmic variable stars. He published two key books^{6,7} and many papers (for example^{8,9}) on the topic, including theoretical as well as observational papers¹⁰. He was Head of the Department of Astronomy until December 2004; Renee Kraan-Korteweg took over as Head in January 2005. But he continued to do research.

He was, however, much more than an astronomer: he was a meticulous researcher of broad interests who wrote books on flora, and on the history of astronomy in South Africa. Particularly he wrote about Sir John Herschel in regard to both his astronomy and his botanical studies, for example co-authoring *Flora Herscheliana: Sir John and Lady Herschel at the Cape 1834 to 1838*¹¹ and authoring *Cape Landscapes: Sir John Herschel's Sketches 1834–1838*¹².

An important paper which he published in the *South African Journal of Science* was on the meeting between Charles Darwin and John Herschel at the Cape of Good Hope in 1836.¹³ Brian wrote: "with Herschel himself having speculated on evolution just before he met Darwin, it is probable that he stimulated at least the beginnings of the latter's lifelong work on the subject" – a key observation regarding the history of the theory of evolution. Brian wrote poetry^{14,15}, and built a harpsichord and a clavichord, both requiring great woodworking virtuosity.

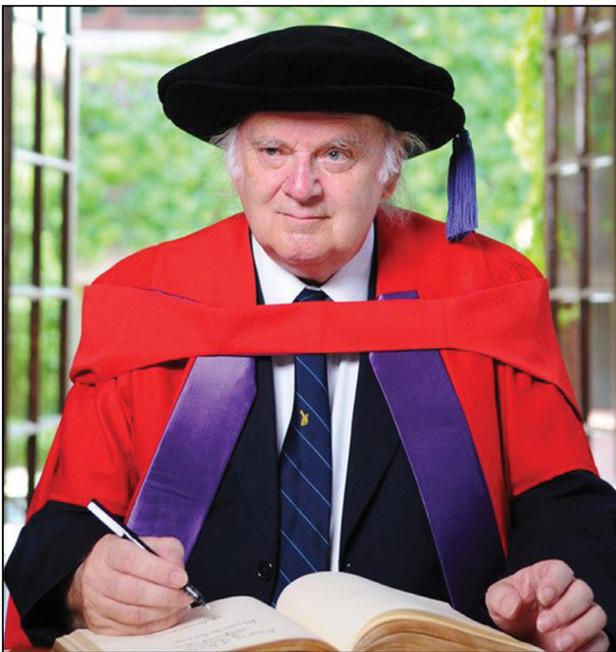
He was a strong supporter of science in general at UCT and in South Africa. From 1981 to 1983, he served as President of the Royal Society of South Africa, and he was a founding member of the Academy of Science of South Africa. But his reach was global: he was Vice-President of the International Astronomical Union from 2003 to 2009 (other South African astronomers who have held this position are Richard Stoy, Michael Feast, and Renee Kraan-Korteweg).

His work was recognised when he was made a Fellow of UCT, and an Honorary Fellow of the Royal Astronomical Society. He received the McIntyre Award from the Astronomical Society of Southern Africa, the John F.W. Herschel Medal from the Royal Society of South Africa, and the Gill Medal from the Astronomical Society of Southern Africa. He was made an Honorary Fellow of the Royal Society of South Africa, an Honorary Member of the Royal Astronomical Society of New Zealand, and won the Science-for-Society Gold Medal of the Academy of Science of South Africa. He was awarded an Honorary Doctorate from the University of Cape Town in 2009, made an Honorary Fellow of University College London the same year, as well as being elected a Fellow of The World Academy of Sciences. He was on the board of the South African National Library for 10 years.

The Academy of Science of South Africa's book *Legends of South African Science* states':

Warner considers building up the astronomy department at UCT as his crowning achievement. When he took charge in the beginning, it consisted of only two people. Today there are so many staff and students that he can't remember the names of everyone. "It's a big department and I'm proud to have laid the foundation for it," he says. Without it and the people it has trained, South Africa would not have been in the position to build and run the ten-metre mirror SALT, which helped to win the bid to host the SKA.

He made a great contribution to UCT and to South Africa in many ways. I personally was grateful to be able to talk to him on many topics, including astronomy.



Brian Warner (photo CC-BY-ND: www.news.uct.ac.za)

Acknowledgement

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