

The June Lyrids and James Joyce's *Ulysses*

One of these meteors, seen 100 years ago, seems to be described in a famous literary classic.

By Donald W. Olson and Marilyn S. Olson

FOR MORE THAN three decades, meteor enthusiasts have been on the lookout for an elusive shower in mid-June with a radiant in the constellation Lyra. The first report of it appeared in the pages of *Sky & Telescope* (October 1966, page 237), in a letter from California observer Stan Dvorak:

UNEXPECTED METEOR SHOWER FROM LYRA

On the evening of June 15th, I camped in the San Bernardino Mountains, about 70 miles east of Los Angeles. Weather permitting, I often sleep outdoors and watch the heavens.

On this night I noticed a very bright meteor moving swiftly to the northeast and passing through Lyra. Shortly thereafter, another traveled in the same direction. Since I usually carry a star chart on these outings, I plotted meteors.

In 1½ hours, I had recorded 16 meteors, all but three of which were members of the shower. Their magnitudes ranged from -4 to +4. The majority were very swift and traveled in a northeasterly direction, appearing to radiate from roughly right ascension 18½h, declination +30°, near the Lyra-Hercules border. Their colors ranged from bright white to blue-green, turning yellow as they neared their burnout points. The meteors left trains visible from three to six seconds.

Observers worldwide confirmed the existence of the June Lyrids in the late 1960s through the 1970s, and then the activity ceased. Yet the International Meteor Organization (www.imo.net) states, "The probable maximum in 2004 benefits from a nearly-new Moon on June 15, and we urge all observers who can to cover this possible stream. The radiant is a few degrees south of the bright star Vega. . . . All potential June Lyrids should be carefully plotted, paying special attention to the meteors' apparent velocities."

Before 1966, meteoric as-

tronomy did not recognize any annual shower in mid-June. But a possible early observation is that of Giuseppe Zezioli, who recorded 11 meteors radiating from a point near 18^h 40^m, +35°, on June 14, 1869 (*Memoirs of the Royal Astronomical Society*, Vol. 53, 1899, page 273).

We believe that we have identified another early June Lyrid, one carefully described in a famous work of fiction that is always listed among the top 10 novels of the 20th century.

The Meteor in *Ulysses*

Every year on June 16th, Dublin and many other cities around the world celebrate "Bloomsday," in honor of James Joyce's novel *Ulysses*. The story parallels the epic *Odyssey* by Homer, which relates the travels and adventures of Odysseus in the Mediterranean while coming back from the Trojan War. Joyce chronicles the wanderings of Leopold Bloom (the Odysseus of the story) and Stephen Dedalus (standing in for Odysseus's son Telemachus) around Dublin, beginning at 8 a.m. on the morning of June 16, 1904. Joyce chose this date because it had personal meaning for him: it was the day that he first walked with his future wife, Nora Barnacle.

In this complex novel, the journey concludes with both characters together in the backyard of Bloom's house (7 Eccles Street, at the north end of Dublin) in the early-morning hours

of June 17th. Just as Stephen is taking his leave, with new father-son ties forged between them, a meteor streaks through the constellations (Chapter 17):

What celestial sign was by both simultaneously observed?

A star precipitated with great apparent velocity across the firmament from Vega in the Lyre above the zenith beyond the stargroup of the Tress of Berenice towards the zodiacal sign of Leo.

Throughout the novel, the characters, particularly Bloom, discuss or think about astronomical topics. Bloom is noted as buying a book with "fine plates in it . . . the stars and the moon and comets with long tails. Astronomy it was about" (Chapter 10). He has a copy of Sir Robert Ball's *Story of the Heavens* in his library (Chapter 17) and is familiar with Ball's discussion of parallax. Among many other astronomical references, the novel mentions an upcoming solar eclipse (Chapter 8), Tycho's supernova of 1572 (Chapter 9), and the constellations of "the great bear and Hercules



Irish-born writer James Joyce (1882–1941) lived much of his adult life in Italy, Switzerland, and France. Carola Giedion-Welcker took this photograph of Joyce in Zurich in 1938.



The design of the modern euro coin from Ireland features a circle of stars surrounding an Irish harp, a cousin of the lyre. Collection of Donald W. Olson.

and the dragon, and the whole jingbang lot" (Chapter 10). There is mention of the Hyades with the bright star "Alpha, a ruby and triangled sign upon the forehead of Taurus" (Chapter 14), the constellation "Orion with belt and sextuple sun theta and nebula," surface markings on Mars, and the appearance of "new stars" like Nova Persei 1901 (Chapter 17).

Joyce almost certainly drew some precise astronomical references in *Ulysses* from his copy of a Dublin almanac, *Thom's Official Directory* for 1904. For example, near the end of the novel, in the early-morning hours of June 17, 1904, Bloom describes the "moon invisible in incipient lunation, approaching perigee" (Chapter 17). Both Thom's almanac and our computer calculations agree that a slender, waxing crescent Moon (three days after new) would have set before 11 p.m. on June 16th, and that a lunar perigee fell near midday on June 17th.

Problems with Timing

Although Joyce is a precise writer, he is also experimental and difficult to follow. Thus, though each of the 18 chapters is associated with a time of day and there are many references to clocks, church bells, and hours, confusion still exists, particularly toward the latter part of the novel. Adding to the confusion, Joyce himself provided two conflicting timetables, one created for Carlo Linati in 1920 and another published by Stuart Gilbert in 1930.

After Bloom and Dedalus see the meteor, they hear the "sound of the peal of the hour of the night by the chime of the bells in the church of Saint George . . . Heigho, heigho, / Heigho, heigho," indicating the half-hour in Westminster chimes. Therefore, as modern scholars have pointed out, the first part of Chapter 17 takes place between 1:00 and 1:30 a.m. according to the Linati scheme, between 2:00 and 2:30 a.m. according to the Gilbert scheme, and possibly even between 3:00 and 3:30 a.m. (Don Gifford with Robert J. Seidman, *Ulysses Annotated*, 1988, page 586).

Upper Transits

We realized that the time of night could be determined from Joyce's statement that

This chart of the sky above Dublin at 1:00 a.m. local mean time (1:25 Universal Time) on June 17, 1904, includes a meteor matching the description in *Ulysses*. It begins near Lyra (almost overhead) and continues through Coma Berenices toward Leo.

the meteor originated near the "Lyre above the zenith." The bright stars of Lyra crossed the Dublin meridian, not far south of the zenith, at 12:54 a.m. (Vega), 1:07 a.m. (Beta Lyrae), and 1:16 a.m. (Gamma). Dublin in 1904 had not yet adopted modern time zones, so readers wishing to check these times must use Dublin local mean time, 25^m 21^s behind Greenwich. For example, Gamma Lyrae's upper transit occurred at 1:16 a.m. Dublin local mean time, equivalent to 1:41 a.m. Greenwich (Universal) Time.

Joyce was aware of this time difference, corresponding to the longitude difference between Dunsink Observatory and Greenwich Observatory. Bloom notes that Dublin citizens passing the Ballast Office read "Dunsink time" from the clock "worked by an electric wire from Dunsink," and he also realizes that the time ball on the building (visible to ships in the harbor) indicates "Greenwich time" (Chapter 8). For more about that method of time signaling, see "The Bygone Era of Time Balls" by Ian R. Bartky (S&T: January 1987, page 32).

The description of Lyra's position therefore supports the Linati time scheme, with Bloom and Dedalus observing the meteor between 1:00 and 1:30 a.m. Dublin local mean time.

As the diagram below shows, the mete-

Note to Readers

Last month's *Celestial Calendar* was so packed with predictions of the transit of Venus that we had to postpone this article and the next one by a month. Our July issue goes in the mail in late May, so we can still alert readers to a pair of little-known meteor showers that might be seen in June 2004.

or described by Joyce descended from the vicinity of Lyra near the zenith, passed downward through Coma Berenices, and then disappeared near the horizon where Leo was setting in the northwest. The detail and precision of this description suggest that James Joyce may have observed a June Lyrid while walking with Nora on June 16–17, 1904, more than six decades before the shower was recognized.

This year marks the 100th anniversary of June 16, 1904, and people all over the world are celebrating the centenary (see www.rejoycedublin2004.com). Perhaps after a toast or two in an Irish pub, astronomers can also observe Lyra passing near the zenith and — with luck — see another "celestial sign."

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