Biographical Encyclopedia of Astronomers

© 2007 Springer

Molyneux, Samuel

Born Chester, England, 18 July 1689

Died Kew, (London), England, 13 April 1728

Samuel Molyneux, noted as an instrument maker and observational astronomer, assisted James Bradley in the latter's studies that led to the discovery of the aberration of light. The only son of the astronomer William Molyneux and Lucy Domville, Molyneux was raised by his uncle, Thomas, after both parents died while he was a young boy. Educated at Trinity College, Dublin (BA: 1708, MA: 1710), Molyneux studied meteorology and was elected to the Royal Society in 1712. He became a member of parliament in 1715 (elected again in 1726 and 1727).

In 1717, Molyneux married Lady Elizabeth Capel, who inherited money and an estate at Kew, to which the couple moved. Caught by John Hadley's enthusiasm for optics, Molyneux turned his scientific interests to making optical components and instruments. His design for a Newtonian reflector set the standard of construction for such instruments. He conducted experiments to find the best alloy for speculum metal by testing 150 alloys of varying compositions. Between 1723 and 1725, Molyneux worked on reflecting telescopes with James Bradley, then Savilian Professor at Oxford (later Astronomer Royal).

In 1725, with Bradley, Molyneux ordered a large zenith sector from instrument maker George Graham in order to investigate the large parallax of Draconis reported by Robert Hooke. Molyneux and Bradley set up the telescope in Molyneux's house in Kew, looking through holes in the roof. They observed Draconis in December 1725 and found a large shift in position as the month progressed. However, it was in the wrong direction to be a parallax shift; as the two continued observing throughout the year, they saw a large annual circular motion. Bradley ordered a larger, more versatile zenith sector from Graham and erected this one at the house of Molyneux's aunt in Wanstead in August 1727. By December, Bradley had made accurate measurements by which he inferred the phenomenon of the aberration of light

Meanwhile, Molyneux's political interests took up more of his time. He became a member of the Irish Parliament in 1727 and a lord of the admiralty, ceasing work in astronomy. Molyneux died at a young age of a stroke, presumably as a result of a medical problem inherited from his mother, who also died early of a brain disease.

Paul Murdin

Selected Reference

Bradley, James (1832). *Miscellaneous Works and Correspondence*, edited by S. P. Rigaud. Oxford: Oxford University Press.