John Lamont – Astronomer and Geophysicist

John Lamont FRS, FRSE (1805-1879) was awarded the order of the crown of Bavaria entitling him to be known as Johann von Lamont, by which name he is usually called. Lamont was a 19th century astronomer of note, born at Corriemulzie on the far side of Braemar from Aberdeen but whose life was spent mainly in Bavaria and his reputation earned there. A ten foot high memorial in grey granite is to be found at Inverey close to his birth-place. It was unveiled in September 1934 and among the tributes to Lamont at the event, Sir James Jeans said1 “Lamont took to a foreign country many of the intellectual and moral qualities of the country of his birth, energy and industry, intelligence and originality, and, not least, sturdy human kindness and generosity to those less fortunate than himself”.

Lamont’s story is that his father died when he was 12 and he was taken in hand by a Scottish Benedictine Monastery in Regensburg, Bavaria, no doubt with the intention of being trained for a career as a priest. In his early 20s he spent some time in the Royal Observatory at Bogenhausen near Munich where he showed a strong interest and aptitude for astronomy. He was appointed assistant there in 1828. The observatory is shown in the accompanying illustration engraved around 1830². In 1835 he was effectively made ‘Astronomer Royal of Bavaria’ after the death of the Conservator and he began lecturing on Astronomy in addition to his extensive programme of research. In due course (1852) he was appointed Professor of Astronomy in the University of Munich, a post he held for 27 years until his death. His rise to prominence and high honours (there were others) were the results of a very productive career in both astronomy and in initiating international projects in the study of terrestrial magnetism.

In astronomy, von Lamont made contributions to both solar system astronomer and stellar astronomy. Today, space probes have transformed our knowledge of the solar system out of recognition from that available in the 19th century. The fact is that since solar system bodies shine only by reflected light from the Sun, all but the largest and nearest are very faint. Lamont was fortunate that just before he joined the Bogenhausen observatory a telescope that would be the very best refractor in the world for a few years had been ordered from the instrument maker Fraunhofer and delivered by his successor Mertz in 1835. The accompanying photograph³ shows it. The objective was 285 mm in diameter.

Lamont studied the satellites of Saturn and Uranus and was able to deduce the orbits of Enceladus and Tethys around Saturn and deduce the mass of Uranus more accurately than any previous estimates. He made observations of the asteroid Pallas to estimate its diameter and observations of lunar occultations to determine whether the moon had any measurable
atmosphere. In the mid 1830s he devised a much faster method of determining stellar spectra than that the one pioneered by Fraunhofer but didn’t realise the importance that stellar spectroscopy would have in astronomy. In his day he was particularly noted for his accurate stellar catalogues that covered a wide band across the celestial equator and included (according to the DNB) some 80,000 stars, no mean achievement.

Lamont made a day-time reputation for himself as well as a night-time one. He established the Bogenhausen observatory as a centre for measurement of the Earth’s magnetic field and became one of the principal organisers and participants in an international effort to record hourly variations in this field. Magnetic survey instruments designed by Lamont were widely used and he himself undertook surveys in Bavaria, North Germany, Denmark, France and Spain. He is credited with discovering a 10 year periodicity in variations in the Earth’s field (nowadays more commonly quoted as an 11 year periodicity associated with sunspot activity) and the presence of earth currents. Lamont also established the observatory as a centre for meteorological work and, like a few other 19th century astronomers with the skills of precision measurement, he assisted in on-going geodetic survey work of the time. For this latter input he was awarded the Order of the Iron Crown by the Emperor of Austria. In all, Lamont was author of over 100 academic papers.

Lord Lindsay, who established the Dun Echt observatory under David Gill’s superintendence, mentions that during his travels in 1872 he visited Lamont in the Bogenhausen observatory ‘and was talking away in French when to my intense surprise he addressed me some question in broad Aberdeen Scotch. He has been 52 years away and almost forgotten English, but has not lost his accent.”

All this brings us to the memorial at Inverey, set back from the road a little on a rising bank. A simple inscription on the front is topped by the St Andrew’s cross above. On the back of the stone is the biblical quotation “Day unto day uttereth speech and night unto night showeth knowledge”; on the sides this is repeated in German and Gaelic. The pattern of Orion’s belt and surrounding stars on the back makes the astronomical connection. Lamont never married. He died in Munich, and is buried in the churchyard of St Georg in Bogenhausen where there is an impressive stone monument at his grave which includes the inscription “et coelum et terram exploravit”, literally “and the sky and the earth he explored”.

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1 A description of the unveiling of the monument is recorded in “The Deeside Field: seventh number”, pp 90-91, Abdn. Univ. Press (1935) along with an article on “The Scientific Career of Johann von Lamont” by Professor John Carroll, pp 44-47. See also J. MacPherson, Johann von Lamont, Astronomer Royal of Bavaria, Aberdeen 1929.
2 Courtesy University of Munich: http://www.usm.lmu.de/Geschichte/01.jpg.
3 Courtesy University of Munich: http://www.usm.lmu.de/Geschichte/03.jpg.